

GRENADA

Climate Smart Agriculture and Rural Enterprise Programme (SAEP)

Final project design report

Main report and appendices

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GRENADA Climate Smart Agriculture and Rural Enterprise Programme (SAEP) Final project design report

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Currency equivalents

Currency Unit = East Caribbean Dollar (XCD)

US\$1.0 = 2.7 XCD

Weights and measures

1 kilogram = 1000 g 1 000 kg = 2.204 lb. 1 kilometre (km) = 0.62 mile 1 metre = 1.09 yards

1 square metre = 10.76 square feet
1 acre = 0.405 hectare
1 hectare = 2.47 acres

Abbreviations and acronyms

AFDP Artisanal Fisheries Development Project
APWB Annual Programme of Work and Budget

BDC Business Development Centre
BNTF Basic Needs Trust Fund
BDO Business Development Officer

CARDI Caribbean Agricultural Research and Development Institute

CARUTA Caribbean Regional Unit for Technical Assistance

CBO Community-Based Organization

CC Climate Change

CCCCC Caribbean Community CC Centre
CIAT Centre for Tropical Agriculture
CDB Caribbean Development Bank

CEFE Competency based Economies through the Formation of Enterprises

CPA Country Poverty Assessment
CPI Corruption Perception Index
CPM Country Programme Manager
CSA Climate Smart Agriculture

CU Credit Union

CYEP Caribbean Youth Empowerment Programme

EBD Enterprise Business Development

ECD Eastern Caribbean Dollar

EIRR Economic Internal Rate of Return
FAO Food and Agriculture Organization
FIRR Financial Internal Rate of Return
FMA Financial Management Assessment
GAC Grenada Agricultural Census

GARFIN Grenada Authority for the Regulation of Financial Institutions

GCB Grenada Cooperative Bank

GCIC Grenada Chamber of Industry and Commerce

GDB Grenada Development Bank

GIDC Grenada Investment Development Corporation
GOAM Grenada Organic Agricultural Movement

GOG Government of Grenada

GPRS Growth and Poverty Reduction Strategy
ICT Information and communication technology
IFAD International Fund for Agricultural Development

IFR Interim Financial Report

IICA Inter-American Institute for Cooperation in Agriculture

ICCAS Integrated CC Adaptation Strategies

IPSAS International Public Sector Accounting Standards

ISA International Standards Auditing

KW Kilowatt

LAC Latin America and the Caribbean

LF Logical Framework
LTB Letter to the Borrower

MAREP Market Access and Rural Enterprise Development Programme

MCPMA Ministry of Carriacou and Petit Martinique Affairs

M&E Monitoring and Evaluation
MIS Management Information System
MNIB Marketing and National Importing Board

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MoA Ministry of Agriculture and Fisheries

MoF Ministry of Finance

MOU Memorandum of Understanding

MoW Ministry of Work

MoY Ministry of Youth, Sports and Religious Affairs

MTR Mid-Term Review

NAP National Agriculture Policy

NCCC National Climate Change Committee

NEWLO New Life Organization

NHTA National Hotel and Tourism Association

NPV Net Present Value

NTA Grenada National Training Agency
OECS Organization of East Caribbean States
ORMS Operational Results Measurement System
ORMS Organisation of Eastern Caribbean States
PBA Performance Based Allocation System

PCR Project Completion Report
PFM Public Financial Management
POM Programme Operations Manual
PPP Public-Private Partnerships
PM Programme Management
PMU Programme Management Unit

PS Permanent Secretary

PSC Programme Steering Committee

REP Rural Enterprise Project

RIMS Results and Impact Management System

SAEP Climate Smart Agriculture and Rural Enterprise Programme

SIDS Small Island Developing States
SME Small and Medium Enterprises
SOE Statement of Expenditure

TAMCC T. A. Marryshow Community College

VAT Value Added Tax

VST Vocational Skill Training

WB World Bank

Map of the programme area

Grenada

Climate Smart Agriculture and Rural Enterprise Programme (SAEP)



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

IFAD Map compiled by IFAD | 23-05-2017

Executive Summary¹

The proposed Programme aims at promoting Enterprise Business Development (EBD) and Climate Smart Agricultural (CSA) practices in rural areas of Grenada. It will hence address two of the main vulnerabilities of Grenada, which are common for Small Island Development States (SIDS): (i) the high levels of youth unemployment (above 40%); and (ii) the high exposure of agricultural production to climate change and variability.

At present the agricultural sector in Grenada suffers from low productivity levels, an ageing farming population, a high amount of idle land (up to 28% of the agricultural land), and lack of irrigated areas, storage and processing facilities. As a result Grenada depends on food imports for up to 80% of its consumption. By linking sustainable CSA practices with the development of agro-processing enterprises and improving market access, the proposed Programme is expected to lead to a significant increase in production and income levels in the rural areas of Grenada.

Based on the observed poverty levels in Grenada (around 38% of the population), the overall target group (the rural poor) is estimated to comprise around 13,900 poor households. The proposed Programme aims at providing technical services and support to around 7,500 households (54% of the total poor households), out of which 4,500 (60%) are expected to report an average increase in income of 10%, with around 500 farmers adopting at least one CSA practice.

The goal of the Programme is to contribute to the reduction of poverty and vulnerability of men and women in rural communities in the tri-island state of Grenada. The development objective is to improve the livelihoods of the beneficiaries through accessing new jobs, starting up businesses or consolidating new businesses and adopting CSA practices.

The intervention logic, design and proposed methodology are based on the lessons learned from the on-going "Market Access and Rural Enterprise Programme" (MAREP), which has succeeded in strengthening rural communities, in vocational training activities and in the rehabilitation of rural roads, but has had limited impacts in the promotion and financing of rural enterprises and in the creation of new employment. MAREP will complete its activities in March 2018 and the proposed new Programme (expected to start in the first semester of 2018) will build upon the existing capacities and facilities.

Components

The Programme will specifically target two of the most vulnerable groups within the rural poor, that is (i) the unemployed and underemployed men and women, with a focus on youth (age 16-35); and (ii) smallholder farmers (full- and part-time), vulnerable to climate change and variability. With a view of targeting these two groups and achieving the development objectives in an efficient and effective way, the Programme will be implemented through the following three components: (i) Enterprise Business Development (EBD); (ii) Climate Smart Agriculture (CSA); and (iii) Project Management.

Component 1: EBD. The objective of this component is to support on-going and start-up businesses in rural areas through capacity building, technical services and financing, with a focus on youth. At present there are a series of constraints that prevent poor youth to consolidate or start-up businesses. There is limited access to support services to develop a business idea and build the required capacities to become sustainable or to have a minimum financial support to test the product, the market and the management scheme. The component will hence seek to increase the availability of these services, promoting innovation and the engagement of young people in the most promising sectors of the rural economy, including farming and non-farming activities (e.g. agro-processing, ecoand edu-tourism, wellness, renewable energy sources, ICT, etc). The main activities carried out will

¹ Mission composition: Mr L. Anwandter, CPM: Mr. L Bullor, Economist and Financial Analysts; Ms E. Di Stefano, CC specialist; Ms. A. Gittens Baptiste, Project Design, Supervision and Implementation Support Specialist, Ms. Brenda Mendieta, Procurement Specialist, Ms. I. Schreuel, Gender and M&E specialist; Ms. M. Sisto, Rural Development specialist.

be: (i) the provision of vocational and employment skills training; (ii) the provision of technical support services for business development; (iii) a matching grants scheme to promote start-up businesses that will support the development of business ideas, by financing a trial and error process when defining the product, the market and the technology.

Component 2: CSA. The objective of this component is to increase the sustainability of small farmers through the adoption of CSA practices. Farmers need to increase their resilience to the expected above-average temperatures and below-average dry-season rainfalls, meaning longer lasting drought periods that lead to increased demand for water. The component will hence promote the adoption of more efficient water management and conservation measures, as a key activity to address changing rainfall patterns, such as irrigation and rain-water harvesting systems, terracing, drainage and mulching. The component will also finance backyard gardens with CSA approaches to improve food security and nutrition among the most vulnerable population. The main activities carried out will be: (i) the provision of knowledge on CC issues and training on CSA practices to farmers, MoA extensionists and vulnerable people in poor rural communities, including the very young ones; (ii) the provision of extension services to farmers on CSA practices and on improving marketing links; (iii) a matching grant financing scheme for individual farmers and/or groups to promote the adoption of CSA practices and technologies; (iv) the rehabilitation of rural roads and drainage systems to improve and/or maintain access to markets in extreme weather events, such as heavy rainfall.

Component 3: Project Management. This component aims at ensuring the effectiveness and efficiency of the Programme, establishing key management systems and processes that will achieve the expected outputs and outcomes with the funds provided. It will benefit from the experience and capacities built throughout MAREP implementation, by promoting continuity of key performing staff of the existing PMU to the extent possible. The PMU will continue to operate under the auspices of the Ministry of Finance, with an office located in Sauteurs (in the North of the main island). The envisaged continuity with respect to MAREP will allow to reduce start-up costs and the risk of delays, particularly in setting up an operational Monitoring and Evaluation (M&E) system, accounting and financial systems.

Background, rural context and rationale

Grenada is a tri-island state in the Caribbean with a total surface of 344 km². The population in 2015 reached 110,096 people (around 36,600 households), of which 107,000 live in rural areas. 95% of the population lives on the main island of Grenada and 5% on the two minor islands of Carriacou and Petit Martinique.

Although Grenada is classified as an Upper Middle Income Country (UMIC), as a SIDS it is vulnerable to external environmental and economic shocks. In particular, the country was affected by hurricanes in 2004-2005 and by the downturn in tourism following the global financial crisis of 2008-2012. It is estimated that in 2016 the economy grew by 3.9%, led by tourism and construction, but despite the positive upturn poverty and unemployment remain high.

Approximately 38% of the population is estimated to live below the poverty line, with an estimated 2.4% being considered as indigent and an additional 14% being considered highly vulnerable. Unemployment levels have been extremely high since 2008: the current average unemployment rate is 29% overall and is a concern particularly among youths, whose unemployment rates are above 40%, and even higher for females.

A potential opportunity lies in the agricultural sector, which grew at an average rate of 7.4% per annum between 2010 and 2014, well above the average GDP growth of 1.5% during the period. Even though agriculture and fisheries represent between 5% and 9.5% of GDP in the past five years, their contribution to exports is significant: fish exports contribute to 25% of total exports and nutmeg and mace to at least 23%. Overall, however, Grenada remains a net food importer, with approximately 80% of the food consumed not being produced domestically.

In terms of land use, 50 percent is forest land, 21 percent is dedicated to permanent crops, 9 percent is other arable land, 17 percent is other land and 3 percent are meadows and pastures. Only a small fraction of the land - 1.5% of the total land area under cultivation - is under irrigation systems, hindering market oriented production planning: the peak agricultural produce during the rainy season - June to November - is currently dislocated from the top demand of the hospitality sector - from December to April. The high volumes of agricultural produce in the rainy season instead face a weak demand, creating gluts in the market and non-remunerative prices for farmers.

Another important constraint relates to an aging farming community (estimated at 9,300 farmers), using traditional technologies and approaches, many of them part-time farmers who are retired or employed in other sectors and regard agriculture as an additional source of income. At present around 28 percent of the available agricultural land is left uncultivated, while access to land remains a constraint for young people.

In this context, there are opportunities in increasing local agricultural and agro-processing production through improving yields and marketing linkages, with better planning to supply the peak demand of the hospitality industry. This requires a business approach and entrepreneurship drive that is currently not widespread in the farming community. By attracting youth to agriculture with technology driven approaches and putting in place the required support services, the Programme expects to bring about the missing links that are currently preventing an increase in income for rural poor.

At present there are a number of products that the Marketing and National Importing Board (MNIB) has identified as highly demanded, whose supply is falling short consistently but could be produced domestically. These include the "fruit salads" (cantaloupe and watermelon), "root crops" (sweet potatoes, dasheens, carrots, tannia and eddos) and vegetables (broccoli, beets, romaine lettuce, purple cabbage and cauliflower). There are other market opportunities identified by the private sector not directly related to farming: arts and crafts, particularly bamboo baskets for spices; health and wellness services based on aromatherapy products, including nutmeg and cinnamon soaps and essential oils; guided tours through trails and forestry areas; and, ICT services developing solutions, applications and support for SMEs. The link with the hospitality sector, where the vast majority of hotels are small and medium size sourcing in the domestic market, could be significantly improved if farmers had irrigation schemes and access technical support to increase yields and quality of produce.

IFAD's strategy for reducing poverty in Grenada is based on the following three main principles: (i) focusing on youth, as an asset that rural communities may promote to the forefront of change and development; (ii) identifying and promoting rural entrepreneurship as a driver for change and improvement; and, (iii) fostering the sustainability of beneficiaries' business initiatives through capacity building and the adoption of CSA approaches.

The new Programme proposes an innovative approach to tackle the promotion of rural entrepreneurship, i.e. through performance-based service contracts that empower the key implementing partners in terms of the Programme's goals and targets. It also includes a matching grant scheme, instead of assuming loans from financial institutions (which was not successful in previous projects, since they consider start-ups and the agricultural sector too risky). The proposed approach instead includes significant handholding in the initial phases of the start-ups, with record keeping activities that are expected to allow them to access financing, and thereby to become sustainable, in the long run.

Geographic area of intervention and target groups

The Programme area will include rural communities in the 7 parishes of Grenada (the 6 parishes on the main island and the parish which covers Carriacou and Petite Martinique). Besides the capital town of St. George's, the other areas are considered rural.

Overall the poor households of the target group have the following main characteristics: (i) more than the national average number of 3 family members per household; (ii) one or more unemployed

persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and (iv) the head of the household being single. Small farmers are also part of the rural poor. Over 80% of farmers in the fruits, vegetables, and roots and tubers subsectors are considered small-scale farmers, i.e. farming less than half an acre (0.2 hectares).

The direct beneficiaries of the Programme are expected to be 7,500 rural poor households. In particular, it is estimated that around 4,500 households will benefit from technical and financial support services (financed by IFAD) and 3,000 households from rehabilitated rural roads and drainage works (financed by the Caribbean Development Bank), which will improve and/or maintain climate resilience and access to markets in the Programme area.

With respect to the technical and financial support services, approximately 75% of the beneficiaries would be rural youth (age equal or below 35 years) and approximately 50% would be female beneficiaries, granting priority to young female-headed households (single mothers). It is expected that around 2,200 households will benefit from climate awareness raising activities and training starting at school (age 7-17), thereby ensuring a life-cycle approach.

Benefits

The expected impacts and outcomes from the Programme are:

- Number of poor households reporting an increase in income: 4,500 HHs
- Number of poor households receiving services supported by the Programme: 7,500 HHs
- Number of farmers with greater resilience: 400 farmers
- Number of new jobs created as a result of supported interventions: 400 jobs
- Number of new enterprises created: 120 enterprises
- Number of farmers increasing production by 20%: 400 farmers
- Number of farmers improving physical access to markets: 3000 farmers

The main outputs of the Programme will be:

- Number of people receiving VST: 400 people
- Number of people receiving technical support services for start-ups: 500 people
- Number of youth accessing matching grants: 400 young people
- Number of rural enterprises accessing business development services: 270
- Number of people trained in innovative technologies, CSA and climate change: 2,200
- Number of farmers who have received extension services on CSA practices: 1,200 farmers
- Number of farmers receiving market support services: 400 farmers
- Number of adaptation and climate smart investment projects financed: 180 projects
- Number of rural roads rehabilitated: 30

It is expected that the Programme will produce an Economic Rate of Return of approximately 11,47 per cent and result in an Economic Net Present Value of USD 3,33 million. The ERR is resilient to a 2-year delay in benefits, to a combined 10% increase in costs and 10% reduction in benefits, or to an overall increase in costs of 20% or an overall decrease in benefits of 20%.

Implementation arrangements

The Ministry for Finance (MoF) will be responsible for implementation through the Programme Management Unit (PMU), reporting directly to the Permanent Secretary (PS). The PMU will have a reduced staff and will be a coordinating, supervising and facilitating body, delegating the execution of most technical activities to implementing partners through performance-based service contracts.

In particular, most of the activities under component 1 will be implemented through a Memorandum of Understanding (MoU) with the Grenada Investment Development Corporation (GIDC), while the VST

activities will be carried through the main training service providers (e.g. TAMCC, NEWLO, and other private service providers).

Most of the activities under component 2 will instead be implemented through a MoU with the Ministry of Agriculture (MoA), contributing to sustain the public agricultural extension services with a multifaceted approach, while the succession plan to replace the retiring qualified extension officers is not completed. The PMU will also sign an MoU with the Ministry of Carriacou and Petit Martinique, which is in charge of agricultural extension services on these two small islands. In particular, the Programme will support young Extension Assistants (EA) with training and technical assistance. The SAEP will also promote exploring innovative ways of delivering the agricultural extension services by attaching trained young EA to farmers' organizations at the district level.

Finally, the rehabilitation of rural roads and drainage systems will be implemented through an MoU with the Ministry of Works (MoW) and will be financed by CDB.

Costs and financing

The Programme implementation period will be six years. It is estimated that the total cost of the project will be USD 12 million, which will be financed in the following manner: (i) IFAD loan of USD 3,99 million (PBAS 2016-2018); (ii) Loan from the Caribbean Development Bank (CDB) of USD 3 million; (iii) an amount equivalent to USD 2,0 million in counterpart funds from the Government of Grenada; (iv) USD 0.27 million from beneficiaries; (v) USD 0,33 million from GIDC; and (vi) USD 2,41 million of financing gap (to be covered either by IFAD's next PBAS 2019-2021 or by CDB).

Risks

The following main risks and mitigating measures have been identified:

Main risks	Mitigation strategy				
Economic risk: the vulnerability of the country to external shocks, particularly to fluctuations of the touristic in-flows that could reduce the demand for the businesses promoted by the Programme. Level of risk: moderate CC risks: increased temperatures and more erratic rainfall patterns could affect production gains achieved during programme implementation and cause production losses. Level of risk: moderate	 SAEP will promote small businesses linked to agriculture, agro-processing and related services that have the capacity to supply the domestic market (as supported by the MoA through the campaign "Eat local, buy local"). Higher yields and quality control will be supported in order to gain competitiveness against imported products, adopting a business approach to become a reliable supplier. High quality technical support services will contribute to increase competitiveness and instill entrepreneurship drive. Different CSA practices and technologies will be tested and fostered to improve resilience. Access to local markets by smallholders will be improved, in order to provide an economic incentive for CSA adoption and develop food processing capacity and skills. 				
Social risks: the capacity of the Programme to reach the most vulnerable sectors of the target population (the unemployed single mothers and youth at risk of juvenile delinquency not being able to come forward to benefit from the Programme's opportunities). Level of risk: moderate to low (decreasing over time)	 Most of the SAEP opportunities will be available for the target group through open calls for proposals. The implementation of SAEP will mainstream enabling measures, including affirmative actions when required, designed to empower the most vulnerable groups and creating an enabling environment for their participation. In order to counteract youth's lack of interest to be involved in farming activities, the SAEP will only promote profitable activities. Young men and women will be able to discern through the capacity building process, which are the best opportunities for increasing income on a sustainable basis. The PMU will monitor the participation of beneficiaries by sex and age, taking affirmative actions when necessary to correct unbalances, so that the risk would decrease along implementation. Youth and gender participation could be 				

	promoted through the type of activities and trainings provided and through the communication strategy for						
	disseminating the Programme's opportunities.						
Institutional risks: the capacity of	- Roles and responsibilities of the PMU and the institutional						
service providers to target the right	partners will be clear, vesting full implementation						
beneficiaries and to provide quality	responsibility in service providers.						
and timely support to them.	- Institutional partners will participate in planning and will include activities and targets in their own work-plans.						
Level of risk: moderate	- Contractual arrangements will be based on performance; payments will be approved and processed according to						
	progress reports; and, beneficiaries will be involved in monitoring the quality of the services at various levels.						

Social and Environmental aspects

SAEP is designed to positively affect social and environmental conditions, since it incorporates special considerations for women and youth in the creation of new jobs as well as in CSA practices, implementing affirmative actions, when necessary, to ensure the outreach to the most vulnerable groups. The Programme strategy recognises that improvement of smallholders livelihood must be based upon enhancing Natural Resources Management, and that this must be done in a way that reduces any potential adverse environmental impacts, so that they are: i) less adverse than those for Category A projects; ii) site-specific and reversible in nature; and iii) can be readily remedied by appropriate preventive actions and/or mitigation measures. The starting or consolidating of sustainable businesses, as well as construction or rehabilitation of rural roads will occur in "nonsensitive areas" (e.g. not in protected areas, natural forests, wetlands, areas of global significance for biodiversity conservation or locations that include physical cultural resources). In line with IFAD's Social, Environmental and Climate Assessment Procedures (SECAP), in view of the targeting of existing farms, the promotion of CSA practices, organic farming and/or integrated pest management, the Programme is considered to pose moderate socio-environmental risks, and can be classified as category B.

According to the Notre Dame Global Adaptation Index, Grenada is ranked 61th out of 181 countries, in a ranking system where countries are listed in reverse order of vulnerability. The Programme design has incorporated all available information regarding CC vulnerability, impacts and potential adaptation responses identified in the national policies, UNFCCC National Communication, Nationally Determined Contribution, as well as existing country disaster risk profiles. Safeguards against climate vulnerabilities are incorporated into the Programme through the promotion of CSA practices that buffer the crops against climate extremes and reduce the risk of crop failure. The theory of change was based on the recognition that increased agricultural production will only provide a lasting benefit to smallholders' incomes if smallholder homesteads are resilient to the anticipated CC; and if sustainable NRM is strengthened at the farm level. On the basis of the above, the climatic risk classification is Moderate.

Knowledge management and scaling-up

Throughout Programme implementation, specific evidence-based knowledge products will be developed on the basis of the experiences made, in order to extract lessons and best practices, replicate innovative solutions, achieve better outcomes and greater impact from development resources, and strategically disseminate the knowledge generated to support national decision making and policy processes. Communicating and showcasing success stories of young male and female farmers and entrepreneurs is important to change the image of farming and to motivate other youth to take up farming and develop their potential business ideas. In particular, the following topics could be of interest for an in-depth analysis and to promote policy dialogue with the GOG: (i) the innovative mechanism designed by the Programme to develop the extension services in rural areas; (ii) the access of youth to land; (iii) the development of renewable energy sources to reduce energy costs in rural areas, and (iv) the concessions scheme to ensure access to affordable agricultural equipment to the rural poor.

In terms of scaling-up, the new Programme is aligned with IFAD's approach to SIDS. IFAD's work in Grenada could hence be a cornerstone for the development and upscaling of similar projects in other SIDS in the Caribbean (e.g. St. Lucia, Dominica, St. Vincent and the Grenadines).

Monitoring and Evaluation

The main objective of monitoring and evaluation (M&E) is to provide the Programme stakeholders with data and information to ensure an efficient use of resources and timely dealing with problems. M&E would be conducted using a participatory approach through which stakeholders and implementing partners will be fully engaged in the recollection of field data, discussion of this data, and decision making regarding changes that might be required for a more effective programme implementation. Key implementers such as the Ministry of Agriculture and GIDC will play an active role in data collection and monitoring the progress on the implementation of their respective AWPBs. The PMU will instead be responsible for monitoring the overall SAEP progress, providing feedback to the Programme Steering Committee (PSC), in charge of strategic guidance.

Logical Framework

Results Hierarchy	Indicators [of which Core Indicators - CI - in square brackets]				Means of Verification			Assumptions (A)
	Name	Baselin e	Mid-Term Target	End Target	Source	Frequency	Responsibilit y	-
Outreach	 Number of persons receiving services promoted or supported by the Programme Corresponding number of households reached Corresponding total number of household 	0	3,200 3,200	7,500 7,500	Programme M&E system	Annually	M&E unit - PMU	
	members	0	9,600	22,500				
Goal: contribute to the reduction of rural poverty and vulnerability of men/women in rural communities in GOG.	Number of indigent, poor and vulnerable HHs increasing their assets by more than 10%.	0	1,500	4,500	Baseline and final impact survey	At start and completion	M&E unit - PMU	A 1: Reasonable growth in the economy. A 2: There are no
Development Objective: Project beneficiaries improve	 [N HHs reporting an increase of at least 10% of income (by sex and age of HH head)] 	0	1,500	4,500		At start and completion	M&E unit - PMU	natural disasters, such as hurricanes.
their livelihoods ² and resilience by accessing new	■ [CI 3.2.2: Number of farmers reporting adoption of at least one CSA practice]	0	200	500	final impact			
jobs, starting-up /consolidating businesses ³ and adopting CSA practices ⁴ .	■ [CI 2.2.1: N of new jobs created (by sex, age, and employed/self-employed)]	0	150	400				
Component 1: Enterprise and BD Outcome: Start up and new enterprises in rural areas are supported through capacity building, technical services	N of enterprises created/consolidated	0	40	120	Programme M&E system Employment/ national records	Annually	M&E unit - PMU	A 3: Focus on self-employment and youth is a successful strategy.
and financing. Outputs 1.1: Youth receive employment skill training.	■ N of youth (by sex, age) receiving VST.	0	250	400	Programme M&E system	Semi- annually	M&E unit - PMU	A 4: Technical support services

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² Definition: In SAEP "livelihood", is defined as the capabilities, assets and activities required for a means of living. Livelihood refers to economic production, employment, and household income, within a broader context of reduced vulnerability, and environmental sustainability.

³ Definition: New businesses refers to businesses operating for less than 3 years, registered or not registered, and requiring support to become consolidated / sustainable.

⁴ Definition: Refers to practices and technologies (e.g. clean production, aquaponics, hydroponics, solar panels, bio-gas) that sustainably increase agricultural productivity and rural household incomes, while building resilience and adapting production practices and technologies to climate change. These practices may or may not contribute to the reduction of greenhouse gas emissions.

1.2 Start-ups receive N of people (by sex, age) receiving technical 0 300 500 are provided to technical support services for support services. Reports of enterprises in an business development. - NTA efficient manner. 1.3 Youth N of youth (by sex) accessing Youth Business 0 250 400 - GIDC start-up businesses access grant Grant Fund financing. ■ [CI 2.1.1: N of rural enterprises accessing 80 270 1.4 Start-ups and new enterprises supported with business development services1 capacity building and technical services 0 100 400 Programme Semi-M&E unit -A 5: Rural Component 2: CSA [CI 1.2.4: N of farmers increase production by PMU Outcome: Farmers have 20% (by sex and age of HH head)] M&E system annually communities are increased access to CSA aware of the practices. challenges related ■ [CI 2.2.6: N of people reporting improved 0 1000 3000 to CC MoA Reports physical access to marketsl **Outputs:** ■ N of people (by sex, age) trained in innovative 0 700 2 200 A 6: Services are Service Farmers, MOA 2.1 technologies, smart agriculture and CC. providers provided to extensionists and vulnerable people in farmers in an poor rural communities receive training MoW efficient and wellon CC and CSA practices. coordinated way [CI 1.1.4: N of farmers (by sex, age) receiving Farmers receive 0 600 1 200 extension services on CSA extension services on CSA practices.15 ■ [CI 2.1.2: N of farmers (by sex, age) receiving 400 practices and on improving 0 200 marketing links. market support services.16 2.3 Individual farmers and/or N of adaptation and climate smart investment 0 60 120 groups receive grant projects financed through CSA Grant Fund. financing for CSA initiatives N of backyard gardens financed through CSA 0 20 60 Grant Fund. 2.4 Rural roads rehabilitated • N of rural roads rehabilitated in the project to improve and/or maintain 0 10 30 area. access to markets.

⁵ Corresponds to the following Core indicator: 1.1.4 Number of persons trained in production practices and/or technologies.

⁶ Corresponds to the following Core indicator: 2.1.2 Number of persons trained in income-generating activities or business management.

I. Strategic context and rationale

A. Country and rural development context

- 1. **Country context**. Grenada⁷ is a Small Island Developing State (SIDS), highly vulnerable to external shocks and Climate Change (CC) effects. According to official figures, Grenada's population is 110,096 (as of 2015 statistics) living on 344 square kilometers (95% on the main island of Grenada and 5% on the two minor islands of Carriacou and Petit Martinique, which account for 34 square kilometers). Around 107,000 people live in rural communities spread across 7 parishes (excluding the capital town of St. George's in the southwest of the main island).
- 2. The Government of Grenada (GOG) has implemented actions to revitalise the economy after the hurricane devastation in 2004-2005 and the downturn in tourism following the global financial crisis of 2008-2012. These adverse events left the GOG with high public debt (which reached 130% of GDP), current account deficits and limited fiscal space for financing public sector investments and development projects. A three-year Structural Adjustment Programme was launched beginning June 2014 until December 2016, drastically reducing the funds available for capital and development investment.
- 3. It is estimated that the economy grew by 3.9% in 2016, led by tourism and construction, implying an annual real GDP growth of 5.8% on average from 2014-2016, with tourism recovery being basically a reflection of USA economic recuperation. Despite the positive upturn, poverty and unemployment rates remain high.
- 4. **Poverty.** approximately 38% live below the poverty line with an estimated 2.4% being considered as indigent and an additional 14% being considered highly vulnerable⁸. The GOG prepared a Growth and Poverty Reduction Strategy (GPRS) 2014-2018, in which the top priorities are economic growth and employment creation.
- 5. **Unemployment**. Private investment and job creation is mainly concentrated in the St George's area, mostly linked to tourism. Unemployment levels have been extremely high since 2008: the current unemployment rate is 29% overall and, in the northern rural parishes St. Patrick, St. Mark, St. John and St. Andrew it ranges between 32% and 38% . Education is a key to become employed: "the lower educated are more likely to be unemployed than those with secondary and above education" 10. These figures do not reveal the severity of the problem in rural areas, where employment opportunities from private investments are scarce and access to GOG programmes is reduced. Persistently high unemployment has led to large income gaps, with inequality in Grenada being above the Caribbean average 11. Thus, unemployment is a concern for rural communities, particularly among youths, whose unemployment rates are above 40% and even higher for females.
- 6. **Youth.** According to the Eastern and Southern Caribbean Youth Final Report (2013), Grenada's population structure represents a progressive pyramid with a wide base and narrow top, usually associated with rapid growth, high fertility and mortality. On the basis of the 2011 Population Census, the projections for 2015 show a total population between 15-34 years old of 37,539 men and women¹². Most of the youth population lives in the parishes of St. Andrew and St. George.

⁷ The country, which reached political independence in 1974, covers an area of approximately 344 square km² and is composed of the main island of Grenada and of the minor islands of Carriacou and Petit Martinique.

⁸ The poverty line was set at EC\$ 5,842/capita/year (USD 2,161/capita/year), and the vulnerability line EC\$ 7,302/capita/year (USD 2,701/capita/year).

⁹ Grenada CSO and WB, Grenada Labour Force Survey 2013-2015, St Georges, 2016 and Central Statistics Bureau data.

¹⁰ Grenada CSO and WB, Grenada Labour Force Survey 2013-2015, St Georges, 2016.

¹¹ According to the Caribbean Development Bank's (CDB's) Country Strategy Paper (2014-2018), the most affluent 10 percent account for 30 percent of consumption, while the poorest 10 percent account for 3 percent. In the Country Poverty Assessment of 2008 the GINI index was estimated to be 0.38.

¹² Age group 15-19 (9,046), 20-24 (9,961), 25-29 (9,915), and 30-34 (8,617).

- 7. Youth are a very diverse population, as are their employment and self-employment expectations. However, rural youth can be characterized as young men and women in large percentages unemployed or not meaningfully/gainfully engaged in society, with low educational levels, high migration rates (in particular the male youth), limited access to land and financial resources, and to a certain extent involved in youth and community development organizations. Poor unemployed youth cannot contribute to the family income and cannot satisfy their needs through the family's support, thus increasing the chances that they migrate to find a job outside of the community or turn to quick-earning illicit activities, particularly males. High migration rates result in rural communities that lack the energy and innovation that young members could provide. One result of young men migrating from their communities is a culture of "irresponsible fatherhood", leading to a high percentage of adolescent single mothers that interrupt their education to sustain their children, reducing their chances to access better paid jobs and posing an additional burden on their poor families.
- 8. Most of these young men and women start a family still being dependent from their parents, thus increasing the vulnerability of the family as a whole. Also, young people need quicker responses to their proposals than individuals from older age groups, as they are known to lose interest faster, implying additional challenges for development projects.
- 9. **Food Security and Nutrition.** Food Security data are based on the Grenada Country Poverty Assessment of 2008. According to this assessment in particular vulnerable to food insecurity is the population in St. Georges (33%), St. Andrew (28%) and St. Patrick (13%). The Grenada Country Food and Nutrition Security Assessment of 2012 considers that the following categories are most likely to be vulnerable to food and nutrition insecurity: low income households, children and adolescents with little education, youth without employment, adult working poor, and the elderly.
- 10. Over the past twenty years, Grenada has been faced with a shift in the consumption patterns. Traditionally, the consumption pattern was based on foods grown on their land or backyard garden such as maize, peas, cassava (flour) and ground provision, some of which were preserved for the dry season. This traditional diet made of mostly complex carbohydrates and locally produced fruits and vegetables has changed to a diet of imported refined products, resulting in an increase in the consumption of processed foods, sugar and fats. This is reflected in some of the top food items imported by Grenada, namely: Chicken (Protein and fat), baked goods (fats, sugar and refined flour) and fats and oils. Previously protein was obtained from poultry reared in the backyard, fish caught by local fishermen, meat reared and some imported pickled items ¹³. In households where there are limited funds, the funds are used to purchase low cost imported items such as flour, rice, pasta and chicken, which are easier to prepare. Therefore, the poor specifically have changed their diet to a less healthy but cheaper combination of foods.
- 11. This dietary transition from traditional to a diet high in energy, protein and fat, is not only seen in Grenada but in most of its adjacent states. This trend, coupled with a sedentary lifestyle, lends itself to an increase in nutrition related non- communicable diseases such as diabetes, hypertension, stroke, heart disease and cancer. Obesity, an underlying risk factor for non- communicable chronic diseases, poor health and reduced longevity, has also been on the increase. This is seen in adults but also in school age children. Iron deficiency anaemia is a major health issue for Grenada and has been on the rise since 2008. This indicates the need for nutrition education on Infant and Young Child Feeding. However, nutrition education is currently scarce and dissemination of nutrition concepts is only addressed by health services when the effects of new nutritional habits become evident.
- 12. **Agriculture.** Growth in the agricultural sector between 2010 and 2014 averaged 7.4% per annum, well above the average GDP growth of 1.5% during the period. Even though agriculture and fisheries represented between 5% and 9.5% of GDP in the past five years, their contribution to exports is significant: fish exports contribute to 25% of total exports and nutmeg and mace to at least 23%. However, Grenada remains a net food importer with approximately 80% of the food consumed

¹³ Poultry imports increased from 1.8% of total imports in 2005 to 3.8%, 6.3% and 5.4% respective in 2010, 2013 and 2015.

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not being produced domestically. The single most important product that contributes to a negative trade balance is poultry meat representing 6% of total imports¹⁴.

- 13. So far, in the agricultural sector low yields at the farm level and lack of infrastructure for production and processing to meet high quality standards have hampered the development of domestic supply, in spite of the opportunities arising from the hospitality sector's demand. The GOG has given top priority to the agricultural sector, approving a series of policy papers and/or pilot projects aimed at increasing production and reducing internal barriers, such as the high cost of feed for the poultry sector, barriers in the access to land and the problem of praedial larceny. The National Agriculture Policy (NAP) identifies priority commodities and classifies them according to their utilization for increasing food security, exports, supply of the tourism industry or import substitution. Most of the crops and livestock products identified are produced by the smallholder sector, such as fruit trees (nutmeg, cocoa, mangoes, breadfruit and soursop), vegetables (hot peppers, tomatoes, cabbages and callaloo), roots and tubers (dasheen, sweet potatoes, cassava), poultry, pigs and goats.
- 14. The land use in Grenada is the following: 50 percent is forest land, 21 percent is dedicated to permanent crops, 9 percent is other arable land, 17 percent is other land and 3 percent are meadows and pastures¹⁵. Only a small fraction of the land is under irrigation systems, hindering market oriented production planning: the peak agricultural produce during the rainy season June to November is currently dislocated from the top demand of the hospitality sector from December to mid-April. The high volumes of agricultural produce in the rainy season face a weaker demand and create gluts in the market and non-remunerative prices for farmers. Although the Ministry of Agriculture (MoA) provides technical support and the Marketing and National Importing Board (MNIB) provides an outlet to small farmers, at present rural poor typically have limited access to dynamic markets. The Structural Adjustment Programme included commitments to reduce public employment and expenses, which affected the number of staff basically reducing replacements and resources allocated to extension services, further reducing the scope for increasing farm production and income level of the smallholder sector.
- 15. There has been a significant decline in the number of lands under agriculture (-24%) and number of farmers (-22%) over the last twenty years. The largest decline was in large farms, so that the average farm size dropped slightly. According to the Grenada Agricultural Census (GAC), in 2012 there were 9,200 farmers and 1,500 fisher folks (mostly males), down from 15,000 farmers in 1961. 80 percent of the farmers (7,360 people) are smallholders (with less than 0.2 hectares) and only 20 percent are medium and large scale farmers (above 0.2 hectares). Over 70% of total farm population are men. At parish level, the distribution of male and female farmers is similar to the national distribution except for Petit Martinique, which has a higher percentage of farms headed by women with 57 percent female headed farms, and Carriacou with 36 percent of farms headed by women.
- 16. Another important constraint relates to an aging farming community using traditional technologies and approaches, many of them part-time farmers who are retired or employed in other sectors and regard agriculture as an additional source of income. Only 8% of male farmers and 4% of female farmers receive all income from the farm. About 33% of male and 48% of female farmers receive no income from farming and rely on farming for self-consumption. Even though there is a strong stigma among youth that agriculture is "dirty and backbreaking", discussions with focus groups have shown that many young men and women are interested in farming if: (i) it is profitable, (ii) has a quick turn-over, (iii) uses modern technology, and (iv) training is provided.
- 17. At the policy level there appear to be two main areas of opportunities, in which reforms could support the growth of farming and agro-processing activities. One is access to land, especially for

¹⁴ OEC Atlas.

¹⁵ Source: World Bank, CIAT, CATIE. Climate Smart agriculture in Grenada. CSA Country Profiles for Latin America Series. Washington D.C. The World Bank Group.

¹⁶ Ministry of Agriculture, National Agriculture Plan, 2015-2030.

young people. At present around 28 percent of the available agricultural land is left uncultivated. While the GOG is promoting programs to increase access to public lands (such as those owned by the national insurance company), most of the land is in private hands. Discussions are ongoing about the establishment of a land bank, which would allow private owners to rent the land to third parties. There is however a problem of trust of the landowners in the capacity of public authorities to enforce contracts. They hence prefer to leave the land idle, rather than running the risk of losing it. In addition, there is a gender consideration with regard to land ownership as women represent 29% of farmers owning 23% of the land, posing additional barriers for accessing credit.

- 18. The other policy area is the liberalization of renewable energy sources in rural areas. At present the cost of energy is very high in Grenada due to a single energy supplier, which has a concession for 79 years. At present, farmers and entrepreneurs with renewable energy sources solar panels or wind mills have to sell the energy to the company at half-price of fossil fuel-based KW price, meaning that businesses need to produce twice their needs of energy to actually reduce their cost. The GOG is pursuing different strategies to liberalize the energy sector negotiating an amendment to the concession that could reach results in the medium term. Renewable energy sources in rural areas would allow rural producers to reduce their energy costs in an environmentally sustainable manner.
- 19. **Market Opportunities.** There are opportunities for profitable businesses in the agricultural sector: vegetable production in the dry season using small irrigation systems could benefit from higher prices when tourism is at its peak; poultry production is being promoted by the Ministry of Agriculture and Fisheries (MoA) under a new policy that seeks to reduce the import bill of poultry meat, by guaranteeing a market share to domestic production and reducing the feed prices to increase competitiveness; soursop is being exported and Grenada is the only Caribbean country allowed to export it to the United States. In addition, the MoA is currently active in promoting domestic production, through the "Eat local, buy local" campaign. Fishing is an activity that is found attractive by male and female youth, as it has a high turn-over, however it requires a high capital investment.
- 20. The Grenada Marketing and National Importing Board (MNIB), which markets agricultural produce since 1973, is the main aggregator for crops, fruits and roots and tubers. The MNIB is responsible for securing fresh fruit and vegetables from farmers throughout Grenada, Carriacou and Petit Martinique for export and local consumption. According to MNIB analysis of the competitiveness of agricultural products, the main problem that affects agricultural production across the board, including agriculture and agro-processed products, lies in the lack of quality controls, lack of standardization of produce and poor labelling and packaging, issues that could be addressed with intense technical support.
- 21. The MNIB has an extensive database on the supply and demand of agricultural products that is analyzed on weekly basis to improve the linkages between supply and demand of agricultural produce; it follows 40 products out of which 21 are consistently under-produced. These highly demanded products include: the so called "salad fruits" (cantaloupe and watermelon), "root crops" (sweet potatoes, dasheens, carrots, tannia and eddos) and vegetables (broccoli, beets, romaine lettuce, purple cabbage and cauliflower). The MNIB signs contracts with farmers for supplying these products on a weekly or bi-weekly basis, developing a planting schedule that stabilizes prices and provides reliability of supply to the hospitality industry and supermarkets. MNIB liaises with the MoA Extension Department, input suppliers and purchasers, performing as a coordination and market intelligence body. Some results have already been achieved: sweet potatoes used to be imported from St Vincent, while Grenada's production achieved self-sufficiency in the past two years. However, at present most small farmers in Grenada cannot benefit from these contracts due to the lack of irrigation infrastructure, which makes their production too dependent on rainfall.
- 22. The MNIB identifies chicken meat as the most important food item imported by the hospitality industry, yet it does not have the infrastructure and capacities to promote increased local production. Nonetheless, the MNIB buys fresh chicken from farmers and faces a consistent demand from supermarkets, which indicates that consumers prefer fresh chicken meat and would be willing to buy the product if it meets the required quality and sanitary standards.

- 23. The information provided by MNIB confirms the findings of the Market Access and Rural Enterprise Programme (MAREP) Market Survey involving 24 purchasers (8 supermarkets, 9 hotels and 7 restaurants) and 33 producers from Grenada and Carriacou. The study focused on 15 products, perceived as in high imports/demand or consumption in the country and the findings are similar to MNIB information. The study identified a number of constraints for small farmers: hotels and restaurants do not have contracts with suppliers, only a "preferred list", which means that sales are not guaranteed if the product is available; small farmers lack transportation to deliver the products, which means it is less risky to sell at the community level at a lower price than renting a vehicle. The lack of irrigation systems also contributes to the disconnect between supply and demand in spite of the opportunities.
- 24. The hospitality industry is one of the drivers for the high food import bill. Currently farmers supply is not meeting the peak of demand that takes place in the dry season due to lack of irrigation infrastructure. Nonetheless, there is scope for increasing sales to small and medium size hotels that source domestically. Grenada has 44 hotels, out of which only one would be rated as large, which represents a good opportunity for local supply¹⁷. The main products demanded by the small and medium sized hotels include: watermelon, cantaloupe, chicken, coconut and lettuce. Eggs, honey, carrots and sweet potatoes would be the second best products in terms of demand. Productivity and quality improvements are also required to improve linkages between small farmers and the most dynamic sectors.
- 25. Currently poultry producers are competitive in egg production –mainly because of the high cost of importing fresh eggs but face constraints for meeting the meat demand, mainly in terms of quality. Small farmers have constraints for sourcing hotels due to lack of cold storage to preserve the quality of eggs while they attain the quantities demanded. The Grenada Poultry Association has been working with the GOG to develop a Poultry Policy aimed at removing the main barriers for competitiveness (mainly high costs of feed). Once this policy is fully enforced, poultry producers will access feeding with a reduction of 25% in prices.
- 26. The agro-processing industry takes advantage of the availability of fruits and vegetables all year round, with a long tradition of producing herbs, spices and natural products (soaps and oils), that are highly appreciated in the tourism sector when meeting high quality standards. According to the GAC, in 2012 there were 260 small agro-processing plants, 9 medium sized processors¹⁸ and 40 fish vendors. More innovative activities, such as aquaponics and hydroponics, organic farming, are being explored in Grenada and could have great potential to engage young men and women in agriculture. Other innovative activities could arise from the dissemination of renewable energy systems (such as solar panels) that will require maintenance services at the local level. At present, the missing links are access to information, training, and technical and financial support.
- 27. Another important source of information on market opportunities in Grenada is the Grenada Chamber of Industry and Commerce (GCIC). According to their assessment, the areas with greater potential for start-ups and SMEs are: arts and crafts, particularly bamboo baskets for spices; health and wellness services based on aromatherapy products, including nutmeg and cinnamon soaps and essential oils; guided tours through trails and forestry areas; and, ICT services developing solutions, applications and support for SMEs. The first two lines of businesses have great potential to link with the hospitality industry: spices are highly demanded by tourists, as well as soaps and oils, whose manufacturing has a long tradition in Grenada to build upon.
- 28. **Micro, Small and Medium Enterprise (MSME) Sector**. There is no available survey or study on the sector that provides a precise estimate on the number of MSMEs. The Grenada Investment Development Corporation (GIDC), as the main institution supporting businesses in Grenada, estimates that the total number of enterprises would be around 6,000 MSMEs, with no more than 60% of them being formal. According to Grenada's standards, micro, small, medium and large enterprise

¹⁷ Large hotels in the Caribbean generally have centralized procurement and supply structures. There is one additional large hotel under construction.

¹⁸ 65 percent of processors are women.

are defined according to the number of employees, assets, sales and legal structure. Micro enterprises are those with 1 to 5 employees, a maximum of USD 37,000 net asset value and annual turnover, demanding no more than USD 18,000 loans and which are 100% locally owned. Micro enterprises account for 65% of total MSMEs, while Small, Medium and Large represent 25%, 9% and 1%, respectively.

- 29. Female presence in the micro/small-scale business sector is significant, even if overall the number of male run operations exceeds those run by women, especially in the areas of construction, manufacturing, tourism, finance, business and personal services. Micro enterprises in rural areas are more likely to be informal, meaning they cannot access contracts with the Government (such as the school feeding programme) and cannot apply for concessions or business loans.
- 30. A general constraint for micro and small businesses in Grenada is the lack of access to financial services. There is no provision of financial services from banks or Credit Unions to the business sector; most loans are approved based on collaterals or an analysis of the borrower's sources of regular income (such as salaries). The banking sector is not interested in small businesses: the MAREP had funds for implementing a Line of Credit financed by the Caribbean Development Bank (CDB) that was reallocated due to the difficulties to persuade private banks to adapt their procedures and policies to the characteristics of small businesses. The Grenada Development Bank (GDB) manages funds from the GOG targeting micro and small businesses, including a Youth Business Fund that targets young men and women with a viable business concept. The performance of these funds has been very poor, with widespread arrears and high default rates, showing that borrowers perceive that GOG financing schemes are basically grants. Credit Unions typically provide loans to their members as a leverage based on their amount of shares, meaning that the borrower has to show a savings capacity in order to access financing. All these institutions require business records if the client is engaged in a business activity. Currently, record-keeping is not a standard practice among small farmers and micro-entrepreneurs¹⁹.
- 31. Climate Change. It has been widely acknowledged that Climate Change (CC) will have the greatest impact on the poorest and most vulnerable populations living in developing countries, even though they are the ones least responsible for causing it. CC has a greater impact on those sections of the population, in all countries, that are most reliant on natural resources for their livelihoods and/or who have the least capacity to respond to natural hazards, such as droughts, landslides, floods and hurricanes. Thus, in the design of the present Programme, youth, rural men and rural women are essential agents of change in the effort to address CC effects, in identifying and implementing adaptation and Climate Smart Agriculture (CSA) options, and being involved in policy dialogue on the topic.
- 32. Grenada is vulnerable to the anticipated impacts of CC and is already experiencing changes in its climate system, evidenced by increased incidence of drought, longer dry seasons, increased temperatures, coastal degradation and intrusion of saline water into aquifers, among others. The expected impact of CC on agriculture is an increased risk of crop failures induced by an overall variation of average climatic variables, with above-average temperatures and below-average dryseason rainfall.
- 33. Grenada is generally endowed with an abundance of surface water resources, with 71 watersheds on the island. The variability, timing and duration of periods of high and low water supply are not predictable, particularly during the dry season and droughts. This poses great challenges to ecotourism, agriculture and other sectors. It is expected that higher temperatures will increase evapotranspiration, and the impact of CC with reduced annual rainfall by itself will be negative for agriculture. Non-irrigated subsistence farming is vulnerable to droughts, pests and diseases. In 2010, the country suffered the first drought in its history, with serious effects on agricultural production. On

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¹⁹ Data from the 2012 Agricultural Census indicate that record keeping increases with farm size: only 4% of smallholders farming less than 2 acres of land kept records, as opposed to 32% of farmers cultivating between 25 and 50 acres and 52% of those cultivating 50 acres or more.

the other hand, heavy rains erode agricultural soils, reduce yields and quality of produce. They also increase fertilizer runoff, threatening the integrity of the country's marine protected areas. Livestock farming is concentrated on the low-lying, drier areas of the country. In Carriacou in particular, livestock production is most vulnerable to weather conditions since it experiences less rainfall than anywhere else in Grenada during drought conditions. Long dry spells can lead to reduced productivity of grazing pastures and lower animal yields. The overall effect of CC on small farmers is asset decrease, due to lower yields of fruits and vegetables and animal loss of weight and mortality.

- 34. The promotion of CSA practices and technologies is currently addressed by a number of projects that are strengthening the public sector and promoting the implementation of pilot projects. One of these projects is the Integrated CC Adaptation Strategies (ICCAS) funded by GIZ, aimed at building capacity at different levels to mainstream CC issues in policies, plans of action and community initiatives. It provided institutional strengthening to the National Climate Change Committee (NCCC), responsible for coordinating all interventions linked to CC, and to the MoA. This project will finalize operations at the end of 2018, leaving capacities to build upon when addressing CC issues and promoting CSA practices under the new Programme.
- IFAD experience in Grenada. IFAD has been operating in Grenada since 1981 establishing a 35. solid partnership with the GOG for addressing poverty in rural areas. IFAD has designed and supported 3 projects for a total cost of US\$ 18 million (with IFAD financing of US\$ 9 million), all cofinanced by the Caribbean Development Bank (CDB). In 1981 IFAD financed its first project in Grenada, approving a loan of US\$ 1.5 million to the government for its Artisanal Fisheries Development Project (AFDP). AFDP was successful in increasing the production and income levels of fishermen, but did not succeed in establishing a sustainable credit line for the latter. In 2001 IFAD approved a loan of US\$ 4.2 million for the Rural Enterprise Project (REP), which was implemented from 2002 to 2009. REP was successful in rebuilding rural communities and providing public goods after the shock of hurricanes Ivan and Emily in 2004 and 2005, but was less effective in developing rural businesses. In 2010 IFAD approved a loan of US\$ 3.0 million for the Market Access and Rural Enterprise Development Programme (MAREP), which had a focus on both vocational training and on business and enterprise development. After a one-year extension, MAREP is expected to be completed in March 2018. So far MAREP has shown better results in community strengthening and in vocational training activities than in the creation of new enterprises, which was impeded by lack of access to the required funding, complex procurement procedures and inefficiencies and delays in the delivery of the services to the final beneficiaries. Also MAREP focused mainly on wage employment, which depends on the development of the overall economy, and less on self-employment (which is instead the focus of SAEP).

B. Rationale

- 36. **The national priorities.** As a SIDS, Grenada suffers from a high level of vulnerability, both to economic downturns and to CC and variability. The rural sector is particularly vulnerable. The structural change from an agricultural-based economy to a service-based economy has created a high dependency on food imports, the abandonment of agricultural lands, and high levels of unemployment in rural areas, particularly among youth. Some of these youth are attracted by illegal activities, which in turn creates a risk for the development of the tourist sector.
- 37. For the above reasons, the Government of Grenada has two strong priorities, which emerge from its national policies, and from the meetings with IFAD: (i) job creation and youth empowerment; (ii) climate smart agriculture, to improve incomes and the resilience of its farmers to climate change. The proposed new Programme is designed to assist the GOG in addressing both of these two priorities, linking entrepreneurship and start-up businesses to climate smart agriculture and services, with a focus on youth.
- 38. **Main challenges and opportunities.** Access to opportunities for employment, for linking to markets and for receiving support services are concentrated in the St George's area, while rural communities remain poorly linked to these opportunities. Poor farmers are farming very small plots

with traditional techniques, most of them on a part time basis and as a subsistence strategy: 33% of male farmers and 48% of female farmers receive no income from farming and rely on farming for self-consumption. More than half of them are 50 years old or older.

- 39. At present young men and women do not feel attracted to agricultural activities: they have a negative perception and no information on how to do things differently from the older generations. At the same time the rural sector requires the inflow of young people to address agriculture as a business, increase market driven production planning and benefit from the opportunities in the domestic and export markets, i.e. fresh agricultural products matching the tourism peak demand or soursop production for export markets. Additionally, a sustainable growth of the agricultural sector may open new opportunities for businesses that provide services, inputs or post-harvest handling and processing.
- 40. As recommended by the last Country Poverty Assessment (CPA), a key factor is promoting entrepreneurship among youth, identifying entrepreneurship drive and boosting the capacity of young men and women to develop their initiatives on a sustainable basis, until they are able to display their full potential. At present the Small and Medium Enterprises (SME) sector accounts for 50% of total employment in Grenada, and around 20% are self-employed without employees, that is, subsistence micro-enterprise. Females represent a significant share in the micro/small-scale business sector, however, there is evidence that the number of male run operations exceeds those run by women in specific sectors. A challenge is that, according to several studies, women tend to predominate in certain business activities based on the compatibility of such activities with their domestic roles. They are often attracted to activities that keep them close to home and allow them some flexibility with respect to working hours. Women also tend to be more cautious and avoid risky ventures that will expose them to loss of savings and where they are unable to care for their families, hence the business of choice generally is in the low growth sector with little profit potential. This implies the necessity to introduce gender considerations to ensure that women will be included in the development of those businesses that will allow them to move out of poverty.
- 41. The opportunities lie in increasing agricultural and agro-processing production through improving yields and marketing linkages, with better planning to supply the peak demand of the hospitality industry. This requires a business approach and entrepreneurship drive that is currently not widespread in an aging farming community. Attracting youth to agriculture with technology driven approaches and putting in place the required support services may bring about the missing links that are currently preventing an increase in income for the rural poor.
- 42. **The new Programme's strategy.** The Programme's strategy for reducing poverty in Grenada will be differentiated in relation to the context, constraints and opportunities of each target sub group and lies in three main principles: (i) focusing on youth, as an asset that rural communities may promote to the forefront of change and development; (ii) identifying and promoting entrepreneurship as a driver for change and improvement; and, (iii) fostering sustainability of beneficiaries' business initiatives through capacity building and through CSA practices.
- 43. The design of the new Programme is built upon promoting new businesses started by youth with a strong entrepreneurship drive, focusing on market opportunities for products and services arising from the adoption of climate smart agriculture approaches, building resilience on the cluster as a whole and increasing the prospects for success and sustainability.
- 44. While numerous theoretical market studies exist illustrating potential opportunities in various sectors²⁰, the key and missing links are considered to be the actual quality and intensity of the support provided for self-employment, creating new businesses that in turn could create new job opportunities as the initiative consolidates and grows. This includes the actual access to the support (in terms of

²⁰ The National Policy Statement on Small Business Development identifies the following key sectors: (i) agriculture and fisheries, (ii) manufacturing, (iii) construction, (iv) mechanical engineering, (v) tourism, (vi) wholesale and retail trade, (vii) various services (transportation, security, information, communication, finance, consulting).

procedural rules), the availability of financial resources for start-up activities and putting in place implementation arrangements and measures that ensure quality and timeliness of support.

- 45. An expansion of the agricultural sector could be undermined by the effects of CC and could increase the current pressure on natural resources. The new Programme will hence promote profitable, no-regret measures that increase resilience to CC and the sustainability of the farming businesses. Water access and management will be a crucial factor to address CC impact and improve linkages to markets, as it allows production planning to target specific market conditions. The new Programme hence proposes a component which is innovative for IFAD's intervention in Grenada and highly relevant for SIDS: the promotion of climate smart agriculture (CSA).
- 46. The proposed new Programme aims at contributing mainly to the first two Sustainable Development Goals (SDG 1: End poverty; SDG 2: Achieve food security and improved nutrition, and promote sustainable agriculture), to SDG 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all) and SDG 10 (Reduce inequality within countries). In doing so, it also supports SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), SDG 5 (achieve gender equality and empower all women and girls) and SDG 15 (Protect, restore and promote sustainable use of terrestrial ecosystems).
- 47. **IFAD's comparative advantage.** IFAD is clearly a smaller player than other IFI's in the region, which provide mainly lending for infrastructure^{21.} However, based on its rural sector expertise, IFAD has a comparative advantage in supporting rural communities and agricultural development projects, in strengthening rural enterprises, in participatory approaches, gender equity and in market driven business development. The MAREP remains one of the few IFI projects in Grenada with a PMU located in the rural area (in Sauteurs, at the northern tip of the main island). MAREP's implementation promoted a capacity building process that started to yield results in the last two years, with a network of specialized institutional partners that are aware of the needs of the rural poor and willing to ensure sustainability after programme completion. In addition, IFAD has increasingly started working on climate change adaptation projects in the region (i.e. in Central America).
- 48. Another distinguishing feature of IFAD is its focus on the final beneficiaries, the rural poor, vulnerable and the smallholders. The World Bank has just approved a new project (named "OECS Regional Agricultural Competitiveness") focused on the development of agricultural value chains in Grenada and St. Vincent (around US\$ 4 million for Grenada), which will start operations before the end of 2017. This project promotes the development of competitive clusters in the agricultural and fisheries sectors, involving key players in each value chain. It does not exclude the smallholder sector, but is focused mainly on the aggregators and agro-processors as driving entities and does not include specific measures to ensure the engagement of smallholders and the poor. The new IFAD operation could build synergies and become complementary by enabling poor farmers to benefit from the development of competitive value chains, by improving production, increasing yields and increasing market orientation.
- 49. **Potential synergies and scaling up.** The Programme has potential synergies with various projects at the regional and national level that are complimentary to the proposed intervention (for example, the IICAS project promoted by the GIZ mentioned above and the WB financed project supporting value chains). The SAEP institutional arrangements have been designed to promote coordination by involving key actors in decision making, such as the National Climate Change Committee (NCCC) that has an overall perspective of projects promoting CSA adoption.
- 50. The design includes innovative pilot schemes for delivering extension services that could be upscaled and replicated at the national level, exploring Public-Private-Partnerships approaches. The SAEP strategic support to the MoA is the starting point of a policy dialogue on enabling policies for

²¹ For example, the CDB has approved US\$ 237 million for Grenada between 1970 and 2013. It foresaw an indicative resource envelope of US\$ 74 million to support its 2014-2018 Country Strategy for Grenada.

agricultural development (for example, on land access for youth or on the diffusion of renewable energy in rural areas), as an essential factor for reducing rural poverty in Grenada.

- The Programme will also look at establishing synergies with the FAO/IFAD regional grant "Strengthening decent rural employment opportunities for young women and men in the Caribbean", which has the objective to promote rural youth employment in six countries of the Caribbean, including Grenada²². The grant's objectives are to: (a) facilitate a common sub-regional policy and programme development process with governments, stakeholders and partners, including rural youth and farmer organizations; (b) develop and promote an evidence-based knowledge platform as the basis for information-sharing, training and capacity-building in rural youth employment generation and entrepreneurship; and (c) facilitate access to employment and the adoption of innovations and best practices for enterprise development among young people. At present the activities of the grant (which are expected to be finalized by mid-2018) are delayed due to the complexity of managing and engaging in numerous countries at the same time. A remedial action plan is being developed by FAO and by the local Country Project Management Team of Grenada to recover the delay.
- In terms of scaling up of the new Programme, a regional view can be taken. Many parts of the design of the Programme could be adapted to other countries of the "Organization of Eastern Caribbean States" (OECS), which as SIDS face similar challenges in terms of youth unemployment and climate vulnerability. Contacts were already established by IFAD staff with St Lucia and could be extended to St Vincent & the Grenadines and Dominica, which are other UMICs in the region.

II. Programme description

Programme area and target group Α.

- Programme area. The Programme area will include rural communities in the 7 parishes of Grenada (the 6 parishes on the main island and the parish which covers the two minor islands of Carriacou & Petite Martinique). Besides the capital town of St. George's, the other parishes are considered to be rural. On the basis of the latest population census of 2011, the projection for the total rural population of Grenada in 2015 is around 107,000 inhabitants.
- Target group. The potential overall target group of the Climate Smart Agriculture and Rural 54. Enterprise Programme (SAEP) includes (i) poor rural households (extreme poor and poor, approximately 13,900), (ii) the rural less poor but vulnerable (approximately 5,000 households), and (iii) small scale commercial farmers (approximately 2,700). The main characteristics of poor households in rural areas are: (i) more than the national average number of family members²³ per household; (ii) one or more unemployed persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. Rural poor have limited opportunities to improve income or access social programmes or public services, since employment opportunities, dynamic markets and support programmes are concentrated in the St George's area. The main differences between the poor and the other target sub-groups can be found in their educational levels, household size, land tenure, unemployment rates, assets, as well as income earning opportunities.
- 55. Young men and especially young women show very high unemployment rates. Recent studies mention a number of causes, including: the state of the economy; structure of the labor market; lack of relevant skills; lack of experience; no knowledge of vacancies; constrained opportunities due to health status or disability, location (rural location or general lack of transport options); stigma and discrimination due to age, ethnicity, criminal record, gender, poverty, area of residence, disability; a reactive approach to gaining employment due to negative employment experiences (personal or by others); lack of work ethic; belief that opportunities are limited due to social class or political affiliation.

²² This grant (USD 2.74 million, of which USD 1.80 million funded by IFAD, USD 0.27 million by FAO, USD 0.58 million by the beneficiary countries, and USD 0.08 by Procasur) covers Belize, Cuba, the Dominican Republic, Grenada, Guyana and Haiti.

²³ The national average is 3 family members per household.

For many young mothers pregnancy is the end of their schooling and the beginning of their attempt to provide food, clothing and housing for themselves and their children. Child-care responsibilities add to these women's constraints in accessing business opportunities or holding jobs.

- 56. Small farmers are also part of rural poor. Over 80% of farmers in the fruits, vegetables, and roots and tubers subsectors are considered small-scale farmers, i.e. farming less than half an acre or 0.2 hectares. Production of fruits, vegetables, and roots and tubers at this scale is primarily for subsistence and occasional sale in local markets. A large portion of these small farmers, most of them 50 years old or older, are part-time farmers, meaning that farming is no longer their main source of income.
- 57. Most small farmers have access to a small plot of land but cannot prove their legal rights. Most of the land in Grenada is privately owned and has been sub-divided among family members and passed on through generations. This has led to the development of very small holdings and difficulty in tracking the ownership of properties, leaving high levels of idle land, undermining investment and access to financial services. Women's share of farmland (23%) is smaller than their participation as farmers (29%), posing additional barriers.
- 58. The Programme will specifically focus on two of the most vulnerable groups within the rural poor: (i) the unemployed and underemployed men and women, with a focus on youth (age 16-35); and (ii) smallholder farmers (full-time and part-time), vulnerable to CC and variability.
- 59. The rural poor can be found in all rural areas of Grenada, with particular emphasis in the parishes of St. Patrick, St. Mark, St. John and St. Andrew, due to the higher poverty levels. St. Andrew is also an important parish for the Programme as almost one third of the 9,300 farmers are located in this Parish. Furthermore, most of the youth live in the parishes of St. Andrew and rural St. George. The targeting strategy must also take into account that at present only approximately 21% of the farmers in Grenada are in the age range of 15 to 39 years old.
- 60. As vulnerability to CC is part of the targeting criteria, it is important to mention that in the parishes of St. Patrick and St. John the exposure to CC is high due to planting on steep slopes and soil erosion, as well as damming of rivers. St. Andrew's vulnerability lies amongst others in coastal erosion, flooding, and damming of rivers. St. David, Carriacou and Petit Martinique are increasingly becoming more vulnerable due to the limited access to water (drought) and destruction of mangroves.
- 61. **Direct beneficiaries.** The expected direct beneficiaries of the Programme are 7,500 individuals from an equal number of households. In particular, it is estimated that around 4,500 households will benefit from technical and financial support services (financed by IFAD) and 3,000 households from rehabilitated rural roads and roads and drainage works (financed by CDB), that will improve and/or maintain climate resilience and access to markets in the Programme area.
- 62. The Programme's direct beneficiaries are expected to come from the following four identified target subgroups: (i) 2% would be indigent (representing 21% of all extreme poor households in Grenada), (ii) 63% would be poor (representing 36% of all poor households), (iii) 29% would be vulnerable (representing 43% of all vulnerable households), and (iv) 6% would be small scale commercial farmers (representing 16% of the existing small scale commercial farmers).
- 63. Overall, half of the direct beneficiaries will be men and half will be women. With respect to support to youth for business development and VST&Job placement, approximately 40% of the beneficiaries will be men and 60% will be women, aiming at closing the existing unemployment gender gap. With regard to support to adult existing businesses, approximately 60% of the beneficiaries will be men and 40% will be women, following existing trends of more male entrepreneurs amongst the target group. In the case of female beneficiaries, priority will be granted to unemployed young household heads (single mothers). Also, around 1,000 households (approximately 50% male and 50% female beneficiaries) are expected to benefit from climate awareness raising activities and training, while 1,200 (approximately 50% male and 50% female beneficiaries) will benefit from CSA training, technical assistance, and investments, and 1,000 primary and secondary

schoolchildren (approximately 50% male and 50% female beneficiaries) are expected to increase their knowledge and capacities regarding CC impact, CSA and relevant social issues, thereby ensuring a life-cycle approach.

B. Development objective and impact indicators

- 64. **Goal.** The goal of the Climate-Smart Agriculture and Rural Enterprise Programme (SAEP) is to contribute to the reduction of poverty and vulnerability of men and women in rural communities in the tri-island state of Grenada.
- 65. **Development Objective.** The Programme aims at improving the livelihoods of beneficiaries through accessing new jobs, starting up businesses or consolidating new businesses and adopting CSA practices. The SAEP target is to increase the assets of the target population by 10%. The Programme M&E system will provide the data to measure the number of households receiving support services and their assets and income before and after SAEP's intervention.
- 66. **Impact indicators.** The main indicators selected to measure the progress with respect to the Development Objective during Programme implementation are presented below. The M&E system of the Programme will monitor these indicators by sex and age throughout implementation. For more details, see the Logical Framework presented at the beginning of this document.
 - Number of poor households receiving services promoted or supported by the Programme: 7,500 HHs (estimated to be 54% of the poor households in Grenada)
 - Number of households increasing income by on average 10%²⁴: 4,500 HHs (this is 60% of the households receiving services under the Programme)
 - Number of farmers with greater resilience through adopting at least one CSA practice: 500
- 67. **Outcome indicators**. The main outcome indicators are the following ones:
 - Number of new jobs created as a result of supported interventions: 400 jobs
 - Number of new enterprises created: 120 enterprises
 - Number of farmers increasing production by 20%: 400
 - Number of farmers with improved physical access to markets: 3,000
- 68. Output indicators. The output indicators for the main activities are the following ones:
 - Number of youth receiving VST: 400 youth
 - Number of youth receiving technical support services for start-ups: 500 youth
 - Number of youth accessing matching grants: 400 young people
 - Number of rural enterprises accessing business development services: 270
 - Number of people trained in innovative technologies, smart agriculture and climate change: 2,200
 - Number of farmers who have received extension services on CSA practices: 1,200 farmers
 - Number of farmers receiving market support services: 400 farmers
 - Number of adaptation and climate smart investment projects financed: 180 projects
 - Number of rural roads rehabilitated: 30

²⁴ The indicator refers to an average increase in income levels. As illustrated in appendix 10, section C, the increase in income levels depends on the type of activities and support received by the various households. They are expected to increase between 17% and 95% for the beneficiaries receiving business support grants, between 17% and 52% for the beneficiaries of CSA grants, around 20% for the beneficiaries of Vocational training. For the households receiving extension services, business support services or benefitting from better rural roads and improved market linkages, an average increase of 10% appears feasible. Finally, for some beneficiaries just receiving CSA training the effect on income will be negligible, but the effect is expected to be important in terms of resilience.

C. Outcomes/Components

Outcomes

69. The Programme aims at two basic outcomes for achieving the development objective: (i) start-up businesses and new enterprises in rural areas are supported through capacity building, technical services and financing schemes; and, (ii) farmers have increased their sustainability through CSA practices. It is expected that through the SAEP job opportunities will be created for rural poor, either becoming employed or self-employed; start-up businesses will be established or strengthened; farmers will be increasing production and will report improved market links, either diversified or having a better physical access. Both components have specific gender considerations, as described below.

Components

The Programme will be implemented through two main technical components: the Entrepreneurship and Business Development (EBD) component, and the Climate Smart Agriculture (CSA) component. While each component has its specific focus, target population and implementation arrangements, there are many opportunities to develop linkages along implementation. The support to start-ups in the agricultural and agro-processing sectors will provide grounds for linking both components, since the new enterprises will receive extension and training from the MoA, will contribute to marketing through post-harvest handling services, and will contribute to reduce market gluts by demanding produce in the off-peak season for manufacturing value added products. Both components seek to increase income levels and sustainability in rural communities: promoting the development of sustainable new businesses linked to markets by young men and women will bring innovation and youth to a prominent position in their rural communities; building resilience to Climate Change (CC) will secure and improve the supply and quality of agricultural goods, providing grounds for micro-enterprise consolidation in the long term and creating opportunities for businesses along the value chain, as new practices are adopted. The intervention focuses on youth, entrepreneurship and vulnerable population. As cross cutting issues, the SAEP will promote capacity building; an enabling pro-poor environment for accessing support services; gender equity in the access to opportunities. The Programme will also introduce nutrition education as a key factor to improve the livelihoods of rural poor in the long run. This is an innovative feature of IFAD projects in Grenada: in the absence of regulatory measures by the Government (e.g. taxation of unhealthy food stuff and labelling of products), nutrition education at all levels is the most preferred intervention. Nutrition concepts will hence be mainstreamed in all the training activities of the Programme to raise awareness of the long term dangers of the emerging nutritional habits, which are detrimental for health, providing the poor with a better understanding and alternatives to the cheap imported processed foods, sugar and fats.

Component 1: The Enterprise Business Development (EBD)

- 71. The Enterprise Business Development (EBD) aims at supporting start-ups and new enterprises in rural areas through capacity building, technical support services and financing. This component has a strong focus on youth, assisting this vulnerable group to improve their income levels through becoming employed or self-employed. The component will support young men and women with the entrepreneurial drive to start-up new businesses instigated from an identified market opportunity; will provide technical support to a limited number of existing new businesses with potential for upscaling and creating employment; and, will support unemployed young men and women to receive Vocational Skills Training (VST) to become employable.
- 72. The promotion of innovative start-up businesses is at the core of this component. At present there are a series of constraints that prevent poor youth to start-up new businesses or consolidate their on-going initiatives. There is limited access to support services to develop the idea and build the required capacities to become sustainable or to have a minimum financial support to test the product, the market and the management scheme. This component will seek to increase the availability of these services, promoting innovation and the engagement of young people in the most promising sectors of the rural economy, including farming and non-farming activities (e.g. agro-processing, ecoand edu-tourism, wellness, renewable energy sources, ICT, etc).

- 73. Young men and women do not feel attracted to agricultural activities because they do not consider these as a profitable business and typically engage in farming as a last resort, following traditional approaches that lead to low productivity levels, market gluts and no profits. Nonetheless, farming and agro-processing activities could be approached as a business with fair chances of success, if the appropriate support services are available. Farming and non-farming activities will be supported if the market prospects are promising and there is potential to grow and become sustainable.
- 74. The EBD component will have three main outputs: vocational skills training for youth for becoming employed, a comprehensive business support package to youth for consolidating/starting-up new businesses and a grant financing scheme for start-up businesses.

Output 1.1 Youth receive vocational skills training (around 8% of cost of technical components)

- 75. Youth unemployment in rural areas is extremely high and at the root of prevailing high poverty rates. These young men and women lack the skills, qualifications and experience required by employers. The Programme would provide Vocational and Skills Training (VST), apprenticeships and job placement, especially oriented towards males and females from 16 to 35 years old, with the purpose of increasing their possibilities to become employed through certified training.
- 76. Vocational Skills training is conducted by several public and private sector institutions, such as the T.A. Marryshow Community College (TAMCC) or the New Life Organization (NEWLO), under the supervision and certification scheme of the Grenada National Training Agency (NTA), responsible for the introduction and management of the Caribbean Vocational Qualifications (CVQs) in Grenada. The CVQs demonstrate competence according to Regional Occupation Standards and allow to look for jobs in the region. The Programme will finance access to courses recognized for the different Caribbean Vocational Qualifications (CVQ) levels, allowing young men and women to grow professionally according to the potential of each individual, providing for a wider scope and better paid employment opportunities. The Programme will also finance short courses to enhance the skills that beneficiaries already have in a specific area. These competence based training would also lead to certification based on the practical knowledge of the trainee for a certain task, e.g. construction or electric/mechanic repairs. The enhancement of skills in an area where the applicant has already shown interest, may contribute to reduce the drop-out rate, particularly among male participants.
- 77. The courses are identified according to labour market surveys to increase the prospects of becoming employed. NTA carries our annual labour market studies, but in addition the service providers such as NEWLO and TAMCC will be required to adjust the training they offer to what the market demands. At present MAREP is more successful than the Ministry of Youth (MoY) IMANI Programme due to the emphasis given to job placement activities in the contracts with service providers. Trainers organize apprenticeship in recognized local firms to ensure that trainees can show work experience when applying for a job, thus increasing the chances of being selected for a permanent position.
- 78. The Programme will support skills development and vocational training in areas including, but not limited to: (i) sustainable agriculture (especially areas attractive to young people); (ii) processing and marketing of agricultural produce; (iii) repair services, either electric or mechanic; (iv) renewable energy technologies and their maintenance; (v) food preparation, housekeeping, yachting; and (vi) Information and Communication Technologies (ICT). It is important to note that training provisions for young men and women would be based on market opportunities, not on the traditional division of labor.
- 79. The SAEP will include apprenticeships and other job placement activities that provide trainees with relevant work experience according to their new capacities as a means to increase their chances to become permanently employed. As a lesson learned from MAREP, all VST training service providers will be required to secure apprenticeships after theoretical training. At present this has become a standard practice that improves overall achievement of targets. Even though the Programme has separate specific activities for youth with entrepreneurial drive leading to starting up

new businesses, VST training could also include entrepreneurship training as a means to instil self-reliance and a pro-active and positive attitude towards addressing hardship and frustrations.

- 80. A critical factor for Programme success lies in the selection methods and criteria to ensure that only people committed and genuinely interested in improving their living conditions are provided with those opportunities. The social problems and issues affecting the quality of life among the targeted rural men and women, households and villages/communities cannot be overlooked. Addressing these issues is a key element of the affirmative actions. At present 2-months life skills are included in most of the VST programmes offered by TAMCC or NEWLO. MAREP's experience with life skills training has been very positive and the Programme will also include this training as a standard module of VST. The purpose of Life Skills training is to identify, discuss and equip participants to address the crucial human relationship issues, challenges and constraints that impact on the individual, household, community, and consequently, the nation. These include, but are not restricted to, personal presentation, positive life skills, confidence-building, motivation and self-esteem, sensitization to topics like gender (how gender equality creates a better family relation and living environment), domestic violence, consequences of teenage pregnancies and irresponsible fatherhood.
- 81. As an innovative feature of the SAEP, the Life Skills training will also include a nutrition module, contributing to improve health and wellbeing in the medium and long term, ensuring a life cycle approach. This training needs to go beyond a food-based approach to nutrition. It needs to address: the links between poverty and nutrition; gender and nutrition; healthy diets and food choices; early pregnancies and the impact on nutrition and health for both the child and the mother; nutrition as a family issue and not as a woman's affair only; household economies for a healthy diet; the economic burden of overweight and obesity.
- 82. The Programme will implement the VST activities through contractual arrangements / Memorandum of Understanding (MoU) with the NTA and service providers (e.g. TAMCC, NEWLO, or other vocational and skills training programmes). The selection of beneficiaries will be carried out by the training providers applying the targeting criteria established by the Programme and will be based on a communication plan agreed with the SAEP PMU.
- 83. It is expected that 400 young men and women will benefit from VST and that at least 20% will be able to find a permanent job. The total cost of the VST was estimated at USD 755 thousand.

Output 1.2 Start-up and new businesses receive technical support services for business development (around 19% of cost of technical components)

- 84. Another key action to reduce unemployment in rural areas is to promote sustainable self-employment. At present, businesses outside the St George's area are poorly connected to markets, have no records on sales and profits to present to financial institutions, have little or outdated technical knowledge on how to increase production and meet quality standards. Most of them are informal and cannot link to formal institutions or more dynamic markets, such as supermarkets or hotels.
- 85. This output is planned for tackling these issues, promoting the consolidation of on-going businesses initiatives or the creation of new businesses by young men and women in the framework of a comprehensive capacity building process, designed to increase the chances of success on a sustainable basis. The Programme will seek to identify entrepreneurship drive among selected youth and boost this potential with massive training, hand-holding support, mentorship, and grant financing, until the business becomes sustainable. All business ideas will originate in a market opportunity: the capacity building process and the different instruments of the Programme will contribute to effectively testing the product, the market and the organizational structure until the business reaches a sustainable stage, with the capacity to grow, invest and create employment.
- 86. It is expected that a number of businesses will be linked to new technologies in agricultural and non-agricultural production hydroponics, aquaponics, organic production, agro-processing, ecotourism, health and wellness eco products and services, solar systems installation and maintenance, ICT. The wide range of skills required means that a great number of institutions will participate in the

training and support. The Grenada Investment Development Corporation (GIDC) is the specialized institution in Grenada for providing entrepreneurship and business development services. Its Business Development Centre (BDC) is responsible for entrepreneurship, business development, technical assistance, training, export readiness, start-ups, upgrade and expansion of existing businesses and the enabling environment. The BDC was responsible for implementing the Caribbean Youth Empowerment Programme (CYEP, 2012-2013) targeting marginalized youth, who had dropped out of school and came from the poorest parts of the country, including young single mothers as well as vouth at risk of iuvenile delinquency. The CYEP offered market driven technical, vocational and life skills, plus entrepreneurship training and career guidance. Drop-out rates were low and the targets were met and surpassed: it was expected that 250 youth would apply and the applications received doubled the target; 136 graduated (instead of 120 originally planned) and only 10 dropped out (half the initial estimate); 48 enterprises were created, 4 accessing loans from the Youth Business Fund. GIDC was strengthened with new approaches to entrepreneurship that kept the interest of trainees reducing drop-out rates; the staff was trained in the Competency Based Economies through the Formation of Enterprises (CEFE) methodology, developed by the German Ministry of Economy and currently applied in 130 countries. It also promoted more intense networking with other training institutions to achieve the overall objectives.

- 87. The SAEP will implement the youth business development activities through a contractual arrangements with the GIDC. The Programme will call potential beneficiaries to apply for participating in the component activities by implementing a strong communication strategy that will make use of inter alia mass media, social networks, youth organizations and community groups. There will be a selection process, including screening criteria based on the Programme's targeting criteria and minimal educational attainment (primary school completed), tests and interviews, which will ensure that the candidates belong to the target group and have the greatest commitment and potential to fulfil the capacity building process. GIDC will convene a Selection Panel with participation of the Programme Management Unit, representatives of the private sector, as well as other stakeholders involved in supporting youth (like training providers and the Ministry of Youth, Sports and Religious Affairs).
- 88. Selected candidates will go through a training process that will enhance their basic skills Life Skills, including nutrition as described above, basic numeracy and literacy, Information and Communication Technology (ICT) and identify their entrepreneurship drive through specific entrepreneurship training. Along the training process, young men and women will develop a business idea and will be supported by a comprehensive package of technical support services that will provide hand-holding and mentorship until the business is sustainable. GIDC will provide training and business development services: there will be Business Development Officers (BDOs) specifically assigned to the start-ups, providing orientation along the training process to develop the different aspects of the business idea and guide the young entrepreneur through the various steps (research, networking, registration, procurement, record keeping, etc.). Specific technical skills training will be provided at this stage based on needs and in collaboration with specialized institutions or through consultants. It is envisaged that some of the selected candidates may not proceed to start up a business, but the capacity building process will assist them to become employable or to link with other participants creating or consolidating their enterprise.
- 89. The Programme will support 500 young men and women to participate in the youth start-up business activities. It is expected that at least 80% will complete the training and that at the end 120 new enterprises will be created, with a minimum of 2 people employed per business.
- 90. According to GIDC experience, the start-up phase lasts approximately three years. The Programme would ensure that several types of support are provided throughout this period, when there are high chances of failure. As part of the Programme's activities to promote employment, a number of on-going businesses run by adults, in need of technical assistance to become sustainable, will be supported with business development services to grow, consolidate and create employment. The selection of these businesses will take into account their potential to upscale, their market prospects and the capacity to develop linkages with the start-up businesses, as buyer or supplier in a

mutually beneficial relationship. The GIDC will provide the business support services to these businesses through offices established in the rural areas. It is expected that approximately 150 rural businesses will benefit from this support. The total estimated cost of the business development activities is USD 1,8 million.

Output 1.3 Youth start-up businesses access grant financing (around 16% of cost of technical components).

- Based on IFAD's long-term experience in the country and repeated (but failed) attempts, as well as meetings held during the design mission with credit unions, it can be concluded that the financial sector in Grenada is not interested in financing start-up businesses. The Grenada Development Bank (GDB) - fully owned by the GOG - implemented two funds for start-up businesses on concessional terms in the past few years, the Small Business Fund and the Youth Business Fund. Both are currently under review due to high delinquency rates: borrowers perceived public sector funding as grants and there were no measures in place to promote sound business selection and commitment to repayment. As a result, financial institutions in Grenada are no longer financing startups; they are demanding a minimum of two years' experience in business and the corresponding records, which most of the small businesses lack. MAREP tried to implement a Credit Line through the Grenada Cooperative Bank - a private bank - which was cancelled due to the barriers for accessing loans that the bank could not waive due to the supervisory rules, namely collaterals, records, property documents and paper work. The Credit Union sector is also under a supervisory body, the Grenada Authority for the Regulation of Financial Institutions (GARFIN), but is more flexible with requirements. Nonetheless, the CU core clientele are consumers and service businesses; their portfolio for agro-processing, agriculture and fisheries is less than 4% of their total loans. Also the CU are not financing start-up businesses because they perceive that the risks are too high.
- 92. Under the prevailing conditions, the lack of access to financing represents a great constraint for rural poor with a business idea. For non-poor, the family savings and assets finance the new business venture, but rural poor do not have this alternative at hand. The Programme will hence implement a matching grant scheme to tackle this market deficiency, promoting a step by step approach and putting in place implementation arrangements that select only feasible and potentially profitable and sustainable business ideas, while at the same time promoting accountability and complementarity with the financial sector.
- 93. As soon as young entrepreneurs have identified a business idea, the Programme will support the initial steps for implementing the most innovative and potentially profitable proposals with small grants to start a trial and error process, which will contribute to improving the business plan and identifying the capacity building gaps. The grants for this purpose, called "First push", will be small with a ceiling per participant of USD 1,000 including 5% contribution of the trainee (in cash or in kind) and only available for those participants that approve the Entrepreneurship training. Group proposals involving more than one participant, will have a maximum funding of USD 2,500 per initiative including the beneficiary contribution of 5% (in cash or in kind). The grant will finance a specific output, that is, a short term objective towards implementing the business idea, e.g. to prepare sample products, brochures or pay for space or transportation to participate in fairs and exhibitions, to set up a small hydroponic garden, buy small equipment to improve quality or buy inputs / hire temporary staff to produce enough products to display in a market event. The grant amounts should be sufficient for advancing towards the business concept, so that the young entrepreneur may have a first actual experience on his/her new venture, yet not arising unreal expectations and keeping risks under control.
- 94. Those proposals that successfully undergo this process of trial and error will be supported to develop a full business plan. GIDC Business Development Officers (BDOs) would support the implementation of the First Push small grants aiming at identifying those entrepreneurs and ideas successful enough to proceed to the business planning stage. These would be supported with a more intense hand-holding scheme, including technical, business and mentoring services, in order to develop a business plan to be submitted to the selection committee to access a second, larger grant

that aims at financing a viable business. There would be a second selection process for identifying the most promising - technically feasible, market oriented, environmentally sustainable and profitable - business plans. The selected plans would receive a maximum Business grant financing of USD 9,300 per initiative, including a beneficiary contribution of 10% (being at least 5% in cash). More ambitious proposals involving more than one participant within the same business would have a ceiling equivalent to the number of trainees multiplied by the individual limit, with a maximum of USD 30,000 per business, including the beneficiary contribution of 10% (being at least 5% in cash). The funds would be disbursed in tranches according to identified steps in the implementation of the idea and subject to positive reports on the progress of implementation.

95. The selection of proposals will consist of a competitive process. Proposals will be ranked according to a set of criteria relating to: a) the capacity to upscale and become sustainable according to the market potential; and, b) the commitment and achievement of the trainee in the training process. The Programme will set up a Business Grant Selection Committee with participation of financial institutions - including CUs and the GDB - to seek complementarities and have their expertise in assessing business proposals. The Selection Committee could waive the beneficiary contribution for the youngest entrepreneurs -17 to 21 years old- and for the most vulnerable members of the target group (unemployed single parents). Eligible expenses include investment and purchase of goods and services, such as - inter alia - small works, land access legal advice, land preparation, equipment, vehicles, machinery, inputs, specialized technical assistance, permissions and certifications, laboratory analysis, temporary labour, brochures and printing material, packaging and labelling. The grants will not finance land purchase or lease, refinancing or payment of debts, house improvements not related to the business idea, activities that might harm the environment (such as farming on steep slopes, deforestation, slash and burn, overuse of chemicals, brick or charcoal manufacturing, etc.).

96. The Programme will actively promote a link with financial institutions to explore possible partnerships to expand their clientele among these new businesses. In view of long-term sustainability, the Programme would promote that the new businesses manage to access loans from these institutions in the future by assisting them in establishing record keeping practices since the onset, in order to provide evidence of the business performance and reduce collateral requirements. Even though the Youth Business Grant Fund is a demand driven fund, in order to calculate the fund allocation it has been estimated that 400 trainees would access the First Push and 120 new enterprises would be created at the end. The Programme will allocate a total of USD 1,5 million for matching grants, including the initial First Push and the Business grants.

Component 2: Climate Smart Agriculture (CSA)

97. The CSA component will aim at increasing the sustainability of small farmers through the adoption of CSA practices. This component will assist the farmers and members of rural communities, including the very young ones, to have a better knowledge of CC issues and CSA practices and to adopt CSA practices. Farmers need to increase their resilience to the expected above-average temperatures and below-average dry-season rainfalls, meaning longer lasting drought periods that lead to increased demand for water. This component will promote the adoption of more efficient water management and conservation measures, as a key activity to address changing rainfall patterns. These measures include irrigation systems, rain-water harvesting systems, terracing, drainage, mulching and small drainage works. The component will also support the rehabilitation of feeder roads and drainage systems that will bear the impact of increasingly extreme events, such as heavy rainfall, with increasingly unpredictable patterns.

Output 2.1 Farmers and MoA extensionists and vulnerable people in poor rural communities receive training on Climate Smart Agriculture (around 4% of costs of technical components).

98. The Programme will provide technical training to farmers and members of rural communities on CSA practices that aim at increasing production and income on a sustainable basis. This includes:

- (a) Build capacity of farmers and farmer organizations (including young farmers) to understand the effects of CC in agriculture, and identify and implement CSA practices;
- (b) Provide training to MoA extension assistants to enhance their capacity to address CC issues, assess CSA practices and approaches and interpret climate information.
- 99. This sub-component includes two types of training: specialized technical training to MoA staff and training activities to members of rural communities through the activities of the Extension and the 4H Departments25 of the MoA. In SAEP's approach youth will not be considered as a problem but rather as a strategic asset. The Programme will leverage the comparative advantage of youth as early adopters of new technologies and the higher risk-taking attitudes, and support young people by building their capacities to come up with innovative ideas.
- 100. The CSA component will strengthen the capacity of extension services by implementing a comprehensive training package to be made available to young Extension Assistants (EA) of the MoA, young agronomists in the private sector and selected young members of farmers' organizations, developing also horizontal technical assistance (farmer to farmer).
- 101. The training will include CC concepts and issues and CSA approaches and practices. It is expected that this specialized training will be provided by selected institutes in the Caribbean region such as the Inter-American Institute for Cooperation on Agriculture (IICA), the Caribbean Community CC Centre (CCCCC), the International Centre for Tropical Agriculture (CIAT), the Caribbean Agricultural Research and Development Institute (CARDI), or similar. The selection of topics and training providers will be conducted in consultation with the Environment Division of the Ministry of Education and the MoA. Other key areas for training include: an update on agricultural practices and technologies, including irrigation systems and water management systems; the use of ICT to develop new approaches that reduce operational costs; the increase in the scope of the technical advice to provide guidance on marketing issues and business development, particularly record keeping; and, social inclusion and gender issues.
- 102. SAEP training to extensionists will also include nutritional concepts and approaches to nutrition-sensitive value chains. Agricultural extension services are focusing mainly on production and productivity. Nutrition is not a genuine part of the service, and, when addressed, nutrition education is based on very traditional/conservative approaches (like the food pyramid, the colour principle and/or food and its role in the human body). At present nutrition education usually does not engage in socio-cultural issues, such as gender divides, food beliefs and taboos, nutrient values for human nutrition, household economy, cash versus food crops. Even utilization of non-traditional crops such as pak choi is not part of the extension programmes. Therefore, SAEP support for strengthening extension services will include a nutrition module to promote nutrition-sensitive agriculture.
- 103. The Programme will finance the implementation of demonstration models at schools, community and farmers' organizations or individual farms. These will be used by extension services to disseminate innovative technologies and CSA practices among targeted farmers. The demonstration plots will show farmers the feasibility and benefits of different CSA practices, providing a valuable feedback to extension services. The Programme would also raise awareness on CC and CSA practices among at least 1,000 school children in the age group 7-17 through the MoA 4H department. The support to the 4H programme would have different objectives and activities:
- (a) Promote a positive vision of agriculture at an early age as something fun, innovative and necessary, not as something dirty, backbreaking, for older people, or as a last resort. The 4H programme has in place several activities at the 4H school-clubs that can be supported by SAEP. In addition, other ways to promote a new image of agriculture are to: include visits to local farms in school activities; implement positive awareness programs and campaigns to sensitize youth on the importance of agriculture: economic, health and social benefits; ask students to show successful farmers' achievements (video, blog), or showcase innovative ways of doing

²⁵ 4 H stands for Head, Heart, Hand and Health and it is an international organization. The 4H Department at the MoA promotes educational activities at schools.

agriculture and other rural activities (agricultural project initiatives have been implemented in schools around the island and include school gardens, poultry and goats rearing).

- (b) Create awareness about climate change, adaptation, and climate-smart agriculture.
- (c) Create awareness about social issues, as they are relevant to a particular age group: self-esteem, gender equality, the effects of alcohol and drug abuse, domestic violence (where to find help), consequences of teenage pregnancies and irresponsible fatherhood. The MoA 4H programme already liaises with specialized institutions to provide talks on these topics. In addition, field trips could be undertaken and contests be held for students to write essays, prepare short videos on these topics. Also, a national or regional famous "role model for youth" could be invited as a keynote speaker at a national conference organized around one or several topics. The topics could also be discussed at the 4H Annual Leaders Convention.
- (d) Promote a better understanding of nutrition and food security issues, including healthy nutritional habits.
- 104. School gardens are a good intervention to promote appropriate agricultural practices like CSA, but also to promote nutrition and healthy diets/life style as well as household economies. This part of nutrition learning is 'nutrition in the life cycle'. A nutrition-sensitive school garden would have to take care of the nutrient value of the chosen crops (and trees and small livestock). It would go beyond the production and tackle utilization. Recipe development and cooking demonstration are part of the proposed activities. Demonstration plots should also promote dietary diversity as some crops might be attractive for selling and maybe even consumption, but have little value from the nutritional point of view, like lettuce or cassava. A comprehensive and tailored nutrition education programme to be developed also needs to address socio-cultural impacts on nutrition, such as gender and teenage pregnancies.
- 105. The total cost estimated for this activity is USD 416 thousand.

Output 2.2. Farmers receive extension services on CSA practices and on improving marketing links (around 9.5% of costs of technical components)

- 106. The Programme will give emphasis to CSA for resilient livelihoods, including new technologies and practices resilient to CC impacts and backyard gardens. The core of this approach is the recognition that useful synergies for adaptation and mitigation exist in the agriculture sector, relevant to food security, nutrition and rural livelihoods. These include a wide set of strategies that lead to conservation and restoration of soil, water, and ecosystem services by improving the quality, availability and efficiency of their use. Promoting new approaches to agriculture as a sustainable business requires technical input with updated knowledge on such CSA practices.
- 107. The capacity of the MoA to lead this process is a key success factor. At present, the extension services are going through a transition period: 12 out of a total of 17 experienced extension staff are retiring in the next two years. The impact of such a decrease in experienced staff is significant in terms of the coverage and the quality of extension services. Under this scenario, the access to extension services by poor farmers is likely to suffer and the chances for adopting CSA practices would be seriously compromised. At present, there are around 45 Extension Assistants (EA) working under the fully qualified extension officers. The MoA is developing a succession plan that aims at training part of this cohort to perform as extension officers: approximately 15 will be trained by FAO, in coordination with TAMCC, to achieve an associate degree level in three years. As extension officers retire over the next two years, all young EAs will be required to take on new tasks and responsibilities.
- 108. Since this is a critical factor for promoting CSA practices, it is proposed that the SAEP contributes to address the shortage of MoA extension staff at the district level in the short term by training as described in Output 2.1 the EAs to take on additional and more demanding responsibilities. The MoA and the PMU would select a group of approximately 10 of these trained assistants to be seconded to the SAEP, for the implementation of extension services under Component 2. The Programme would pay a complement to their salary to cater for additional

responsibilities, such as report writing and providing training to beneficiaries. These EAs would be deployed at the district level to provide training and technical support to farmers, targeting the adoption of CSA practices and technologies.

- 109. The Programme would also recruit a Coordinator, responsible for supervising the EAs, coordinating the training and other activities of the component with the MoA. The Programme will also hire specialized consultants to provide guidance and on the job training to the MoA's EA. These consultants will be selected and recruited by the Programme in consultation with the MoA and will have expertise in the main farming activities of the small farmers and in the CSA practices to be promoted (e.g. small ruminants, crops, fisheries, irrigation/water management, poultry). They will not necessarily be engaged on a full-time basis, but could basically be hired through retainer contracts.
- 110. The MoA has assessed different public or private extension models and has taken the decision that for the time being the public sector approach is the most adequate one for extension services in Grenada. The SAEP will promote exploring Public-Private Partnerships (PPP) with farmer organizations. These pilot experiences would consist of assigning the selected EAs to farmers' organizations. The Programme would request that these organizations be inclusive of rural poor and provide a quality service to SAEP's target population. The farmers organizations would report to SAEP on the quality and regularity of the services. Extension workers would have an activity log that records all field activities, allowing monitoring the focus on the rural poor by the Programme. In this way the Programme is introducing an innovative approach with great potential for improving the quality of service, replication and scaling up, without losing focus on its target population.
- 111. The Ministry of Carriacou and Petit Martinique Affairs (MCPMA) also faces staff constraints. All line ministries were affected by the Home Grown Programme and had to reduce their staff. At present the MCPMA is promoting the adoption of new technologies, with a particular focus on youth. It has developed a business centre open to all the community members for a small fee. This center has modern technologies for on-line training and is linked to existing services in Grenada, such as GIDC.
- 112. It is expected that the Programme will hire one extension officer in collaboration with the MCPMA. This extension officer will be trained by the Programme and will be absorbed by the MCPMA after three years of formal and on-the-job training.
- 113. Therefore the Programme would tackle the challenges of extension services with a multifaceted approach, strengthening the MoA current staff to ensure the sustainability and continuity of support services while the succession plan is not completed, complemented with specialized back up to maintain quality and contribute to on-the-job training. It is expected that the Programme will cover the islands of Grenada, Carriacou and Petit Martinique, providing technical support to at least 1,200 farmers. The specific fields crops, livestock, forestry and fisheries will be selected based on the needs of the rural poor and of their farmers and fishermen organizations.
- 114. In addition, the SAEP will provide support in order to improve marketing links, by putting farmers and fishermen in contact with potential buyers (processors, supermarkets, hotels and restaurants). The total cost of the extension services and marketing support was estimated at USD 914 thousand.

Output 2.3 Individual farmers and/or groups receive grant financing for CSA initiatives (around 12% of costs of technical components)

115. The CSA component will promote investments that improve resilience to CC as well as improve income, nutrition and market linkages. The adoption of CSA practices will be promoted through a grant scheme that will be open to groups or individuals receiving extension services from the SAEP, to enable poor farmers to increase resilience and income on a sustainable basis. The initiatives will be developed by individual farmers or farmers' groups with the support of the extension workers. The Programme will release calls for proposals among SAEP's extension beneficiaries establishing the objectives of the call and the terms and conditions to be applied according to the characteristics of beneficiaries, initiatives and type of expenses.

- 116. Consideration will be given to the impact of CC according to the geographical location and analysis of the farm, conducted by the extension services. There are three main types of CSA practices and investments to be supported by the SAEP: (i) those contributing to increase water availability, either through increasing access or improving efficiency of water management; (ii) those that reduce soil run-off in case of heavy rain; and, (iii) backyard gardens.
- 117. Water related practices and investments are intended to address longer drought periods and thereby enabling production planning to target higher prices in the dry season. These CSA investments include inter alia drip irrigation systems, efficient water harvesting systems, solar panel pumps, mulching, terracing and shredding, contributing to keep moisture in vulnerable eco-systems such as grazing lands. For livestock farmers, these practices would also include pens and fencing, cut and carry pastures and compost production from droppings, promoting a more efficient use of chemicals that are damming the rivers, particularly affecting the parishes of St. George's, St. John, St. Patrick and St. Andrews. Water harvesting and fencing to improve fodder management and availability along dry periods would be promoted in Carriacou, where the climate is drier, there are less sources of surface water and 60% of the land is classified as shrubs or grassland used for goat rearing. The CSA practices oriented to adapt to heavy rainfalls include small on-farm drainage works, intercropping and shade houses.
- 118. Grants will also be available for backyard gardens which, in the country context of Grenada, do not equal kitchen gardens, which have the main purpose to increase consumption of nutrient-rich vegetables. In a cash-deficient population, selling will always be the priority, but guiding the selection of nutrient-rich food to grow in the backyard coupled with nutrition education will improve healthy food choices. Backyard gardens, in particular when principles of CSA will be applied, have the potential to improve food security and nutrition and thereby to strengthen the resilience of beneficiaries. Priority beneficiaries shall be female headed households and poverty-stricken households with nutritional challenges.
- 119. The SAEP will define backyard gardens as plots close to the beneficiaries with an average size between 1/8 and ½ acre. Crops to be selected are those with high nutrient value like orange flesh, sweet potatoes, cabbage, carrots and green leafy vegetables. These are also crops classified by MNIB as having high market value. Vegetable gardens can also be mixed with fruit trees or the multipurpose Moringa tree. When possible, integrated homestead food production (IHFP) with small livestock (such as goats, chicken and rabbits) should be preferred over backyard gardens exclusively focusing on vegetable and fruit trees. Adding animal sourced protein in the diet will increase dietary diversity and nutrient supply for nutrition vulnerable beneficiaries (women and children). A seasonal calendar will provide the information which crops have to be planted at what time, in order to increase the accessibility of food throughout the year.
- 120. As is the case for all CSA practices to be promoted, backyard gardens/IHFP need to be accompanied by agricultural extension services. In the particular case of backyard gardens, it also requires tailored nutrition education.
- 121. The CSA grants will finance investments and purchase of goods and services, such as –inter alia- small works, land access legal advice, land preparation, equipment, vehicles, machinery, inputs, specialized technical assistance, permissions and certifications, laboratory analysis, temporary labour, packaging and labelling. In order to avoid negative environmental effects, the SAEP would not finance land purchases or house improvements not conducive to improving farming activities or nutrition of the household, activities that might harm the environment (such as inter alia farming on steep slopes, deforestation, slash and burn, uprooting perennial crop, brick or charcoal manufacturing). In addition, the programme will monitor the adequate use of chemicals and the adoption of appropriate waste disposal and management practices (as part of the Environmental and Social Management Plan ESMP, see Appendix 12).
- 122. The Programme would set up a CSA Grant Selection Committee for grant approval with participation of the Department of the Environment of the Ministry of Education in order to ensure

alignment with national guidelines. The Programme could hire consultants to assess proposals and score them according to the criteria established for in the call for proposals. The SAEP will build upon the formats and scoring methodologies applied by the Department of the Environment for CSA practices.

- 123. Proposals will be ranked according to a set of criteria relating to: a) the severity of the impact of CC on production and income; and, b) the socio-economic condition of the beneficiary, that is, the contribution of the proposal to improve the livelihood of the most vulnerable sectors of the target population, either by improving income or nutrition. The specific geographic and sectoral priorities for each call will be established in consultation with the Environment Department of the Ministry of Education and with the MoA, to comply with the overall guidelines and best practices for addressing CC impact in Grenada, and with the targeting strategy of the Programme.
- 124. The selected proposals would be sent to the National Climate Change Committee for clearance and coordination with other funding available for CC adaptation, in order to ensure synergies with other projects promoting CC adaptation.
- 125. The maximum grant financing for CSA practices per individual farmer will be the equivalent to USD 8,000 and the contribution of beneficiaries will be set at 10% (being 5% in cash). Group proposals will have a ceiling equivalent to the number of members multiplied by the individual limit with a maximum of USD 30,000 per initiative, including an average 10% contribution of beneficiaries (5% being in cash). Small commercial farmers, farming more than 2.5 acres of land, are expected to participate in Component 2 activities, representing 6% of Programme's total beneficiaries (see Appendix 2). For this particular group of beneficiaries, the contribution would be set at 20%, (10% being in cash). The beneficiary contribution may instead be waived for unemployed single parents. The backyard gardens would have a maximum funding of USD 1,000 per household including a minimum contribution of 5% (in kind or in cash). Even though this is a demand driven fund, in order to calculate the allocation of the grant fund it was estimated that the Programme could finance 180 initiatives along its implementation (including 60 backyard gardens). The total estimated budget allocated to matching grants for CSA initiatives is USD 1,170 thousand.

Output 2.3 Rural roads are rehabilitated to improve and/or maintain access to markets (around 31% of costs of technical components)

- 126. The CSA component will include support to rehabilitate existing feeder roads and drainage systems that will bear the impact of CC. The interventions will be selected based on the assessment of needs, the potential number of beneficiary farmers and the scope for reducing transportation costs and for promoting improved linkages to markets. The Programme will take the necessary safeguards to avoid negative impacts for the environment at the local level.
- 127. The length and unit cost of the rural road rehabilitation component is expected to vary significantly, depending on the types of works. Data from the previous programme MAREP (cofinanced by IFAD and CDB) was used to evaluate the rural roads component. Under MAREP the length ranged between 0.17 km and 2.4 km (averaging 1.15 km) and the rehabilitation works also included parts of bridges. On average for every kilometer of road, 25% of the length on one side was constructed with box drain, 25% with a slipper drain, two cross culverts with head walls and catch pit were installed, and 33% of the roadway was rehabilitated.
- 128. Under the new Programme, the roads will be selected based on the utilization rate by farmers, current production & potential for increase in agricultural production/income, as well as the interest of the farmers to provide self-help maintenance of the roads. The key missing links in the Programme area will be identified, that suffer damages/interruptions in case of flooding. The drainage of the roads will be improved to make them climate proof and resilient, and allow their use even in case of heavy rainfall.
- 129. The design standards will be based on the OECS (Organization of Eastern Caribbean States) Building Code and Guidelines. Drains will be built to accommodate the volumes of water and cross

culverts will be installed, where necessary to dispose of the water and avoid overflow. Since the works will regard established roads, very little excavation will have to be done to the road. Only trees exactly in the roadway will be cut, while branches overhanging will be cut only where necessary. The banks with the vegetation will not be disturbed, except where retaining walls and drains will be constructed. All construction will be adequately reinforced and build to withstand adverse weather conditions.

- 130. Overall under SAEP it is envisaged that approximately 30 feeder roads could be rehabilitated throughout Programme implementation (6 years). These activities will be implemented through an MoU with the Ministry of Works (MoW). The works will be identified in close consultation with the MoA and with the extensionists of the Programme to ensure synergies with the other activities of the component. The estimated cost of these roads and of the works on drainage systems is USD 3,009 thousand.
- 131. Component 3: The Programme Management (PM) component aims at ensuring the effectiveness and efficiency of the Programme, establishing key management systems and processes that will achieve the expected outputs and outcomes with the funds provided. It will benefit from the experience and capacities built throughout MAREP implementation, by ensuring the continuity of key and performing staff of the PMU to the extent possible. This will allow to reduce start up delays, particularly in the setting up an operational Monitoring and Evaluation (M&E) system, accounting and financial systems. Furthermore, it is expected that the MAREP final impact study will be planned and implemented to serve also as the Programme's baseline study.

D. Lessons learned and adherence to IFAD policies

- 132. **Lessons learned.** The design of the proposed new Programme was guided by the main lessons learned under MAREP, in particular by the drawbacks observed, which have impeded MAREP to exploit its potential and reach its objectives. Even if continuity of key staff of the MAREP PMU is proposed and use of the same office space (in order to ensure implementation readiness, which was a problem under MAREP), the strategy and approach under SAEP are significantly different. Compared to MAREP, in the new Programme it is proposed to:
 - (i) focus on young men and women with entrepreneurship drive, with a comprehensive support package during the crucial stage of business start-up. MAREP instead relied more heavily on wage employment opportunities and lacked focus on youth and on market oriented support services. The dependent work opportunities promoted heavily relied on the overall state of the economy. In addition, the intensity of the business development services under MAREP appears to have been insufficient, with only relatively few Business Development Officers (BDOs) for each rural community.
 - (ii) in geographic terms, SAEP will cover beneficiaries coming from all poor rural communities in the tri-island state to ensure a broad outreach, while MAREP targeted only a selection of 50 rural communities.
 - (iii) in sectoral terms, SAEP will have a specific component to address agricultural and connected off-farm activities (e.g. agro-processing), since Grenada is considered to have a great potential to increase local agricultural production and processing and substituting imports of products. MAREP instead supported a very wide range of businesses, spreading its resources quite thinly. At the end, the vast majority of business proposals presented by beneficiaries under MAREP were agricultural activities, i.e. small ruminants, bee keeping, poultry, pigs, irrigation and farm inputs.
 - (iv) this specific focus on agriculture and agro-processing activities will have a two-fold approach, firstly, a strong commercial drive focusing on highly demanded products that may substitute imported food and develop appropriate linkages to the hospitality industry in order to increase income on a sustainable basis; and, second, particular attention to backyard gardening mainly for self-consumption in the poorest households, increasing the intake of non-processed foods to improve nutritional levels.

- (v) in terms of implementation arrangements, enter into performance-based arrangements with institutional partners such as the Grenada Investment Development Corporation (GIDC) or the Ministry of Agriculture (MoA), ensuring their full empowerment and endorsement of the Programme's objectives and commitment to the attainment of the goals, while reducing operations costs and allocating more resources to technical support. Under MAREP, most activities were carried out directly by the PMU, which had a staff of more than 20 people, and the coordination with the key institutional partners and their level of ownership of the final programme objectives was weak.
- (vi) provide access to financial resources to the rural poor (who have no assets and no access to credit, but who have a valid small business idea), financing a trial and error process by providing small grants that lead to concrete steps within the development of the business plan. Under MAREP, the development of "theoretical" Business Plans took a lot of effort, and the assumption that these BPs would be financed by local financial institutions proved to be wrong (with only 4 loans approved in six years, often based on collateral). Also under previous IFAD projects (the Artisanal Fisheries Development Project (AFDP) and the Rural Enterprise Project (G-REP) the establishment of credit lines for farmers and agricultural businesses was unsuccessful.
- (vii) clearly divide the activities financed by IFAD and CDB, based on the comparative advantages of the two institutions. In SAEP, the CDB will finance the rehabilitation of rural infrastructures (rural roads and drainage systems) under a MoU with the MoW, while IFAD will finance the other activities.
- 133. Also, compared to MAREP, the new Programme is expected to benefit significantly from an existing PMU and the experience gained by the key staff of this PMU, who participated in the design process of SAEP. As shown in the Mid-term review, MAREP suffered from delays in the initial years, until the appropriate staff was found and hired. For this reason, continuity of key staff is proposed for SAEP. Also the management of SAEP is expected to benefit from a clearer and more concise Logframe, with clear targets in terms of outcomes, and with a clear description of the outputs and activities required to reach these outcomes. The Logframe of MAREP was very complex, with too many indicators, creating a dispersion of efforts and a lack of focus on final results.
- 134. Adherence with IFAD policies. The overarching goal, strategic objectives and principles of engagement of SAEP are aligned with the IFAD Strategic Framework 2016-2025. In particular, SAEP will support activities to strengthen the productive capacity of farmers, facilitating access to markets and addressing issues related to climate change. All other policies and strategies, sectoral and thematic, have been observed and abided to (see Appendix 12), including the recently approved manual on RIMS (February 2017) and new targeting guidelines (June 2017). The rural finance policy, which aims at ensuring sustainable access to finance, deserves a special mention. It has been observed that local financial institutions in Grenada, including commercial banks and credit unions, remain reluctant to provide credit without collateral, because of high defaults on past loans and the recognition that farming is a high-risk sector. Credit Unions reported that only 3-5% of their loans goes to agriculture. The matching grant arrangements proposed by SAEP is hence the only option left to provide access to financing, particularly for the innovative start-ups led by youth. It is expected that once businesses have taken off and proven viable after a period of handholding (documented by appropriate record-keeping), any additional financing, if required, will be provided by credit unions, which have expressed an intention to expand their portfolio. IFAD will ensure a close monitoring on the use of matching grants, to avoid the potential risks of elite capture and rent-seeking behaviours. Furthermore, IFAD will be committed to policy engagement with GoG and the local banks on the issue of access to finance (in particular, on creating a more enabling environment for access to finance).
- 135. The new Programme is also aligned with IFAD's approach to SIDS, which includes the following strategic objectives: (i) enhance opportunities for smallholder agriculture to become a vibrant business by catering to new dynamic markets and providing employment opportunities and financial inclusion, especially for women and youth; (ii) strengthen resilience to environmental and climate change and enhance adaptation capacity, including by facilitating access to relevant data and

information and mainstreaming environmental and climate change considerations into development planning. IFAD's work in Grenada could hence be a cornerstone for the development of similar projects in other SIDS in the region.

III. Programme implementation

A. Approach

- 136. The implementation strategy is based on four basic principles: (i) building upon the lessons learned, as well as the capacities built, to reduce the extended preparation period that characterized and negatively affected the implementation of previous IFAD financed projects in Grenada; (ii) improving the contractual arrangements with implementing partners to ensure empowerment of the Programme's objectives and targets, fostering efficiency and accountability; (iii) strengthening specific areas of main service providers to ensure quality and timely support services to beneficiaries; and (iv) ensure social inclusion and gender equality.
- 137. The MAREP experienced difficulties in recruiting qualified staff, particularly at the specialist level. There were lengthy periods in which the positions of the component heads were not filled and later on had to be filled through internal promotion, due to lack of suitable external candidates. This has represented a major setback for the progress in implementation. As a lesson learned, the new Programme will propose to retain qualified staff from MAREP, making use of existing capacities built during implementation. The existing MAREP equipment and office space will also speed up the preparation stage for the new programme.

B. Organizational framework

- 138. **Programme Management Unit.** Following the proposed principles, the Programme will be implemented through a Programme Management Unit (PMU) established at the Ministry of Finance (MoF) reporting directly to the Permanent Secretary (PS). This PMU will be responsible for the core services of accounting and financial management, Monitoring & Evaluation (M&E) and technical coordination.
- 139. The PMU will have a reduced staff and will be a coordinating, supervising and facilitating body. This represents a major change with respect to MAREP's implementation strategy: the SAEP PMU will not have staff allocated for directly implementing activities with beneficiaries, since these tasks will be performed entirely by specialised implementing partners. This strategy was already successfully explored in MAREP for the Vocational Skills Training, retaining only the selection of beneficiaries. The new Programme will take an additional step and leave the selection of beneficiaries to the implementing partners, based on the targeting criteria established by the SAEP. In this way, the partner will be fully responsible for the results achieved and accountable in front of the PMU for attaining the expected deliverables as planned.
- 140. It is expected that, upon agreement with the GOG and assessment of capacities and performance, a number of key staff positions could be filled with existing MAREP staff, implicating a change in scope of the current contracts based on the Terms of Reference for the new Programme. This strategy for filling the PMU staff positions could drastically reduce the preparation period for SAEP, benefitting from the learning process generated by MAREP's implementation. It would also address one of the main obstacles for attaining targets in due time.
- 141. **Programme Steering Committee.** The SAEP will establish a Programme Steering Committee (PSC), in which the key stakeholders will be represented, including: a representative of the MoF that will chair the PSC; two beneficiary representatives (ensuring female and youth representation); private sector representatives such as the National Hotel and Tourism Association (NHTA) and the Grenada Chamber of Industry and Commerce (GCIC); and, public sector institutions such as the Ministry of Youth, Sports and Religious Affairs (MoY), the Gender Department of the Ministry of Social Development and Housing and a representative of the Department of the Environment of the Ministry

of Education, currently acting as Secretariat of the National Climate Change Committee (NCCC). The PSC will have an overall guidance role, establishing the main strategies and approving the Programme Operations Manual, the agreements and contracts with service providers, the Annual Work Plan and Budget (AWPB), the M&E reports and other reports submitted by the PMU for adequate supervision and guidance. Main implementing partners and service providers, such as the Grenada Investment Development Corporation (GIDC), the Ministry of Agriculture (MoA), the Ministry of Works (MoW), the Grenada National Training Agency (NTA), TAMMCC or NEWLO, would be invited to participate in the PSC meetings to allow for an additional level of coordination and networking among stakeholders. These institutions would however be excluded from decisions; their participation is intended to provide more insight on the progress of implementation.

- 142. **Implementation arrangements.** Technical support will be provided through specialized service providers. In the case of Grenada, most of the support services required by SAEP are provided by the public sector. The MAREP worked with many institutional partners, retaining the core activities and giving the institutional partner a secondary role in attaining targets. This prevented a clear distinction of responsibilities, reduced the scope for specialized technical support and for an empowerment of Programmes goals and targets by the implementing partners. The contractual arrangements established the basic responsibilities of the parties, yet the Annual Work Plan and Budget (AWPB) was prepared by the MAREP PMU with little or no participation of implementing partners, which caused many difficulties and disconnections during implementation and long delays for beneficiaries. The Programme will build on the lessons learned by MAREP, regarding the contractual arrangements with these institutions, addressing the issues that may cause delays in the delivery of services to beneficiaries.
- 143. The Programme targeting criteria will be applied by implementing partners and supervised by the PMU. Applicants and selected beneficiaries will fill a form with personal data and household data that will be used to verify the application of targeting criteria and as a baseline survey to measure the Programme's impact on beneficiaries. The forms will be developed by the implementing partners in close consultation with the PMU and linked to the Programme's M&E system.
- 144. **EDB Component.** Under the EBD component the Programme will develop MoUs with the main training service providers (e.g. NTA, TAMCC, NEWLO, and other private service providers) for the Vocational Skills Training activities. The training will include Life Skills training, as has been standard in MAREP and reported as being highly beneficial by trainers and trainees. The new modules on nutrition and nutritional habits to be introduced will be developed by consultants under the guidance of the Food and Nutrition Council.
- 145. The MAREP experience shows that it is possible to make contractual arrangements directly with service providers for courses that provide training in areas that have good prospects for job placement, but do not lead to certification by NTA due to lack of standards. The PSC may identify these potential demands in the market and recommend the PMU to enter into such arrangements, when necessary and/or of interest. The MoUs with the training service provider will establish the responsibility of the training service provider to select beneficiaries according to the Programme's targeting criteria. The MoUs will also establish minimum retention rates that the trainer commits to attain; the final 20% payment will be subject to the attainment of the established targets. This approach is currently applied by the NTA.
- 146. Contractual arrangements will follow MAREP's best practices regarding job placement activities. The participation of a wide range of representatives of the private sector in the PSC, including the GCIC and the NHTA, allows for creating consultation sub-committees for selecting training areas according to the market demand. The POM will include the selection criteria for VST to be applied by implementing partners and/or service providers, as well as the expenses covered by SAEP, amounts and procedures for disbursement. Following MAREP's lessons learned and best practices, the cash disbursement for trainees will be implemented on a reimbursement basis. Nonetheless, disbursement through bank accounts will be promoted, since opening a bank account is a first step in the process of becoming employed and a learning practice for trainees. The service

providers will report to the PMU and the PMU will disburse funds in tranches according to the attainment of targets agreed in the contractual arrangement. The PMU M&E system will monitor the application of the targeting criteria and quality standards through visits and random inspections.

- 147. The entrepreneurship training to youth and the business support services to start-ups and ongoing enterprises (those that have been active for approximately three years and require technical support for becoming sustainable) will be implemented through a Memorandum of Understanding (MoU) with GIDC. As mentioned before, the GIDC is specialized in business development services and entrepreneurship training, and has recently developed a project for supporting marginalized youth from rural areas that increased its experience and expertise in topics that will be at the core of their involvement with SAEP; the CEFE methodology can be adapted to the Start-up Business subcomponent, providing a proven methodology to sustain interest and better prepare young entrepreneurs to carry out their initiative. The SAEP will support the GIDC to have field presence in rural areas, thus increasing coverage of business development services among the rural population on sustainable basis. GIDC will commit to absorb any additional staff recruited for providing business development services to the target population to ensure sustainability of support. The selection of candidates for the entrepreneurship training will be conducted through screening criteria established by the SAEP Operations Manual and will be applied by a selection panel convened by GIDC. composed of the Programme Manager, GIDC, a representative of training agencies (NEWLO or T.A. Marrishow Community College - TAMCC), the MoY, financial institutions (CUs or the GDB) and a representative of the private sector (the GCIC or the National Hotel and Tourism Association - NHTA).
- 148. **Grant financing for Business.** The selection of youth business initiatives for grant financing will be conducted by an ad-hoc committee established by the PSC, composed of the SAEP Programme Manager, two representatives of the financial sector (one from the Credit Unions and one from the Grenada Development Bank, GDB), one representative of the MNIB and one representative of the National Hotel and Tourism Association (NHTA). The GIDC will support the committee as the technical secretariat with no right to vote. The grants will be selected through competitive processes: the Programme will make calls for proposals on an annual basis among the youth participating in entrepreneurship training.
- 149. The eligible criteria and procedures for accessing the grants will be established in a specific section of the POM along with the guidelines established at design. The grant disbursements will be managed by the PMU, based on decisions of the selection committee and progress reports on the use of funds submitted by GIDC. All grants will be disbursed in tranches and payments will be done directly to suppliers whenever possible. Procurement will be conducted by the beneficiaries with supervision and support from GIDC, following simple rules and procedures ensuring transparency and accountability, as well as adequacy to the amounts involved. This should be regarded as a step in the capacity building of the potential entrepreneur.
- 150. **CSA Component.** The Ministry of Agriculture and Fisheries (MoA) is responsible for providing technical assistance to farmers and fishermen, as well as a wide range of support services, including facilitating land access, registration of land use, control over the use of chemicals, research, laboratory analysis, registration, input supply and promotion of domestic production.
- 151. The Structural Adjustment Programme (or Home Grown Programme HGP) applied since 2012 significantly reduced the resources for the MoA services. The GOG applied a "3 for 10" rule, meaning that only 3 out of 10 vacancies would be filled in the public sector. As a result, the replacements for retiring officers were drastically reduced and the capacity of the services to cover the target population relies on young Extension Assistants, who require training and support to take on the added responsibilities. The MoA has a succession plan in place that will be able to replace the qualified retiring officers after approximately three years. The SAEP will support the remaining EA to deliver quality services to the target population through training and technical support.
- 152. The PMU would sign a MoU with the MoA for ensuring quality technical assistance to the target population, exploring innovative ways of delivering the services. The stipulations of the MoU will state

that: the SAEP would finance training to EAs; the Programme would select approximately 10 trained EAs to be seconded by the MoA to the SAEP; the MoA would continue paying the salary to these EA and the SAEP would pay an additional compensation for the added responsibilities; the SAEP would finance a Coordinator and consultants to supervise and provide guidance to the EAs seconded to the Programme; the EAs seconded to the SAEP will be focused on poor farmers and, whenever possible, attached to a farmers' organization; the selected farmers' organizations for the pilot experiences would be agreed upon between SAEP and the MoA; and, the MoA commits to continue delivering services to the target population after programme completion. The MoA would establish a Unit reporting directly to the Permanent Secretary (PS), consisting of a coordinator and the selected young EAs deployed at the district level. The compensation package and other expenses required to operate effectively will be agreed with the MoA. The Programme will provide the necessary equipment except for vehicles - to operate effectively (ICT equipment, soil testers, etc.). The number of crop, livestock, forestry and fisheries officers to be selected and assigned per district/organization will be agreed upon between SAEP and the MoA according to the needs of the target population.

- 153. The training to EAs would be contracted through competitive processes to specialized service providers with recognized expertise in CC and adaptation in the Caribbean region, such as CCCCC, CIAT or CARDI. The contents of the training and the selection of trainers will be agreed between the SAEP and the MoA, in consultation with the Department of the Environment. It is expected that the trainees will also receive training on business development, marketing and ICT technologies applied to extension services. This training should be procured by the Programme in close consultation with the MoA. There are several institutions that could provide this type of support at the regional level, including the Institute for Cooperation for Agriculture (IICA) and the Food and Agriculture Organization (FAO). At the local level, the GIDC could provide training on marketing and business development.
- 154. SAEP training to EAs will also include nutritional concepts and approaches to nutrition-sensitive value chains. This module would be developed by consultants procured by the Programme through competitive processes, in close consultation with the Food and Nutrition Council.
- 155. The PMU will also sign an MoU with the Ministry of Carriacou and Petit Martinique Affairs, which is in charge of agricultural extension services on these two small islands, for hiring an extensionist who will be absorbed by the MCPMA after three years to continue delivering services to the target population. The salary will be agreed upon between the Programme and the MCPMA. The Programme and the MCPM will agree on the necessary equipment except for vehicles and specific support for operating costs that the Programme will finance to operate effectively.
- 156. **Grant financing for CSA initiatives.** Initiatives for adopting CSA practices will be developed by small farmers with the support of the SAEP extension services. The MoA and the PMU will agree on simple formats for presenting the proposals, adequate for the educational levels of the target population. The Programme will make calls for proposals on an annual basis among beneficiaries of SAEP's extension services.
- 157. The POM will establish the basic principles of the grant selection criteria, the ceilings per business and per individual, the type of expenses financed and the procurement rules along the lines described in the design of the Programme. The Programme would set up a CSA Grant Selection Committee for grant approval, composed of the SAEP Programme Manager, a representative of the Department of the Environment, an expert on CSA practices from the MoA, and representatives of the MNIB and the GDB to bring in expertise in business assessment. The Programme could hire consultants through competitive processes to assess proposals and score them according to the criteria established in the call for proposals. The selected proposals would be sent to the National Climate Change Committee (NCCC) for clearance and coordination with other funding available for CC adaptation. In case the NCCC identifies and recommends other sources for financing, the Programme's extension services will support the beneficiary/ies to comply with the procedures to access the recommended source, and the CSA Grant Committee will follow up to facilitate the process.

- 158. Procurement will be conducted by the beneficiaries with supervision and support from the MoA extension services following simple rules and procedures, ensuring transparency and accountability, as well as adequacy to the amounts involved. There will be no cash disbursements to farmers or groups; payments will be done by the PMU directly to suppliers based on the decisions of the CSA Selection Committee and the reports of the corresponding extension worker. This will contribute to control the use of chemicals and the quality standards of the inputs and equipment financed.
- 159. **Rural roads**. The rehabilitation of roads and drainage systems will be implemented through an MoU with the Ministry of Works (MoW). This has worked well under MAREP, where CDB has provided support to the MoW to carry out the required activities. The roads are selected through a process starting with an assessment by the extension services of the MoA, identifying the number of farmers using the roads, the volume of products that need to link with market outlets and the current situation of the infrastructure. This needs assessment provides an initial list of works that is analyzed by the MoW to evaluate the technical aspects and estimate the cost of the intervention. The final list of works is proposed by the MoW and approved by the PSC and the CDB. Minor maintenance works are usually done by the community members, but the major responsibility for maintaining the works in good condition lies with the MoW, and will be included in the MoU.
- 160. The designs of the infrastructure works will be aligned with the Caribbean standards to ensure climate-proof works. There will be no new roads or infrastructure to be financed, meaning that there will be no need for additional environmental studies. In terms of the Environmental and Social Management Plan, the risk of sand mining and the adoption of climate proof maintenance methods will be monitored. The MoW has in place environmental guidelines that ensure close monitoring during the bidding processes and implementation of works.
- 161. **Enabling measures for Gender equality.** In the SAEP affirmative actions have been mainstreamed in general programme management and in the implementation strategies of both technical components. Programme design has ensured that marginalized groups can take advantage of development activities and have access to its services; in particular, reference is made to the empowering and participation of youth and women, particularly of young male and female-headed households.
- 162. The Programme's implementation will take into consideration, amongst others, the following enabling measures to ensure gender balance and focus on youth: (i) experience of working with youth and gender equality will be included in the Terms of Reference of all PMU staff; (ii) experience of working with youth and gender equality would be included in the Terms of Reference and contracts and MOUs with service providers; (iii) the participation of two (2) youth, male and female representatives of beneficiaries in the Programme Steering Committee²⁶; (iv) gender and age specific selection criteria in the call for proposals and differentiated counterpart requirements for the matching business grants and grants for Climate-Smart Agriculture initiatives; (v) monitoring and evaluation will use disaggregated data (registration, collection, analysis and reporting) and the Programme's implementation strategy will be adjusted, if gender and youth targets are not met; (vi) a specific social inclusion/gender equality impact study will be carried out as part of the learning process and the elaboration of knowledge management products; (vi) provisions would be made for training to be implemented as much as possible in rural communities and not in St. George's (to reduce transportation costs and make them more accessible to youth and women); (vii) awareness raising and training materials should be adequate and understandable for its specific audiences; and (viii) provisions should be made to facilitate women's and youth participation in any exchange visits organized or financed by the Programme.
- 163. The affirmative actions included in SAEP's design have the purpose of empowering the more vulnerable groups and creating an enabling environment for its two technical components to be successful.

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²⁶ These would receive a stipend to cover traveling costs and a compensation for the time dedicated to the PSC.

- Various provisions within the Vocational and Technical Skills Training: (i) motivational activities oriented towards youth, especially the male youth who according to experience enroll less in vocational training programmes; (ii) initial 2-month life skills training as part of VST; (iii) provision of a stipend and travel allowance for VST participants; and (iv) provision of either day care facilities at CVQ Training Facilities or a day care allowance for VST participants that are single parents. Similar provisions have implemented by GIDC for a recent training for business development;
- Differentiated counterpart requirements for matching grants and grants for Climate-Smart Agriculture initiatives have been established for vulnerable groups (young men and women in the age group of 16-21 and single mothers could be awarded exceptions from contribution in cash);
- Capacity building in gender equality for staff of key implementing partners: MOA, GIDC staff and Ministry of Carriacou and Petite Martinique;
- 4H: Awareness raising of primary and secondary schoolchildren (male and female) not only
 of climate change and CSA, but also of social issues relevant to their age group; and
- Support to the Gender Department for training of ministerial gender focal points.

165. Furthermore, the Programme would leverage the social capital of existing youth organizations, including community-service organizations and sport associations, to engage youth in the planning, monitoring and evaluation of SAEP's activities. Horizontal exchange visits are envisaged as interesting mechanisms for youth to share experiences, learn and become proactive in the discussion of policy issues of relevance to the youth and women, such as access to land and access to finance. Annual conferences with youth have been catered for with the objective of sharing of experiences, knowledge generation and engaging them in policy dialogue.

C. Planning, M&E, learning and knowledge management

166. The main objective of monitoring and evaluation (M&E) is to provide the Programme stakeholders with data and information to ensure an efficient use of resources and timely dealing with problems (in order to allow the Programme achieving its objectives, expected outcomes and targets within the foreseen timeframe), as well as the capacity to measure Programme impact. The main objective of knowledge management on the other hand is to provide stakeholders with knowledge as an input for up-scaling strategies and policy engagement.

167. Monitoring and evaluation would be conducted using a participatory approach through which stakeholders will be fully engaged in the recollection of field data, discussion and analysis of this data, and decision making regarding changes that might be required for a more effective or efficient programme implementation. This means that key implementers such as the MoA, GIDC and MCPMA will play an active role in data collection; the MOA, GIDC and MCPMA will analyse data to monitor progress on the implementation of their respective AWPBs, whereas the PMU will be responsible for the analysis of all data and monitoring the overall SAEP progress, including the AWPBs of GIDC, MoA and MCPMA, that are an integral part of the SAEP AWPB. The PMU will provide feedback to the PSC and key implementers regarding progress and together these actors will discuss and decide upon corrective measures that might be required. Detailed information will be collected and analyzed with key implementing partners, while more general and strategic analysis will be provided to the PSC.

168. The design of the M&E/Management Information System (MIS) will be based on MAREP's experience, but will aim at including innovations, such as a dashboard for monitoring of the implementation of the AWPB, and the utilization of ICT tools for information transparency and knowledge sharing. It is expected that the MIS will generate information for three distinct functions: (i) management; (ii) accountability; and (iii) learning and policy engagement. Building on MAREP's experience, the Programme will collect data directly in the field through key implementing partners (e.g. MoA, GIDC) by using tablets. The information would be uploaded using an Internet connection to

the MIS located at a server at the PMU. Specifically, the M&E/MIS should assist implementers with monitoring progress on:

- (a) Compliance with the targeting strategy;
- (b) Implementation progress of the AWPB; and
- (c) Achievement of logical framework targets and RIMS indicators.
- 169. As most of the implementation of both technical components will be executed by MoA, MCPMA and GIDC, the PMU should play a proactive role in monitoring compliance of the targeting strategy. Disaggregated data (by age and sex, where relevant) will be used in order to allow the monitoring of the targeting strategy and the outreach to vulnerable groups. Implementing partners will fill out forms with basic personal and household information for all beneficiaries of the Programme they are supporting, providing evidence to monitor compliance with the targeting criteria, and as a means to establish a baseline to then measure the benefits of the Programme at the individual level.
- 170. Training and support would be provided to PMU staff and key implementers such as MOA and GIDC in the use of the data collection system. The M&E Specialist and Officer of the SAEP PMU would be responsible for ensuring the quality of the data, and that information is registered according to the agreed upon timing and frequency. A comprehensive and detailed M&E Plan/Manual would be designed by the M&E Specialist to increase stakeholders´ understanding of what has to be done, how to do it, when to do it, and who is responsible. This Plan should cover all the components of the M&E system, including the planning stage (preparation of the AWPB), taking into account IFAD's template.
- 171. In order to bring SAEP in-line with the new RIMS guidelines (2017) and for the programme's results to be compatible with IFAD's Operational Results Measurement System (ORMS), some of the RIMS Outreach and Core Indicators have been used in the Programme's Logical Framework (LF). Others, when relevant, will have to be included in the Programme's M&E system and MIS.
- 172. The Programme would have start-up workshops on the main island "Grenada" and on "Carriacou and Petite Martinique". The main objective of these workshops is to inform governmental and non-governmental institutions and the target groups of the programme's scope, objectives, expected results, components, and intervention strategies. Participation in these workshops by representatives of youth and farmers organisations is essential. The workshops would help the Programme Management Unit with networking/coordination efforts and to forge strategic alliances that would contribute to ensuring complementarity of activities and avoiding overlaps with other projects and institutions.
- 173. In order to be able to evaluate progress made and impact achieved over time, it is essential to have access to baseline data. The minimum requirement of data for the baseline is that it provides the information required to be able to measure the indicators defined in the Logframe (LF) and RIMS Outreach and Core Indicators. The Baseline study for the new Programme will be carried out under MAREP, as part of its final impact study. At the end, an impact study in Y6 has been planned and budgeted for in order to measure the impact of the SAEP on the target population.
- 174. A Mid-Term Review (MTR) would be carried out three years after Programme start-up; this would be an external review led by IFAD. The scope of the MTR would be wide-ranging so as to assess progress in implementation and achievement of LF and RIMS indicators, programme objectives and outcomes, effectiveness of institutional arrangements, resources used, and allow time for adjustments to be made in programme implementation.
- 175. IFAD's supervisory function will be ongoing and support will be provided for implementation and resolving issues that arise. Supervision missions from the Latin America and Caribbean Division (LAC) will take place once a year and will be organized by IFAD's Country Programme Manager (CPM) in coordination with the Borrower, the PMU, MoA, MCPMA and GIDC.
- 176. At the end of the Programme, the PMU will organize and implement "Closing Workshops" in "Grenada" and "Carriacou and Petite Martinique"; with the objective of discussing experiences with stakeholders, Programme results, impacts, and success stories, as well as obstacles encountered

during implementation as an input to the Project Completion Report (PCR). The completion review is a process undertaken by the Borrower in close coordination with IFAD at the end of the Programme implementation cycle in order to report on the results achieved.

- 177. Specific evidence-based knowledge products will be developed on the basis of Programme experiences, in order to extract lessons and best practices, replicate innovative solutions, achieve better outcomes and greater impact from development resources, and strategically disseminate the knowledge generated to support national decision making and policy processes. Some of the knowledge products that would be produced by SAEP (PMU and implementing partners) include: working papers, case studies, research reports, videos, blogs and vlogs, policy briefs. Dissemination would take place as an interactive process of communicating this knowledge to target audiences, with the purpose that it may be used to lead to change. In particular, the following topics could be of interest for in depth analysis and to promote policy dialogue with the GOG: (i) the innovative mechanism designed by the Programme to develop the extension services in rural areas; (ii) the access of youth to land; (iii) the development of renewable energy sources to reduce energy costs in rural areas, and (iv) the public concession schemes to ensure access to affordable agricultural equipment to the rural poor.
- 178. The key implementing partners have different levels of experience with knowledge management. All have their own web site and Facebook site, MOA has experience with the preparation of videos from field experiences, whereas GIDC has more experience with the preparation of written materials. Each partner has access to different communication channels. The Ministry of Carriacou and Petite Martinique has its own PR&Communication unit, whereas the MOA has access to TV channels, and GIDC uses more seminars and events to share testimonials and experiences and is member of regional networks and platforms. SAEP would tap into these resources to ensure that knowledge products will be amply disseminated. In addition, the Programme would have a basic information technology platform to enable information management, communication and knowledge-sharing with stakeholders and the public in general (web page, Facebook page, link to GoG and IFAD virtual platforms, uploads to Youtube, twitter account, Pinterest, Instagram, amongst others).
- 179. SAEP would support seminars for knowledge generation and sharing, as well as an Awards programme in coordination with the key implementing partners, in order to recognize young innovators in business development or CSA initiatives, successful VST trainees/graduates, or to acknowledge a particular institution that has played a key role in providing support to the programme's target group (e.g. private sector). The Awards programme could also showcase experiences of successful young males or single mothers as role models and inspiration for others.

D. Financial management, procurement and governance

- 180. **Financial Management.** Financial Management Assessments (FMAs) were undertaken as part of Programme design. They included a review of the operations of MAREP and of the Government Public Financial Management (PFM) systems, for the purpose of using national systems where these are compatible with IFAD's requirements. As measured by Transparency International's Corruption Perceptions 2016 Index (CPI), Grenada is rated low risk with a score of 56, placing the country at 46th position out of 176 countries scored. Appendix 7 provides detailed information on the main financial subject areas, including the summary assessment ratings, after incorporation of some risk mitigation measures. This results in an overall result for SAEP as being low risk from a Financial Management perspective.
- 181. The Ministry of Finance (MoF) is assigned overall fiduciary responsibility as the Lead Programme Agency. It will ensure proper financial management and implementation of SAEP, funded in parallel by IFAD and CDB, with the support of the SAEP PMU that reports to the Permanent Secretary of the MoF. The PMU finance team, reporting to the SAEP Programme Manager, shall be composed of a Finance Manager and a Disbursement/ Accounts Assistant. Their responsibilities will include Programme accounting, consolidation of Financial reporting (inclusive of CDB parallel

financing), preparation of annual financial statements, periodic financial reporting, overseeing the arrangements for external audits, in accordance with IFAD/CDB procedures and guidelines, as well as strategic planning, consolidation and monitoring of AWPB activities.

- 182. Annual Work Programme and Budget. The GOG Annual Budget process, requires that all proposed allocation requests are submitted by early September of the preceding year to ensure that allocations are included for approval in the Parliament's Annual budget in October each year. To meet these time lines, the PMU needs to obtain submissions of planned activities well in advance from implementing partners and beneficiaries. In this manner, appropriate reviews for consistency and costing purposes can be carried out before presentation to the PSC for overall approval, prior to submission to the MoF for subsequent Parliamentary approval. Each Annual Work Plan and Budget must include the respective procurement plan and is subject to IFAD non objection. Budget control is facilitated as the current Government SmartStream system has built-in allocation verification and automatic checks, prior to effecting any payment of Programme expenditure.
- 183. **Financial Reporting.** Submission of yearly financial statements using International Public Sector Accounting Standards (IPSAS) on a cash basis, that includes information by category of expenditure, component and financing source, will be undertaken in accordance with IFAD requirements. Apart from this, the PMU will prepare interim financial reports (IFRs) for submission to IFAD after management review.
- 184. **Programme audits.** The Internal Audit department of MoF will include SAEP in its internal audit plans, so as to undertake reviews and submit results of findings thereon to the PSC and IFAD. IFAD will request submission of management action plans with respect to any derived recommendations. The annual external Audit of SAEP's yearly financial statements shall be conducted under specific Terms of Reference that will be generated in accordance with IFAD's revised Audit Guidelines. The external audit will be performed in accordance with International Standards of Auditing (ISAs), including ISA 701 and subsequent changes introduced. The audit will be carried out based on the professional judgement of the auditor on the extension of tests and controls to apply. The audit report together with the related management letter are to be submitted to IFAD no later than six months after the end of each fiscal year.
- 185. Funds Flow and Disbursement Arrangements. In accordance with Grenada's Public Financial Management Act 2014 and 2015, for SAEP, the funds from IFAD and the counterpart funds of CDB and the GOG will be channelled to the Single Treasury Account maintained in the Grenada Cooperative Bank. Funds are traced through ledger accounts and regularly reconciliations take place with respect to disbursements for programme expenditures with accounting entries, where pro-rata allocations between funding sources are required. As GOG recognizes the importance of this Programme it will make budgetary provisions for GOG counterpart funding of the activities of around USD 2 million, including approx. USD 500 000 for financing of taxes and duties. The initial IFAD advance disbursement to be deposited into the MOF Single Treasury Account will be based on the first year's AWPB forecast for IFAD funded expenditure, with subsequent disbursements based upon submission of Statement of Expenditures (SOEs). Disbursement related procedures will be spelt out in the Letter to the Borrower (LTB) in accordance with IFAD Guidelines.
- 186. **Procurement**. Procurement activities under the Programme will be carried out by the PMU in accordance with the provisions of the Legal Agreement, IFAD's guidelines and the Programme Operational Manual (POM). An assessment of the local capacity (including that of Procurement Units at the MoF and of MAREP) to conduct procurement processes was carried out and the overall risk for procurement is rated average, considering the existing capacity and the Programme implementation arrangements. Considering the proposed use of matching grants, the POM shall include clear supervision arrangements as well as appropriate simplified templates for facilitating contracts, requests of quotations, and others.
- 187. **Governance.** The GOG will establish a Programme Steering Committee (PSC) that will have a fiduciary oversight role, including approval of AWPB submissions, discussion of key internal and

external audit findings, review of Programme progress and communication with all parties to ensure a smooth and active implementation of activities from year to year. Members of the committee will include the key stakeholders of the public and private sector, as well as representatives from beneficiaries, to ensure good governance and transparency of the Programme's objectives and achievements.

188. The IFAD Financing Agreement will be drawn up in accordance with IFAD's General Conditions. As an exception to section 4.08(a)(ii) of the General Conditions, specific eligible expenditures during the preparatory period from the start of negotiations of the Financing Agreement (November 2017) to entry into force (expected in March 2018), up to the equivalent of USD 400 000, pre-financed by the GOG, will be reimbursed from the IFAD loan after the Financing Agreement has entered into force and any conditions precedent to withdrawal have been met. In addition to this retroactive financing, an advance can be requested to cover start-up costs (up to the maximum amount of USD 250,000) for eligible expenditures incurred between the date of entry into force of the Financing Agreement and the satisfaction of the conditions precedent to withdrawal.

E. Supervision

189. IFAD will provide direct supervision for the Programme, complemented by implementation support missions. One supervision is generally planned for each year. In addition, if required, implementation support missions will be organized to cover the themes and areas recommended by supervision missions. The supervision mission team could combine expertise in: (i) Enterprise Development, (ii) Climate change adaptation and climate smart agriculture, (iii) Youth and Social Inclusion, (iv) Financial Management, (v) Procurement, and (vi) Monitoring and Evaluation Support, depending on the specific needs.

190. The first supervision mission will be undertaken within the first year of Programme effectiveness. The principal features that be will assessed and monitored during the first supervision mission are, amongst others:

- (a) PMU staffing;
- (b) Programme start-up;
- (c) Understanding and application of targeting criteria;
- (d) Development of the AWPB and Procurement Plan;
- (e) Progress in relation to the timeframe defined in the implementation plan;
- (f) Progress in relation to the MOUs with key implementation partners (MoA, GIDC, MCPMA, MoW) and other institutional arrangement such as MOUs with TAMCC and or NEWLO:
- (g) Development of the Baseline Study, M&E and Management Information System;
- (h) Development of the Programme Operational Manual (POM); and,
- (i) Advancements in fiduciary aspects, expenditures, contribution of funds from the counterparts and compliance with the terms of the loan agreement.

F. Risk identification and mitigation

191. The main risks identified for the SAEP implementation include: a) economic risks, b) climate change risks, c) social risks, and d) institutional risks.

192. The main economic risk lies in the vulnerability of the country to external shocks, particularly to the fluctuations of the touristic in-flows that could reduce the demand for the businesses promoted by the Programme. The SAEP will promote small businesses linked to agriculture, agro-processing and related services that have the capacity to supply the domestic market. Although the most dynamic markets are linked to the hospitality industry, import substitution also for local consumption stands as a market opportunity that could absorb increased production and sustain the growth of agricultural output in the long term. The main mitigation measure to enable farmers and micro-entrepreneurs to benefit from this market opportunity is promoting higher yields and quality control, in order to gain competitiveness against imported products, and adopting a business approach to become a reliable

supplier. The campaign of the MoA "Eat local, buy local" is geared towards this market opportunity that could provide a sustainable basis for increasing agricultural production, which in turn may create business opportunities for non-farming activities in the rural areas. The quality of SAEP's technical support services is another important mitigation measure that will contribute to increase competitiveness and instil entrepreneurship drive. Although there are a number of mitigation measures, due to the potential overall impact of external shocks, this risk is considered to be moderate.

- 193. Regarding CC risks, increased temperatures and more erratic rainfall patterns will affect production gains achieved during programme implementation and cause production losses. The main mitigation measures consist of testing and fostering different CSA practices and technologies, as well as improving access to local markets by smallholders, in order to provide an economic incentive for CSA adoption and developing food processing capacity and skills. The SECAP review has thoroughly assessed the climate change related risks and concluded that these are classified as moderate.
- 194. The social risks relate to the capacity of the Programme to reach the most vulnerable sectors of the target population. Most of the SAEP opportunities will be available for the target group through calls for proposals: the main social risk lies in the unemployed single mothers and youth at risk of juvenile delinquency not being able to come forward to benefit from the Programme's opportunities. The implementation of SAEP will mainstream enabling measures, including affirmative actions when required, designed to empower the most vulnerable groups and creating an enabling environment for their participation. These include: reference to experience in working with youth and gender equality in the preparation of terms of reference for recruitment of staff and contracting services; the representation of vulnerable groups at the PSC level; the explicit reference to age and gender criteria for accessing matching grants; adequate communication and training methods adapted to the needs and constraints of these groups; and, collection of disaggregated data for measuring eventual gaps and taking corrective measures. Hence this risk is rated as low, since mitigation measures are mainstreamed along Programme design and, particularly, in implementation arrangements.
- 195. Since the Programme is promoting agriculture, another social risk lies in the capacity to counteract the youth's lack of interest to be involved in farming activities. As a starting point, the SAEP will only promote profitable activities, so that economic opportunities could arise in the farming or non-farming sector. Young men and women will be able to discern through the capacity building process which are the best opportunities for increasing income on a sustainable basis. There are positive prospects for the agricultural sector by adopting more technological approaches that could be more attractive for male and female youth. The Programme will also showcase success stories and work with the children in primary and secondary school through the 4H activities to revert the negative perception on agriculture, so that unemployed youth would take advantage of available opportunities wherever they may arise. As a result, this risk is considered moderate at the beginning, but decreasing significantly as the Programme develops its activities to showcase success stories and disseminate technological approaches that might be appealing to youth.
- 196. An additional social risk lies in the gender unbalance that could result if males, particularly young men, are not willing to participate in the Programme's activities. In MAREP it was observed that the participation of males is more difficult to ensure and maintain than that of women. In general, in the Caribbean, there is a gender issue regarding young male. As part of the gender equity strategy, the PMU will monitor the participation of beneficiaries by sex and age, taking affirmative action when necessary to correct unbalances. Male participation would be promoted through the type of activities and trainings provided and through the communication strategy for disseminating the Programme's opportunities. Promoting agriculture by itself could be considered a mitigation strategy, since there are more male farmers than female farmers. This risk is rated as moderate at the beginning and should be decreasing as the Programme develops concrete results to show to potential male beneficiaries, i.e. success stories of profitable businesses.
- 197. Institutional risks are linked to the capacity of service providers to target the right beneficiaries and to provide quality and timely support to them. MAREP's experience shows that the risk of long

delays could be high, if appropriate measures are not in place. Building on the lessons learned, the SAEP will implement a number of mitigation measures: roles and responsibilities of the PMU and the institutional partners will be clear, vesting full implementation responsibility in the service providers; institutional partners will participate in planning and will include activities and targets in their own work-plans; contractual arrangements will be based on performance; payments will be approved and processed according to progress reports; and, beneficiaries will be involved in monitoring the quality of the services at various levels. The Programme will take an additional step and will support the key implementing partners to improve and/or expand their support services: on one hand, the SAEP will support the GIDC to have field presence in rural areas, which it currently lacks but is interested in expanding; on the other hand, the Programme will support the MoA to sustain the extension services in the transition period between when the experienced staff retire and the succession plan of the MoA is completed, strenghtening young extension assistants to provide quality technical assistance to farmers and fishermen. The support to the MoA will explore innovative approaches (e.g. secondment of extension workers to farmers' organizations) that will also contribute to improve the quality of services. As a result of all these mitigation measures, this risk is rated as low.

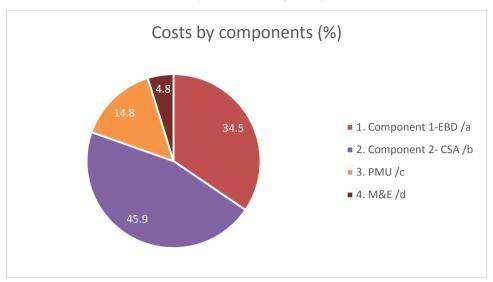
198. The quality and timeliness of programme services would also constitute a mitigation measure for reducing the risk or low youth participation, as young men and women require fast and effective responses. The implementation approach of vesting full responsibility in service providers enables flexibility in implementation, allowing to eventually cancel contractual arrangements that are not yielding the expected results and subsequently engaging others that ensure the attainment of goals and targets. The Programme is designed to target youth: measures to encourage youth participation are hence mainstreamed in the component's activities and implementation arrangements, including approaches that adapt to youth's specific needs, and assurances to provide the quick answers they demand. Therefore, the risk of low youth participation is rated as low.

IV. Programme costs, financing, benefits and sustainability

A. Programme costs and financing

199. **Total Costs.** Total Programme costs over the six-year period are estimated at around USD 12 million (around ECD 32,4 million), including contingencies and taxes. Base costs are estimated at USD 11,29 million (around ECD 30,48 million, 94% of total costs) and both physical and price contingencies represent USD 0,71 million (around ECD 1,92 million, 6% of total costs). Investment costs are estimated at USD 9,9 million (83% of total costs) and recurrent costs at USD 2,0 million (17% of total costs). The fact that salaries and operating costs for the total Programme are slightly higher than the threshold of 15%, can be explained by the relatively high salaries for qualified staff and relatively high operating costs in Grenada.

200. **Costs by component.** Component 1: Entrepreneurship and Business Development, comprises 34,5% of costs; Component 2: Climate Smart Agriculture, comprises 45,9%; Programme Management comprises 14,8%; and Monitoring and Evaluation covers 4,8%.



Graphic 1. Costs by Component

201. **Costs per subcomponent**. The main costs per sub-component and per activity are illustrated in the table below:

Component/Sub-component	(000 USD	%
1. Component 1-EBD /a	\$	4,142	34.5
A. VST	\$	755	18%
B. Start Up Support Package for Youth /e	\$	1,863	45%
C. Start Up Financing Facility	\$	1,525	37%
2. Component 2- CSA /b	\$	5,509	45.9
A. Capacity Building	\$	416	8%
B. Market opportunities	\$	23	0.4%
C. Extension services on CSA practices /f	\$	676	12%
D. CSA Grant Fund	\$	1,170	21%
E Rural roads and drainage /h	\$	3,009	55%
F. Recurrent Costs	\$	215	4%
3. PMU/c	\$	1,775	14.8
A. Capacity building	\$	105	6%
B. Equipment and transportation	\$	111	6%
C. Recurrent Costs	\$	1,559	88%
4. M&E/d	\$	573	4.8
A. Consultancies and Studies	\$	172	29.9%
B. Workshops and trainings	\$	61	10.6%
C. Equipments and materials	\$	43	7.5%
D. Communication and policy engagement	\$	14	2.4%
E Recurrent Costs	\$	284	49.5%
Total	\$	12,000	100%

202. **Main assumptions.** The exchange rate used for calculations is US\$ 1= EC 2,7. Physical contingencies have been calculated at 10% for selected expenditure accounts. Inflation was calculated at 2,6% per annum for both imported and local products. Taxes have been taken into account at the current VAT level (15%) and applied for almost all goods and services. All the indicators and parameters have been checked with the Macroeconomic Unit from the Ministry of Finance.

203. **Unit Costs.** Cost estimates are based on visits in the field and consultations, including taxes. The budget estimates of the implementing agencies and current MAREP's unit costs have been taken into account.

204. **Expenditure Categories.** Expenditure accounts have been established taking into account IFAD's official list for loans (dated 2013).

B. Programme financing

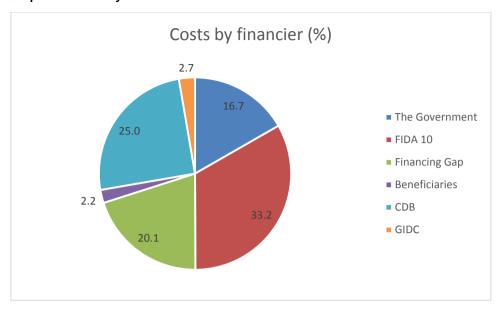
205. **Costs by financer.** IFAD's current PBAS financing is a concessional loan of USD 3,99 million (33,2% of the Programme costs) and the CDB will finance USD 3 million more (25% of total Programme costs). The Government will finance USD 2 million (16,7% of the total Programme cost) mainly through taxes, operative costs and staff salaries (including some existing positions). Beneficiaries will contribute with USD 0,27 million (2,2% of total Programme costs), mainly in kind or labour, while GIDC will contribute with USD 0,33 million (2,7% of total Programme costs). There is at present a financing gap of USD 2,41 million (20,1% of total Programme costs), which is expected to be covered by IFAD's next PBAS cycle 2019-2021 (in this case IFAD would finance up to 53,3% of the total Programme cost²⁷). The following tables show Programme costs by Component and financier and by Expenditure account and financer. The CDB funds will cover only works under component 2 (in particular the sub-component related to rural roads and drainage works implemented through a MoU with the Ministry of Works).

Table 1. Programme Costs by Financier (000 USD)

000 USD	GOG	IFAD PBAS 2016-18	IFAD PBAS 2019- 21a/	Beneficiaries	CDB	GIDC	Total	%
Component 1	113	1,702	1,844	153	-	330	4,142	34.5
Component 2	266	1,932	195	117	3,000	-	5,510	45.9
PMU	1,340	258	177	-	-	-	1,775	14.8
M&E	281	98	194	-	=	-	573	4.8
Total	2,000	3,990	2,410	270	3,000	330	12,000	100.0

a/ To be confirmed

²⁷ If an IFAD allocation were not available for Grenada in the next PBAS, this amount could be covered by CDB or another IFI.



Graphic 2. Costs by Financier

Table 2. Costs by Expenditure Category and Financier (USD '000)

Th	e Governme	ent	FIDA 10	Fit	nancing Gap	В	eneficiaries		CDB		GIDC		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs														
A. Vehicles, Equipments and Materials	28	15.0	155	82.2	5	2.8	-	-	-	-	-	-	188	1.6
B. Grants	-	-	1,605	59.5	821	30.5	270	10.0	-	-	-	-	2,695	22.5
C. Consultancies, Training and TA	246	11.2	1,403	63.9	548	24.9	-	-	-	-	-	-	2,196	18.3
D. Conventions	0	-	707	38.0	826	44.3	-	-	-	-	330	17.7	1,863	15.5
E. Works	0	-	-	-	_	-	-	-	3,000	100.0	-	-	3,000	25.0
Total Investment Costs	274	2.8	3,870	38.9	2,199	22.1	270	2.7	3,000	30.2	330	3.3	9,942	82.8
II. Recurrent Costs														
A. Salaries and Operating costs	1,727	83.9	120	5.8	211	10.3	-	-	-	-	-	-	2,058	17.2
Total Recurrent Costs	1,727	83.9	120	5.8	211	10.3	-	-	-	-	-	-	2,058	17.2
Total PROJECT COSTS	2,001	16.7	3,990	33.2	2,411	20.1	270	2.2	3,000	25.0	330	2.7	12,000	100.0

C. Summary of benefits and economic analysis

206. The expected benefits arise from the different types of activities for each targeted group in the two components. Concerning Component 1 (Enterprise and Business Development- EBD), both quantitative and qualitative benefits are expected from the Programme intervention, which relies on two axes: (a) linking skilled and trained youths with employment opportunities; and (b) expanding start-ups (under a trial and error approach) promoting innovation, consolidating existing rural businesses, as well as a wide variety of new productive activities. In terms of the quantitative benefits, both interventions aim at decreasing unemployment rates (mainly of youths) and increasing family income generation, salaries or new business incomes.

207. The following quantitative benefits have been considered for the Component 1 activities:

- For VST activities: at least a 20% increase in expected wages²⁸ on future employments for 60% of youths participating in VST programme (assuming full-time jobs in different sectors for unskilled and skilled activities).
- For First Push grants: two examples of activities have been developed, one concerning landscaping and another one concerning birdwatching (see activities 5 and 6 of Table 4 below). On this basis, at least a 17% increase in a part-time participant's income for activities receiving a first push has been estimated (e.g. for landscaping initiatives).
- For larger Business grants: four examples of activities have been developed, including fisheries, healthcare and wellness, a shadehouse for lettuce and agro-processing of jellies

²⁸ Source: 2011- Minimum Wages Order-SRO. 30.

and jams (see activities 1 to 4 of Table 4 below). At least a 23% increase in a full-time participant's income for success cases of business start-ups has been estimated (see agro processing initiatives).

- 208. Qualitative benefits include (i) the social-capital enhancement and improved cohesion based on the increasing empowerment of targeted groups, (ii) a reduction in youth's propensity and vulnerability to be involved in violent activities, and (iii) an improved environment to promote innovation.
- 209. For Component 2 (Climate Smart Agriculture), benefits are based on promoting CSA practices and technologies in order to increase resilience, productivity and competitiveness (improving income generation), as well as producing healthier products in a more sustainable environment. All measurable and non-measurable benefits arise from addressing in parallel several problems such as: (i) productivity, income generation, access to markets and competitiveness; (ii) improved nutrition with innovative approaches (promoting backyard gardens and shade-houses); (iii) climate change resilience and adaptation.
- 210. Quantitative benefits are expected from a more efficient use of crop inputs, including organic and environmentally friendly fertilizers, intercropping and planning, water harvesting, mulching, micro-irrigation, and other CSA initiatives that improve resilience and adaptation to climate change. Direct outcomes are expected to come from an increase in productivity, and a reduction in post-harvest losses and wastages. Benefits will also be derived from the support in business development (marketing, labeling, packaging, storage and business linkages), allowing farmers to better perform in highly competitive markets (considering the high volume of low cost food imports).
- 211. In particular, for CSA practices three models of activities have been developed, one concerning a diversified shadehouse, one concerning a farmer applying CSA to crops and one concerning CSA applied to small ruminants (see activities 7 to 9 in Table 4 below). The following quantitative benefits can be pointed out, whereby not all the models reflect a full time occupation activity.
 - A 17% increase in participant's part time income for a typical farmer (1 acre plot, diversified) that improves resilience (reducing losses by 50% in case of climatic events) and yields (by 25%) with water harvesting technologies.
 - A 26% increase in a participant's income for innovative CSA shade-houses.
 - A 52% increase in participant's income for small ruminants CSA initiatives.

Table 3. Income impact Indicators per Model per year

		Incomes per person per yr					
	Model*	WOP		WithP	%		
1	Fishery	\$14,777	\$	28,860	95%		
2	Eco-tourism 1- Healthcare- Full time	\$16,200	\$	26,804	65%		
**3	Shadehouse- Lettuce	\$ 7,716	\$	12,131	57%		
4	Agroprocessing- Jam and Jellys	\$27,719	\$	34,179	23%		
*5	Eco-tourism 2- Birdwatching- Part time	\$ 2,700	\$	5,030	86%		
*6	Landscaping	\$ 6,000	\$	6,993	17%		
**7	CSA Shadehouse diversified- Full time	\$17,150	\$	21,540	26%		
**8	CSA farmer- Part time	\$27,869	\$	32,713	17%		
**9	CSA Small ruminants	\$ 4,605	\$	6,994	52%		

^{*} New activities result in higher increases

212. Even if the models assume certain types of activities and try to recognize some possible effects and impacts, the Programme will keep a "demand driven approach", so none of these activities should be considered mandatory for the assessment and selection of proposals during implementation.

^{**}Family income (farm)

- 213. The same applies for the marketing development strategy. Efforts have been made to illustrate a wide variety of models, risks and realistic assumptions. The models need to be considered as a feasible option, based on data gathered in field visits and consultations during the design of the Programme. Overall the marketing development strategy will depend on the analysis of the expected benefits, scope and rationale of each initiative to be promoted.
- 214. Models, sectors and products have been selected taking into account: a) market opportunities / dynamism and potential in sectors and products (both locally and for export), b) frequency among smallholders, c) pro-poor, pro-gender and pro-youth approach, d) access to land issues, e) inclusion of both agricultural and non-agricultural activities, f) Public and private experts consultations.
- 215. Market options can be found both all the local community level, local fairs and intermediaries or at the national or international level, when niches are developed, or a bigger scale and quality standards are obtained in order to supply new channels and new market opportunities and linkages (e.g. supermarkets, hotels or exporters). In this sense, the rehabilitation of rural roads will lead to better market opportunities by improving access to inputs and to new markets, as well as reducing transport costs.
- 216. **Financial analysis**. The financial analysis takes into account the costs and benefits for adopting the proposals of the Programme from the individual perspective over a period of 15 years (including the Programme duration of 6 years). As mentioned above, various models (in total 9) have been developed to simulate the impacts for each type of intervention on the target group. Only the fishery model is considering a group of 2 beneficiaries, while all other models are individual. All models are profitable, at a 9% discount rate, with the FIRR ranging from 9,3% to 85,5%, depending on the activity, and with net present values (NPV) ranging from ECD 113 to ECD 279.790. The following table summarizes profitability indicators for all the financial models.

Table 4. Summary of Financial Analysis

	Models											
			Busine	ess Initiatives		Entrepre	neurs	CSA	CSA grants			
Detail	Unit	Fishery	Eco-tourism 1- Healthcare- Full time	Shadehouse- Lettuce	Agroprocessing- Jam and Jellys	Eco-tourism 2- Birdwatching- Part time	Landscaping	CSA Shadehouse diversified- Full time	CSA farmer- Part time	CSA Small ruminants		
Without Project												
Expenditures	ECD	39,375	35,800	9,831	72,944			14,208	8,517	4,505		
Revenues	ECD	40,128	52,000	12,852	111,583	2,700	6,000	24,706	32,556	5,610		
Margin	ECD	753	16,200	3,021	38,639	2,700	6,000	10,498	24,038	1,105		
With Project												
Expenditures	ECD	73,648	60,930	10,743	91,365	5,960	7,791	17,815	10,665	6,670		
Revenues	ECD	123,728	88,000	19,354	143,433	14,400	14,784	36,458	39,548	10,379		
Margin	ECD	50,080	27,070	8,611	52,067	8,440	6,993	18,644	28,882	3,709		
IRR	%	80.5%	61.6%	30.3%	85.5%	69.5%	9.3%	74%	25%	12%		
NPV	ECD	279,790	60,187	26,783	79,039	29,784	113	79,038	15,211	3,152		

- 217. **Economic analysis.** The economic analysis uses economic prices to calculate total economic costs in the face of aggregated economic benefits over a period of 15 years, using an economic discount rate of 6%. In addition to the benefits mentioned in the financial analysis, the externalities deriving from the rural road's time savings for its direct beneficiaries have been included in the economic analysis. The analysis performed shows the Programme's economic profitability. The EIRR is estimated at 11,47%, while the NPV reaches USD 3,34 million.
- 218. **Sensitivity Analysis.** The sensitivity analysis was carried out assuming different risk scenarios. These include increase in programme costs (10%, 20% and 50%), reduction in programme benefits (10%, 20% and 50%), delay in programme benefits (1 and 2 years) and occurrence of climate exchange extremes (every 2, 3 and 4 years). The programme is assumed to be profitable and resilient, as it supports a 2 year delay in benefits (EIRR: 6,12%), a combined increment in costs of up to 10% and reduction in benefits of up to 10% (EIRR: 7,38%), a benefit reduction of up to 20% (6,94%) and a cost increase of up to 20% (7,74%). In all these cases, the NPV remains in the positive range. It is worth emphasizing that eleven sources of benefits contribute to the total project's benefits.

This serves to demonstrate that the proposed Programme is well diversified and is not highly exposed to price or sectorial risks. Detailed assumptions and calculations are presented in Appendix 10.

Table 5. Sensitivity Analysis

Sensitivity Analysis	Sensitivity Analysis									
	Δ%		R	isk		IRR	NPV (EC)			
Base Scenario						11.47%	9,010,355			
Benefits	-10%					9.28%	5,231,909			
Benefits	-20%	Combined ri	Combined risks: Prices, yields, adoption, drop-outs				1,453,464			
Costs	10%	Increase in	Increase in inputs and investment unit costs and				6,132,945			
Costs	20%		expenditures				3,255,535			
Delays 1Yr		Implementing delays, phasing and adoption			8.54%	4,488,555				
Delays 2Yr		Impreme	illing delays,	phasing and	гацорион	6.12%	214,641			
Drought every 4yr	0% Bénéf	Extrem	e climate ch	ange events	affecting	10.48%	7,205,119			
Drought every 3yr	0% Bénéf	pro	duction and	comercialis	ation	9.96%	6,459,034			
			10%		-10%	7.38%	2,354,500			
			10%		-20%	5.14%	(1,423,946)			
Mixed Scena	Mixed Scenarios				-20%	3.55%	(4,301,355)			
		20%		-30%	-2.86%	(12,759,281)				
			20%		-10%	5.71%	(522,910)			

D. Sustainability

- 219. **Political and institutional sustainability.** The Programme is aligned with the top priorities of the GOG, fostering employment creation, particularly for youth, and CSA, to improve income levels and the resilience of farmers to CC and variability. Implementation arrangements will involve institutional partners of the public sector (e.g. GIDC, MoA, MCPMA, MoW) that include as core responsibilities the type of support services provided through the Programme. These institutional partners already have a well-established interest in the Programme's activities (e.g. GIDC is planning to expand its activities in rural areas; MoA has to handle the retirement of many of its extension officers; the MoW will be responsible for the maintenance of the public rural infrastructure). The commitment of the main implementing partners to maintain the Programme activities after the completion date will be sought. Coordination will be promoted at different levels, particularly at the PSC level, where all stakeholders will be represented.
- 220. **Financial sustainability.** The Programme will promote start-up businesses and put entrepreneurs and youth in contact with the formal financial markets (e.g. through the request of opening bank accounts). The GDB and Credit Unions will be involved in the selection process of the matching grants, giving them an opportunity to expand their potential client base. The Programme will promote record keeping activities of the new business and of the farmers engaging in CSA activities, which are key to establish a track record and to gain access to finance (without collateral) after some years of operation.
- 221. **Sustainability, upscaling and replication**. The proposed Programme will include innovations that could be up-scaled and replicated at the national level. An important one is promoting an innovative extension scheme based on a Public-Private-Partnership that will encourage the GOG to explore alternatives to the model of only public extension services. This pilot experience could encourage starting a policy dialogue between IFAD and the GOG fostering an enabling environment for reducing rural poverty in Grenada. The Programme will also pioneer the mainstreaming of nutrition education in extension services and training, generating valuable lessons for addressing the negative effects of changes in nutritional habits. In addition, the key elements of the Programme could be upscaled and replicated in other OECS countries in the region, which face similar problems to Grenada (in terms of youth unemployment, dependence on food imports and vulnerability to climate change and variability).

- 222. **Environmental sustainability.** The Programme will increase environmental sustainability of the agricultural sector through the CSA component. It will promote training on CC issues and CSA practices to farmers, community members and technical staff, facilitating the adoption of CSA practices through extension services and grant financing. By promoting business smart CSA and ensuring adequate maintenance activities, it is expected that these practices will be adopted in a sustainable way by the farmers.
- 223. **Intergenerational and gender sustainability.** The proposed Programme follows a life-cycle approach. It includes activities at schools (7-17 years), for youth (15-35 years) and for adults (above 35 years). The Programme also will include particular activities and affirmative actions for fragile groups, such as single women head of households and unemployed young males (see also Appendix 2). The most vulnerable groups will be supported to improve food security and nutrition. By addressing the base of the pyramid of Grenada's population structure in terms of age, the Programme creates the conditions for long-term sustainability.

Appendix 1: Country and rural context background

- 1. **Country context**. Grenada²⁹ is a Small Island Developing State (SIDS), highly vulnerable to external shocks and Climate Change (CC) effects. According to official figures, Grenada's population is 110,096 (as of 2015 statistics) living on 344 square kilometers (95% on the main island of Grenada and 5% on the two minor islands of Carriacou and Petit Martinique, which account for 34 square kilometres). Around 107,000 people live in rural communities divided in 7 parishes (excluding the capital St. George in the southwest of the main island).
- 2. The Government of Grenada (GOG) has implemented actions to revitalise the economy after hurricane devastation in 2004-2005 and the downturn in tourism following the global financial crisis of 2008-2012. Its economy is growing at 3%, a slow recovery from protracted recession. This adverse shift left the Government with high public debt, current account deficits and limited fiscal space for financing public sector investments and development projects. A three year Structural Adjustment Programme was launched beginning June 2014 and until December 2016, drastically reducing the funds available for capital and development investments.
- 3. **Poverty.** Poverty levels are high: approximately 38% living below the poverty line with an estimated 2.4% being considered as indigent and an additional 14% as highly vulnerable^{30.} The GOG prepared a Growth and Poverty Reduction Strategy (GPRS) 2014-2018. The cross-cutting issues that became the top priority for the GOG are economic growth and employment creation.
- 4. Private investment and job creation is mainly concentrated in the St George's area in the south of the main island, mostly linked to tourism. Unemployment levels have been very high since 2008: the current unemployment rate is 29% overall and, in the northern rural parishes St. Patrick, St. Mark, St. John and St. Andrew the unemployment rates range between 32% and 38% ³¹. Education is key to become employed: "the lower educated are more likely to be unemployed than those with secondary and above education" These figures do not reveal the severity of the problem in rural areas, where private sector employment opportunities are scarce and access to GOG programmes is reduced. Persistently high unemployment has led to large income gaps, with inequality in Grenada being above the Caribbean average. Thus, unemployment is a concern for rural communities, particularly among youths, whose unemployment rates are above 40% (even higher for females).
- 5. **Youth**. On the basis of the 2011 Population Census, the projections for 2015 show a total population between 15-34 years old of 37,539 men and women^{33.} Most of the youth population (59.2% between 15 and 24 years) lives in the parishes of St. Andrew and St. George, including the town of St. George; while St. Mark, Carriacou and Petit Martinique have the smallest youth population in Grenada (with 9.3% between 15 and 24 years).
- 6. **Agriculture.** Growth in the agricultural sector between 2010 and 2014 averaged 7.4% per annum, well above the average GDP growth of 1.5% during the period. Even though agriculture and fisheries represent between 5% and 9.5% of GDP in the past five years, their contribution to exports is significant: fish exports contribute to 25% of total exports and nutmeg and mace to at least 23%. However Grenada remains a net food importer, with approximately 80% of the food consumed not being produced domestically. The single most important product that contributes to a negative trade balance is poultry meat with 6% of total imports³⁴.

²⁹ The country, which reached political independence in 1974, covers an area of approximately 344 square km² and is composed of the main island of Grenada and of the minor islands of Carriacou and Petit Martinique.

³⁰ The poverty line was set at EC\$ 5,842/per capita per annum (USD 2,161/per capita/year), and the vulnerability line EC\$ 7,302/per capita per annum (USD 2,701/per capita/year).

³¹ Grenada CSO and WB, Grenada Labour Force Survey 2013-2015, St Georges, 2016 and Central Statistics Bureau data.

³² Grenada CSO and WB, Grenada Labour Force Survey 2013-2015, St Georges, 2016.

³³ Age group 15-19 (9,046), 20-24 (9,961), 25-29 (9,915), and 30-34 (8,617).

³⁴ OEC Atlas.

Final project design report

Appendix 1: Country and rural context background

- 7. The development of domestic food supply has been hampered by low yields at the farm level and lack of infrastructure for production and for processing in order to meet high quality standards, in spite of the opportunities arising from the hospitality sector's demand. The GoG has given top priority to the agricultural sector, approving a series of policy papers and/or pilot projects aimed at increasing production and reducing internal barriers, such as the high cost of feed for the poultry sector, barriers in the access to land or high levels of praedial larceny. The National Agriculture Policy (NAP) identifies priority commodities and classifies them according to their utilization for increasing food security, exports, supply of the tourism industry or import substitution. Most of the crops and livestock products identified are produced by the smallholder sector, such as fruit trees (nutmeg, cocoa, mangoes, breadfruit and soursop), vegetables (hot peppers, tomatoes, cabbages and callaloo), roots and tubers (dasheen, sweet potatoes, cassava), poultry, pigs and goats.
- 8. Only a small fraction of land 1.5% of total land area under cultivation is under irrigation systems, hindering market oriented production planning: the peak agricultural produce during the rainy season June to November is currently dislocated from the top demand of the hospitality sector from December to mid-April. The high volumes of agricultural produce in the rainy season face a weaker demand and create gluts in the market and non-remunerative prices for farmers. Although the Ministry of Agriculture (MoA) provides some technical support and the Marketing and National Importing Board (MNIB) provides an outlet to small farmers, at present rural poor typically have limited access to dynamic markets. The Structural Adjustment Programme included commitments to reduce public employment and expenses, which affected the number of staff basically reducing replacements- and resources allocated to extension services.
- 9. Another important constraint relates to an aging farming community using traditional technologies and approaches, many of them part-time farmers that are retired or employed in other sectors and regard agriculture as an additional source of income. There has been a significant decline in the number of lands under agriculture (-24%) and number of farmers (-22%) in the last twenty years. The largest decline was in large farms, so that the average farm size dropped slightly. Young people do not feel attracted to develop their livelihood from agriculture and consider that there are better prospects in urban areas, particularly in St George's. The prevailing high unemployment rates and lack of skills of rural youths make it difficult for them to find a job. As a result, the young population, particularly males, are extremely vulnerable to engage in illicit activities, while the rural communities lack the energy and innovation that young members could provide.
- 10. Nonetheless there is a general perception that agriculture is regarded as a "last resort" economic activity for young people, there is evidence that youth engage in farming activities whenever exposed to training and new approaches that could turn traditional farming into a business with increased turnover. The Grenada Investment Development Corporation (GIDC) implemented the Youth Empowerment Project in 2013, financed by the Youth Development Foundation and USAID, targeting marginalized young men and women, mainly unemployed and having dropped out of the education system. The project enrolled 146 youth out of which 136 graduated and 48 of these identified a total of 46 new businesses. The interesting fact about these start-up businesses is that ten were farming activities (poultry, farming, bee-keeping, strawberry cultivation) and two in agroprocessing (cocoa balls and local wine). That is, when youth receive technical support to develop business proposals, agriculture is not ruled out.
- 11. There are ongoing successful experiences in Grenada that could interest young men and women, i.e. organic production, hydro and aquaculture, solar energy, vegetable growing, shade houses, goat/pig rearing, beekeeping, some of them not requiring access to land. At present, the missing links are access to information, to training, to technical and financial support.
- 12. **Food security and nutrition**. Food Security data are based on the Grenada Country Poverty Assessment of 2008. According to this assessment in particular vulnerable to food insecurity is the

³⁵ Ministry of Agriculture, National Agriculture Plan, 2015-2030.

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population in St. Georges (33%), St. Andrew (28%) and St. Patrick (13%). The Grenada Country Food and Nutrition Security Assessment of 2012 considers as most likely to be vulnerable to food and nutrition insecurity low income households, children and adolescents with little education, youth without employment, adult working poor, and the elderly.

- 13. Over the past twenty years, Grenada has been faced with a shift in the consumption patterns. Traditionally, the consumption pattern was based on foods grown on their land or backyard garden such as maize, peas, cassava (flour) and ground provision some of which were preserved for the dry season.
- 14. This change from a traditional diet made of mostly complex carbohydrates and locally produced fruits and vegetables to a diet of imported refined products, represents an increase in the consumption of processed foods, sugar and fats. This is reflected in some of the top food items imported by Grenada; namely: Chicken (Protein and fat), baked goods (fats, sugar and refined flour) and fats and oils. Previously protein was obtained from poultry reared in the backyard; fish caught by local fishermen, meat reared and some imported pickled items. Poultry imports increased from 1.8% of total imports in 2005 to 3.8, 6.3 and 5.4% respective in 2010, 2013 and 2015.
- 15. In addition, there is an increase in the number of food outlets within that same time frame indicating the increased consumption of meals away from home. The meals are usually balanced (four of the six food groups), but the proportion of vegetables to a standard serving is very small and they are usually high in starch and fat. In households where there are limited funds, the funds are used to purchase low cost imported items such as flour, rice, pasta and chicken and which are easier to prepare. Therefore, the poor specifically have changed their diet to a less healthy but cheaper combination of food.
- 16. This dietary transition being observed, a shift away from traditional to a diet high in energy, protein and fat, is not only seen in Grenada but in most of its adjacent states. This trend coupled with a sedentary lifestyle, lends itself to an increase in nutrition related non- communicable diseases such as diabetes, hypertension, stroke, heart disease and cancer. Obesity, an underlying risk factor for non- communicable chronic diseases, poor health and reduced longevity, has also been on the increase. This is seen in adults but also in school age children.
- 17. Though there is no comprehensive anthropometric assessment of the population, assessments of some segments of the population are conducted by the Grenada Food and Nutrition Council (GFNC). Some small scale community surveys conducted by GFNC showed a rise in overweight and obesity among women. The 2012 Day Care Survey of 3-5 years old assessed the weight for height of 670 children. The analysis of the data showed 47 children (7.3%) affected by acute undernutrition (wasted); 6 children (0.9 %) indicating chronic undernutrition (stunted); 18 children (2.69 %) being overweight or obese. Compared to the survey in 2009, there was an increase in the number of undernutrition from 7.9% to 8.2% and also in over-nutrition from 2.2 % to 2.7%.
- 18. Iron deficiency anaemia is a major health issue for Grenada and has been on the rise since 2008. Assessment of the haemoglobin levels revealed 51% of 1 year old screened for anaemia were anaemic in 2008; 47% in 2009 and 56% in 2010. This indicates the need for nutrition education on Infant and Young Child Feeding is needed. Nutrition education is also key component in the prevention and management of chronic diseases.
- 19. **Market opportunities.** The Grenada Marketing and National Importing Board (MNIB) which markets agricultural produce since 1973, is the main aggregator for crops, fruits and roots and tubers. The MNIB is responsible for securing fresh fruit and vegetables from farmers throughout Grenada, Carriacou and Petit Martinique for export and local consumption. It has 5 retail outlets and sells to hotels, supermarkets and restaurants on regular basis. It has gone through a restructuring process since 2012 which increased sales until becoming independent from GoG budget for operations, improving their marketing facilities and retail outlets. The Board has created an extension department that promotes quality standards as required by purchasers. Its strategic plan until 2020 aims at

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strengthening its position as the main aggregator for agricultural products, which currently has a strong focus on fruits, vegetables and roots and tubers. As a strong aggregator, MNIB ensures traceability to purchasers and contributes to reduce praedial larceny (MoA identification is required to sell to the Board). Currently, the MNIB premises are the only ones approved for exports of soursop to the United States by the USDA.

- 20. The MNIB has an extensive database on supply and demand of agricultural products that is analyzed on weekly basis to improve the linkages between supply and demand of agricultural produce; it follows 40 products out of which 21 are consistently under-produced. The Board has identified a number of products that are highly demanded on the market and that supply falls short of demand consistently. The MNIB signs contracts with farmers for supplying these products on weekly or bi-weekly basis, developing a planting schedule that stabilizes prices and provides reliability of supply to the hospitality industry and supermarkets. MNIB liaises with the MoA Extension Department, input suppliers and purchasers, performing as a coordination and market intelligence body. These highly demanded products include: the so called "salad fruits" -cantaloupe and watermelon-, "root crops" -sweet potatoes, dasheens, carrots, tannia and eddos- and vegetables -broccoli, beets, romaine lettuce, purple cabbage and cauliflower-. Some results have already been achieved: sweet potatoes used to be imported from St Vincent, while Grenada's production achieved self-sufficiency in the past two years.
- 21. The MNIB identifies chicken meat as the most important food item imported by the hospitality industry, yet it does not have the infrastructure and capacities to promote increased production. Nonetheless, the MNIB buys fresh chicken from farmers and faces a consistent demand from supermarkets, which indicate that consumers prefer fresh chicken meat and would be willing to buy the product if it meets the required quality and safety standards. According to MNIB analysis of the competitiveness of agricultural products, the main problem that affects agricultural production across the board, including agriculture and agro-processed products, lies in the poor quality, lack of standardization of produce and poor labelling and packaging, issues that could be addressed with intense technical support. The MNIB has its own Extension Department with three officers, which focus on supporting the farmers under contract for the scarce products, ensuring these meet the requirements of purchasers.
- 22. The information provided by MNIB confirms the findings of the Market Access and Rural Enterprise Programme (MAREP) Market Survey involving 24 purchasers (8 supermarkets, 9 hotels and 7 restaurants) and 33 producers from Grenada and Carriacou. The study focused on 15 products, perceived as in high imports/demand or consumption in the country. The survey identifies watermelon, cantaloupe, chicken meat, coconut and lettuce within the "star" category, that is, products that are bought on regular basis and with a prospect of volumes increasing in the medium term. Eggs, carrots, honey and sweet potatoes are also purchased on regular basis, yet with less market potential. There are a number of constraints for small farmers: hotels and restaurants do not have contracts with suppliers, only a "preferred list", which means that sales are not guaranteed if the product is available; small farmers lack transportation to deliver the products, which means it is less risky to sell at the community level at a lower price than renting a vehicle. The lack of irrigation systems also contribute to the unreliability of supply for purchasers creating an environment in which production planning to supply the peak demand at the dry season is seldom fulfilled.
- 23. Competitiveness of agricultural products against imports could be enhanced if minimum quality standards were achieved, as well as reliability of supply targeting seasonal opportunities. Currently farmers supply is not meeting the peak demand that falls in the dry season due to lack of irrigation infrastrucutre. The main demand is from the hospitality industry, particularly small and medium size hotels that source domestically. Grenada has 44 hotels, out of which only one would be rated as large36, thus presenting a market opportunity that could be explored. The main products demanded by these hotels include: watermelon, cantaloupe, chicken, coconut and lettuce. Eggs, honey, carrots

³⁶ There is one additional large hotel under construction.

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and sweet potatoes would be the second best in terms of demand. The main constraints for small farmers to source the hospitality industry lies in the lack of an irrigation system to plan production for the tourism peak in the dry season. Accessing the investments for production planning has been identified by all stakeholders in the various consultations held during the Mission as the major constraint for meeting market demands. Promoting and financing irrigation systems, particularly drip irrigation systems that increase the efficiency of water management, was singled out as a key to success in linking with the hospitality industry. Productivity and quality improvements are also required to improve linkages between small farmers and the most dynamic sectors. More intense and updated extension services are key for this purpose.

- 24. Currently poultry producers are competitive in egg production —mainly because of the high cost of importing fresh eggs- but face constraints for meeting the meat demand, mainly in terms of quality. Small farmers have constraints for sourcing hotels due to lack of cold storage to preserve the quality of eggs while they attain the quantities demanded. The Grenada Poultry Association has been working with the GoG to develop a Poultry Policy aiming at removing the main barriers for competitiveness (mainly high costs of feed). Once this policy is fully enforced, poultry producers will access feeding with a reduction of 25% in prices. The WB Project coming on stream before the end of 2017 will also contribute to strengthen the poultry value chain, financing the processing infrastructure that could compete with the imported product.
- 25. Another important source of information on market opportunities in Grenada is the Grenada Chamber of Industry and Commerce (GCIC). According to their assessment, the areas with greater potential for SME are: arts and crafts, particularly bamboo baskets for spices; health and wellness services based on aromatherapy products, including nutmeg and cinnamon soaps and essential oils; guided tours through trails and forestry areas; and, ICT services developing solutions, applications and support for SMEs. The first two lines of businesses have great potential to link with the hospitality industry: spices are highly demanded by tourists, as well as soaps and oils, whose manufacturing has a long tradition in Grenada to build upon.
- 26. **Micro, Small and Medium Enterprise (MSME) Sector.** According to Grenada standards, micro, small, medium and large enterprise would be defined as presented in Table 1.

Table1. Typology of Micro, Small, Medium and Large Enterprises

Туре	No. of employees	Net Assset Value (000 USD)	Annual Turnover (000 USD)	Needing to borrow (000 USD)	Legal Structure	
Large	Over 50	Over 370	Over 740	Over 185	100% local to 100% foreign	
Medium	20 - 50	185 – 370	185- 740	92 - 185	At least 75% local ownership	
Small	6 – 20	37 - 185	37 – 185	18 - 92	ownership	
Micro	1 - 5	Maximum 37	Maximum 37	Maximum 18	100% locally owned	

Source: GIDC, using an exchange rate of 1 USD = 2.7 XCD

- 27. There is no available survey or study on the sector that provides a precise estimate on the number of enterprises per category. The GIDC, as the main institution supporting businesses in Grenada, estimates that the total number of enterprises would be around 6,000 MSMEs, with no more than 60% of them being formal, Micro enterprises would account for 65% of total MSMEs and small, medium and large, would represent 25, 9 and 1% respectively.
- 28. Female presence in the micro/small-scale business sector is significant, however, overall, the number of male run operations exceeded those run by women, especially in the areas of construction,

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manufacturing, tourism, finance and business and personal services. Micro enterprises in rural areas are more likely to be informal, meaning they cannot access contracts with the Government (such as the school feeding programme), they cannot apply for concessions or business loans.

- A general constraint for micro and small businesses in Grenada is the lack of access to financial services. There is no provision of financial services from banks or Credit Unions to the business sector; their loans are approved based on collaterals or an analysis of the borrower's sources of regular income (such as salaries). The banking sector is not interested in small businesses: the MAREP had funds for implementing a Line of Credit financed by the Caribbean Development Bank (CDB) that was reallocated due to the difficulties to persuade private banks to adapt their procedures and policies to the characteristics of small businesses. The Grenada Development Bank (GDB) manages funds from the GoG targeting micro and small businesses, including a Youth Business Fund that targets young men and women with a viable business concept. The performance of these funds has been very poor, with widespread arrears and high default rates, showing that borrowers perceive that GoG financing schemes are basically grants. Credit Unions provide loans to their members based as a leverage on the amount of shares, meaning that the borrower has to show a savings capacity in order to access financing. All these institutions require business records if the client is engaged in a business activity. Currently this is not a standard practice among farmers and micro-entrepreneurs. Data from the 2012 Agricultural Census indicate that record keeping increases with farm size: only 4% of smallholders farming less than 2 acres of land kept records, as opposed to 32% of farmers cultivating between 25 and 50 acres and 52% of those cultivating 50 acres or more.
- 30. **Climate Change**. Grenada is vulnerable to the anticipated impacts of CC and is already experiencing changes in its climate system, evidenced by increased incidence of drought, longer dry seasons, shorter rainy seasons, increased temperatures, coastal degradation and intrusion of saline water into aquifers, among others. The expected impact of CC on agriculture is an increased risk of crop failure induced by an overall variation of average climatic variables, with above-average temperatures and below-average dry-season rainfall.
- 31. Grenada is generally endowed with an abundance of surface water resources, with 71 watersheds on the island. The magnitude of the variability, timing and duration of periods of high and low water supply are not predictable, particularly during the dry season and droughts. This poses great challenges to ecotourism, agriculture and other sectors. It is expected that higher temperatures would increase evapotranspiration, and the impact of CC with reduced annual rainfall by itself would be negative for agriculture. Non-irrigated subsistence farming is vulnerable to droughts, pests and diseases. In 2010, the country suffered the first drought in its history, with serious effects on agricultural production.
- 32. On the other hand, heavy rains erode agricultural soils, reduce yields and the quality of produce. They also increase fertilizer runoff, threatening the integrity of the country's marine protected areas. Livestock farming is concentrated in the low-lying, drier areas of the country. Livestock production in Carriacou is most vulnerable to weather conditions, since it experiences less rainfall than anywhere else in Grenada during drought conditions. Long dry spells can lead to reduced productivity of grazing pastures and lower animal yields. The overall effect of CC on small farmers is asset decrease, due to lower yields of fruits and vegetables and animal loss of weight and mortality.

Appendix 2: Poverty, targeting and gender

A. Characterization of the population in the Programme area

- 1. **Programme area and population.** Grenada, one of the four Windward Islands, is a small island state with an area of 340 sq km and 121 km of coastline. It is an independent state since 1974 within the Commonwealth. The state of Grenada consists of the islands of Grenada, Carriacou and Petit Martinique, with other smaller islands mainly uninhabited being Rhonde Island, Caille Island, Diamond Island, Large Island, Saline Island and Frigate Island. Most of the population lives on Grenada itself, and major towns include the capital St. George's, Grenville and Gouyave.
- 2. The Programme will intervene in rural communities in all the 7 parishes of Grenada (the 6 parishes on the main island and the parish which covers the two minor islands of Carriacou & Petite Martinique). Besides the capital town of St. George's, most areas are considered to be rural. According to projections on the basis of the latest population census of 2011 (published in 2012), the total rural population of Grenada in 2015 was 106,860 inhabitants. The distribution by Parish is given in Table 1 below:

Table 1.	Table 1. Distribution of population by Parish and by sex, 2015 (projection based on 2011 data)									
	St. George/rural	St. John	St. Mark	St. Patrick	St. Andrew	St. David	Carriacou	Total		
Male	17 708	4 532	2 372	5 543	14 056	6 766	2 975	53 943		
Female	18 072	4 242	2 160	5 369	13 523	6 649	2 902	52 917		

Source: Population and housing census, 2012

- 3. **Poverty.** A new (enhanced) Poverty Assessment is planned to be conducted in /2018. For the SAEP design, data from the existing Country Poverty Assessment (2008) are being used, as well as more recent Labour Force Surveys (2013-2016) and Population Census (2011). Poverty is spread in rural communities throughout all the parishes, whereby three of the parishes on the main island (namely St. Andrews, St. Patrick and St. Mark) show poverty incidence rates above the national average of 37.7% (44.9%, 56.7% and 54.6% respectively).
- 4. Poverty is directly related to unemployment; the current unemployment rate is 29% overall and 42% for youths; females have higher unemployment rates than males (32% females and 26% males); and, in the northern rural parishes St. Patrick, St. Mark, St. John and St. Andrew the unemployment rates range between 32% and 38%. The 2013 Labour Force Survey found an unemployment rate among young women of 63%, compared to 49.1% among young male. Unemployment rates among the age group 25-64 years, stood at 22.1% for males and 34.3% for females in 2013.
- 5. On the basis of population data for 2015 and the poverty rates of each Parish, Table 2 shows poor population by Parish. Applying to these numbers the mean household size, slightly different for each Parish, there are an estimated 13,857 poor rural households in Grenada.

PARISH	Total Population (2015)	% Poverty rate (2008 CPA)	Poor Population (2015)	Mean HH size (2011)	Poor HHs (2015)
St. George rural	35 780	35,1	12 559	2,77	4 539
St. John	8 765	36,7	3 217	3,01	1 070
St. Mark	4 532	54,5	2 470	2,99	826
St. Patrick	10 912	56,7	6 187	3,03	2 042
St. Andrew	27 579	44,9	12 383	3,23	3 833
St. David	13 415	29,5	3 957	2,82	1 403
Carriacou	5 877	6,6	388	2,69	144
Total Poor HHs					13 857

Source: Poverty assessment report 2008.

Appendix 2: Poverty, targeting and gender

6. The statistics suggest that:

- 37% of the population is living below the poverty line, with an estimated 2.4% being considered as indigent;
- another 14.7% of the population is considered vulnerable or likely to fall into poverty as a result of external shocks;
- 56% of the poor live in St. Andrew and St. George;
- 53% of the poor are children and 66.4% of the impoverished are 24 years old or younger;
- almost two-thirds of the population living below the poverty line is unemployed; and
- more than half of the population living below the poverty line is working in either agriculture/fisheries or construction.
- 7. **Youth**. Youth is defined in different ways: the National Youth Policy refers to youth as the age group of 16-24 years; however, the government has extended this age group up to 35 years in order for more people to have access to youth programmes. In alignment with this decision by the government, the SAEP programme will consider youth the group of 16-35 years old. Statistical data however, are managed in quinquennial age groups, meaning that data is only readily available for the age group 15-34; as this is a close enough approximation, most of the statistical data used during design will refer to the group 15-34 years of age.
- 8. According to the Eastern and Southern Caribbean Youth Final Report (2013), Grenada's population structure represents a progressive pyramid with a wide base and narrow top, usually associated with rapid growth, high fertility and mortality. On the basis of the 2011 Population Census, the projections for 2015 show a total population between 15-34 years old of 37,539 men and women³⁷. Most of the youth population between 15-24 years (59.2%) lives in the parishes of St. Andrew and St. George, including the town of St. George; while St. Mark, Carriacou and Petit Martinique have the smallest youth population in Grenada, with 9.3% at a cumulated level.
- 9. Youth are a very diverse population, as are their employment and self-employment expectations. As mentioned during the interviews and the workshop conducted during the Programme design phase, many youth envision their employment expectations in areas such as engineering, architecture, accounting and law, among other activities that they believe will offer them some sort of "status" or provide a better salary. They pursue professional studies in those fields, even though there are not enough job opportunities available for them (PROCASUR, 2016).
- 10. Rural youth can be characterized as young men and women in large percentages unemployed or not meaningfully/gainfully engaged in society, with low educational levels, high migration rates, in particular the male youth, limited access to land and financial resources, and to a certain extent involved in youth and community development organizations. Also, young people need quicker responses to their proposals than individuals from older age groups, as they are known to lose interest faster; this implies a challenge for government and non-governmental institutions whose processes often have too much red tape (even development projects of IFAD such as MAREP).
- 11. According to the Caribbean Development Bank (CDB, 2015), causes for youth unemployment in the Region are the state of the economy; structure of the labor market; lack of relevant skills; lack of experience; no knowledge of vacancies; constrained opportunities due to: health status or disability, location (rural location or general lack of transport options); stigma and discrimination due to age, ethnicity, criminal record, gender, motherhood, poverty, area of residence, disability; a reactive approach to gaining employment due to negative employment experiences (personal or by others), lack of work ethic, belief that opportunities are limited due to social class or political affiliation. In addition, many young males and females have difficulty writing their resume and have yet not developed interview skills, increasing the possibility they get rejected when applying for a job.

³⁷ Age group 15-19 (9,046), 20-24 (9,961), 25-29 (9,915), and 30-34 (8,617).

Appendix 2: Poverty, targeting and gender

- 12. Though there is a strong stigma amongst young men and women that agriculture is not attractive (it is considered as "dirty and backbreaking"), discussions with focus groups have shown that many young men and women are interested in farming if: (i) it is profitable, (ii) has quick turnover, (iii) uses modern technology, and (iv) training is provided. The type of farm activity of interest to youth are for instance organic production, vegetable growing, goat/pig rearing, beekeeping, and technologies such as shade-houses, hydroponics and aquaculture or solar energy. As access to land is an issue, especially for young men and women, farming techniques that use less extensions of land are preferred. Furthermore, areas that have great potential to generate rural employment opportunities for youth are non-agricultural rural activities (e.g. agro-processing, agro-tourism, rural services, hospitality arts, marine industry).
- 13. Fishing is an option that is found attractive by youth as it has a high turn-over, however it is a high capital investment business. According to the Poverty Assessment, many of the poor are involved in fishing. Fishing is an activity in which both men and women are involved. Contrary to some beliefs, one finds fisherwomen in all types of fishing, except spear fishing which is mainly a male activity. While in the past the processing and selling of fish was mainly a female activity, nowadays men are also involved in this particular element of the value chain.
- 14. In order to face the financial challenge, some young people have developed strategies such as:
 a) reinvesting the income from a secondary job into their start-up business; b) working until they meet the requirements; c) starting a small business with limited resources and then expanding as it flourishes; d) organizing themselves in an association or cooperative to access financial support for projects; and e) obtaining family support. This does not mean that all young people have the same possibilities or that access to finance is not an issue that needs to be addressed.
- 15. There are many additional gender and social issues related to poverty that affect youth:
 - (a) Drop-out rates in secondary school for boys or girls vary from one year to the other. In some years there are more drop-outs amongst the girls and in other years, the boys tend to drop-out more. However, overall in the period 2006-2012, there have been more male drop-outs (54%) than female (46%). The reasons for these drop-outs include: (i) inadequate parental control, (ii) peer pressure, and (iii) irrelevance of the curriculum to the student. Male drop-outs are much related to poor performance (boys have more distractions, spending time with friends on the block and receive less supervision at home from their parents) and female drop-outs are mainly due to teenage pregnancy. The parents seem to play an important role in male drop-outs in that they often discourage the boys from receiving formal education as they are supposed to find a job and have to learn to be independent at an early age, even though the jobs are not well paying. At the same time, this increases their "low self-esteem" and young male's susceptibility of becoming involved in illegal activities, gambling, alcohol and drug abuse.
 - (b) Whereas Grenada's literacy rate is 95%, there are reports from tertiary level educational facilities such as NEWLO and TAMCC, stating that the literacy levels of a majority of the young men and women, who are fresh out of secondary school, is highly unsatisfactory and that additional training courses need to be provided for, which questions the official literacy rates mentioned.
 - (c) Pregnancy in adolescence (percentage of girls aged 15-19 who are mothers) is a significant health and social problem worldwide, as teenage mothers are likely to remain poorly educated, economically dependent and at risk for repeated unwanted pregnancies. The Poverty Assessment Report (2007/2008), mentions that 40.3% of women between the ages 15-49 are reported to have has their first child between the ages of 15-19 (58% from the lowest quintiles). Of these, 4% reported to have had their first child while under the age of 15. Data from the Gender Equality Policy, indicate 39 births to mothers between 12 and 16 years old, in 2012. The rate of teen births in Grenada continues to increase. Though it's not yet clear why, it constitutes a major social and health problem in Grenada.

- (d) Domestic violence, mainly (but not only) against women is an important issue in Grenada. In the majority of cases the victims have a low self-esteem, often lack economic security and have low educational levels, which limits their opportunity of holding well-paying jobs.
- (e) After the Hurricanes Ivan and Emily, the employment situation has become harsher since many men and women have been pushed out of agricultural labour and the services sector. In the despair of not finding alternative options for income generation, more women opt for an "easy way" out, e.g. prostitution. Amongst young girls the concept of "sugar daddies", adult males who provide for them on the basis of sexual favours is becoming a more pronounced option. The same way, gambling and involvement in illegal activities (make money quick) are becoming more pronounced, especially amongst young males.
- 16. **Farmers.** According to the Grenada Census of Agriculture (GOG, 2012), a farmer is a man or a women or juridical institution who exercises management control over the agricultural farm operations and takes major decisions regarding resource use. The farmer has technical and economic responsibility for the farm and may undertake all responsibilities directly, or delegate responsibilities related to-day-to-day work management to a hired manager. According to the guidelines of the Census a 'farmer' is broadly defined/characterized as someone who either:
 - Has twenty-five (25) or more poultry;
 - Has five (5) or more goats, sheep or pigs;
 - Has one (1) cow;
 - Farms ¼ acre in short crops or vegetables;
 - Has twenty-five (25) or more fruit/nut trees; or
 - Receives EC \$2,500 in income per annum from agriculture.
- 17. A little over 9,300 farms were recorded in 2012, which represents a decrease of 21% compared to the number of farms in 1995. The parishes of St. George and St. Andrew saw decreases of 789 and 838 farms respectively. Of interest is the increase of 16% or 233 farms for the parish of St. David. The parish of St. Andrew has the highest number of farmers, just over 3,000 farmers, followed by the parish of St. George (1,742), St. David (1,643) and St. Patrick (1,333).
- 18. The reported median age of male farmers was 51 years in 2012, whilst that of the females was 53 years. As shown in Table 3, only 21% of the farmers in Grenada can be found in the age group 15-39 years. Over 70% of total farm population are men. At parish level, the distribution of male and female farmers is similar to the national distribution except for Petit Martinique, which has a higher percentage of farms headed by women, with 57 percent female headed farms, and Carriacou with 36 percent of farms headed by women. The large majority of farmers in Grenada are part-time farmers, meaning that farming is just one source of income and not necessarily the principal source. Only 8% of male farmers and 4% of female farmers receive all income from the farm. About 33% of male and 48% of female farmers receive no income from farming and rely on farming for self-consumption.

Table 3. Number of farmers, by age group and by sex						
Age group	Male	Female				
15-19	49	7				
20-29	495	118				
30-39	925	359				
40-49	1 488	556				
50-59	1 656	628				
60-69	991	468				
Over 70	839	455				
No data	188	84				
Total	6 631 (71%)	2 675 (29%)				

Source: Population and housing census, 2012

- 19. Estimates of small farmers' incomes are based on the scale and size of production. Small farmers represent around 80 percent of the farming population. Most small farms are family-owned enterprises, in which men and women are active partners in the production process. The land is usually owned or leased by one or both partners, and may range from less than one (1) acre to 15 acres. Generally, separate pieces of land are used to produce different kinds of crops or livestock. Male-owned/headed farm enterprises are usually larger and tend to rely on extended family members, seasonal workers or Government-paid gangs to meet labour needs. Their agricultural production is more diverse and may include crops, livestock, spices, herbs, vegetables and fishing. Female-owned/headed farms are fewer and smaller, and tend towards poultry and egg production or herbs, spices, food and fruit processing, including fish drying.
- 20. Private ownership is deeply entrenched in the agricultural sector, with 58% of parcels owned, followed by family land for 28% of parcels, and rented land for 9%. Ownership measured in number of parcels is higher among women than men, with 65% of parcels owned by women compared to 57% for men. However, female farmers have significantly smaller farms than male farmers, and in the end women only own 23% of the land. The average area of farms headed by women is 1.57 acres, while for men it is substantially higher at 2.66 acres. Women manage about 4,000 acres of land compared to the 17,000 acres managed by men (other sources³⁸ show similar results with 77% of farm land owned by men and 23% owned by women). Younger male farmers below age 20 have a smaller share of the total area farmed by males, compared to the older age groups.
- 21. With regard to access to services for agriculture production, a gender gap can be identified:
 - More than 80% of the credit provided to farmers was given to male farmers and less than 20% to female farmers; with female farmers receiving relatively more credit from the Ministry of Agriculture than from commercial banks or credit unions.
 - Of all technical assistance provided (mainly through the Ministry of Agriculture/Department of Agriculture) to farmers, 78% was provided to male and only 22% to female farmers.
 - A total of 2,132 farmers have access to irrigation; of these, 74% are male and 26% are female farmers.
 - Female farmers use farm equipment, but the ownership of the assets is dominated by male farmers, who own over 80% of all farm equipment.
- Female headed households. According to the Population Census (2011), male-headed households comprise 59% of all households, while female headed households comprise 41%. For many young mothers, pregnancy is the end of their schooling and the beginning of their attempt to provide food, clothing and housing for themselves and their children. Child-care responsibilities add to these women's constraints in accessing business opportunities or holding jobs. While day care centers and pre-primary schools exist in Grenada, they are insufficient in number. The GPRS 2012-2016, indicates that the well-being of women and of the families they head is of concern in Grenada, since the country has the highest recorded percentage of women-headed households among the OECS member states. Almost one-quarter (24%) of poor female heads of households that are not in the formal labour force; and of those seeking to participate, only 21% are employed. In urban households, 44% of female heads are in the three lowest consumption quintiles, compared to only 18.6% of male heads. Not surprisingly, discussions on the poor focus mainly on female heads of households due to their low labour force participation and employment rates, their comparatively low incomes (e.g. as domestic and agricultural workers, clerical workers, nurses and teachers, street vendors and other occupations in the informal economy, etc.), in addition to the unpaid labour of domestic work.
- 23. Female presence in the micro/small-scale business sector is significant, however, overall, the number of male run operations exceeded those run by women, especially in the areas of construction.

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³⁸ Grenada small farmers vulnerability reduction initiative, MOA, 2013.

manufacturing, tourism, finance and business and personal services. According to several studies, women tend to predominate in certain business activities based on the compatibility of such activities with their domestic roles. They are often attracted to activities that keep them close to home and allow them some flexibility with respect to working hours. Women also tend to be more cautious and avoid risky ventures that will expose them to loss of savings and where they are unable to care for their families, hence the business of choice generally is in the low growth sector with little profit potential.

- 24. Consultations held in preparation of the GPRS 2012-2016 highlighted the following challenges, which restrict women's abilities to care for themselves and their families: (1) inability to find jobs, especially those paying enough to sustain themselves and their children; (2) lack of financial and other care-giving support from the fathers of their children; (3) lack of understanding by society about the real barriers faced by poor, vulnerable women; (4) women's lack of knowledge of their rights, failure/lack of capacity to use available development opportunities; (5) lack of support for women by women; and (6) absence of key social support mechanisms, services and safety nets for women in need, often compounded by lack of help-seeking knowledge, even when support services exist (GOGR/CDB, 2012: 41).
- 25. Given the age profile and social structure in rural Grenada, it is useful to differentiate between two main groups of female heads of household: (i) Young female household heads with several young children (there is an average of four births per woman), who may have intermittent partners and support; and (ii) Older female heads of households with grown children, who will be less likely to have male help, but may receive remittances if older children have migrated.
- 26. **Nutrition.** There is often a confusion between the terms Food Security and Nutrition, as they seem to be interchangeable but this is not the case. Improved food security does not automatically lead to improved nutrition security, as other determinants of nutrition are of equal and sometimes even greater importance, namely care (which includes the gender and socio-cultural dimension) and environmental health, which also looks at health services and other services linked to Water, Sanitation and Hygiene (WASH).
- 27. In line with these remarks, the Grenada Food and Nutrition Security Situation Analysis 2012 does not provide relevant data on the nutrition situation.
- 28. However, the Grenada Food and Nutrition Council carries out annually a Day-Care-Survey and every four years a Pre-school survey. The latter showed a rather low stunting (chronic undernutrition) rate of 1.8% in 2014 which is almost the same as in 2001 (1.9%) but almost doubled in comparison to 2011 (<1%). There was also an increase in stunting observed in children between 3 and 36 months from 3.4% (2015) to 4.7% (2016) at the day-care centres.
- 29. The Global Nutrition Report declines to report for children under five years of age on stunting, wasting, and overweight as no statistically viable data are available but reports Grenada being off-course with regard to anaemia considering the World Health Assembly Indicators. The same report also indicates that more than half of the population is overweight and more than one third of women are obese against 18% of men. The country is in a nutrition transition moving from local, nutrient-rich, unprocessed food to ultra-processed food high in energy but low in high quality nutrients, in particular micronutrients: There is a growing preference to ultra-processed convenient food, high in sugar, saturated fat, and carbohydrates. Unfortunately, this type of "food" is often cheaper than locally available fresh food in particular vegetable and fruits. Therefore, the main message of the MoA is "Eat local buy local".
- 30. In an impoverished community food prices are an issue and cheap food is the preference. Nevertheless, overweight and obesity does not occur in the poor segment of the population only, but covers all wealth and age groups. Even in a single family overweight might only hit a part or just a single member. The fact that being fat is not really seen as a stigma and fat babies are considered as very healthy is a challenge for addressing nutritional problems in the country. In any case undernourishment and over-nourishment is a big challenge for national budget in particular the budget for

health. Non-communicable diseases like diabetes, cardo-vascular diseases etc. are very costly for a society and decrease an individual's productivity.

- 31. There are various factors contributing to negative nutritional outcomes. In addition to the issues mentioned before, early/teenage pregnancies is a main contributor to the intergenerational cycle of malnutrition in the country. The mothers/parents are becoming younger and the potential guidance from old to young is diminishing. The intergenerational cycle of malnutrition is therefore not from a stunted mother to a stunted child but from an overweight/obese mother to an overweight/obese child.
- 32. The main programmes to deliver nutrition services up to now are the Zero Hunger Challenge Initiative, the 4H programme, and the school feeding programme. Unfortunately, all programmes are more focused on food security (agricultural production) and have not taken the nutrition as a key element of the various programmes. There are challenges in terms of funding but, more seriously, capacity issues in nutrition.

B. Main Institutional framework to support youth and gender equality

- 33. The GOG Growth and Poverty Reduction Strategy (GPRS), 2012-2015 identifies the following key priorities: (1) Promoting domestic entrepreneurship and small business development; (2) Economic diversification through strengthening of the knowledge-based component of the economy; (3) Improving female employment levels; (4) Ensuring sound macro- economic management as a basis for growth; (5) Ensuring food security and linking the agricultural sector to the tourism industry; (6) Strengthening the tourism product; (7) Strengthening and expanding education (including skills training), health and wellness; (8) Streamlining and strengthening the social protection system to assist the most vulnerable; (9) Undertaking land reform; (10) Ensuring a relatively even spatial distribution of economic activity; and (11) Strengthening governance systems, especially at the local level (GOGR/CDB, 2012: 4).
- 34. **Ministry of Social Development and Housing**. The Ministry through the development of policies and the delivery of a range of social welfare services aims to provide equitable and sustainable improvement in the quality of life of all citizens, in particular the needy of our society, the elderly, families, victims of abuse, children, young offenders and persons in need of immediate financial and material assistance. Within the Ministry, the Gender Department is housed, which plans and coordinates activities and programmes that educate and highlight critical issues that affect the gender equality and fairness in society. The department has been in charge of coordinating the development of the "Gender Equality Policy and Action Plan (2014 2024)", and recently appointed focal points in all ministries to engage them in the implementation of this policy and action plan.
- 35. **Ministry of Youth, Sports and Religious affairs.** The IMANI Programme in Grenada is operated through the Ministry of Youth, Sports and Religious Affairs. It is the main youth employment initiative in Grenada and runs for 18 months, starting with an initial three months of self-development courses in Personal Skills, Health and Well-Being, Managing Conflicts and Problem Solving, and My Community and Me. The second level offers specific training in the form of apprenticeships, direct skills training (including, for instance, construction, mechanics, housekeeping, food preparation), small business training or community development initiatives. The third and final phase consists of a placement in the workplace. The HEON (Help Educate Our Nation) Project, which was launched on 10 January 2015 as a non-profit organization, provides funds via pledges and fundraising to help disadvantaged youth attend the T.A. Marryshow Community College, a tertiary institution.
- 36. So far, the IMANI programme has resulted in 1,100 young men and women receiving their certification. It is estimated that of the participants who participated in apprenticeships, only 10% are presently full-time employed. The IMANI programme has encountered many challenges of which the main ones are weaknesses in the selection procedures, which have allowed many not fully committed young individuals to enter the programme, with the main purpose being to obtain the stipends. MAREP's experience can be used as an example: out of 366 youth that participated in apprenticeships, 24% holds a full-time job.

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- 37. The T.A. Marryshow Community College **(TAMCC)** is a national tertiary education institution in Grenada. The College has schools of agriculture, technical and vocational education, applied arts and technology, continuing education, and a teachers' college. TAMCC has a strong outreach programme with schools in St. George, but also rural St. Patrick, St. Andrew, and Carriacou. The New Life Organization **(NEWLO)** was established in 1984 and is important with respect to the skill training opportunities that it offers to disadvantaged young people between the ages of 15–24, mainly from rural areas. MAREP has positive experiences in working with and through both institutions.
- 38. The GCTVET Act of 2009 established the the Grenada Council for Technical and Vocational Education and Training and the Grenada National Training Agency (GNTA). Under the Act 1) the GCTVET has responsibility for providing guidance and supervision to the NTA and to advise the Minister of Education on TVET, and 2) the NTA has responsibility for overseeing the development and delivery of TVET in Grenada and is accountable to the Council.
- 39. **The 4H organization** at MOA caters for 68 4H clubs at primary and secondary schools, involving over 2,000 youth (80% in the age range of 7-13 years old and 20% between 14-17 years old) in agriculture related activities (nurseries, school gardens, poultry rearing, water harvesting, composting), educational, and cultural activities. Students and teachers all participate on a voluntary basis. The 4H is active in Grenada and considered to be an interesting opportunity to change young people's image of agriculture and involve them in climate change initiatives.

C. The target group and programme beneficiaries

- 40. **Targeting.** IFADs focus is on "Rural people who are living in poverty and experiencing food insecurity, who have the potential to take advantage of improved access to assets and opportunities for agricultural production and rural income-generating activities" ("productive poor"). Targeting is important in order to ensure that project implementation is executed in such a way that a specific target group (part of the larger target population) will have ownership of the Programme, can fully contribute and participate in its activities, and will have access to its services and benefits.
- 41. IFAD's special targeting efforts are based on the recognition that rural poverty reduction and food security will not happen simply as a result of macroeconomic or sectoral growth, although growth is necessary. Poverty is not just a condition of low income. It is a condition of vulnerability, exclusion and powerlessness. It is the erosion of people's capability to be free from fear and hunger and to have their voices heard. Poverty reduction is about enabling poor men and women to transform their lives and livelihoods, and supporting governments and civil society in creating and maintaining the conditions that allow them to do so (IFAD, 2014). The SAEP intervention strategies focus on proactively including the identified target group.
- 42. **Target group.** Targeting criteria used to identify the target group include poverty levels and socio-economic vulnerability, as well as vulnerability to climate change effects. According to the Country Poverty Assessment³⁹, the main characteristics poor households in Grenada are mainly those:
 - (a) With more than the national average number of family members per household;
 - (b) With one or more unemployed persons amongst adult family members;
 - (c) With one or more adult family members without secondary or tertiary education; and
 - (d) With the head of the household being single.
- 43. The Programme's overall target group can be described as:
 - (a) Men and women of rural households living in extreme poverty and poverty with fewer assets and opportunities; and

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³⁹ CPA, 2007/2008, Technical and statistical appendices.

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- (b) Men and women of rural households vulnerable to external shocks, whose food security has been compromised, and whose livelihoods are vulnerable to the effects of climate change (whose present relative wealth or non-poverty situation can rapidly change).
- 44. More specifically, the Programme will target two of the most vulnerable groups, that is: (i) the unemployed and underemployed men and women, with a focus on youth (age 16-35⁴⁰); and (ii) smallholder farmers (full-time and part-time), vulnerable to climate change and variability.
- 45. The target group can be found in all rural areas of Grenada, with particular emphasis in the parishes of St. Patrick, St. Mark, St. John and St. Andrew, due to the higher poverty levels. St. Andrew is also an important parish for the Programme as almost one third of the 9,300 farmers are located in this Parish. Furthermore, most of the youth population lives in the parishes of St. Andrew and rural St. George. The targeting strategy must also take into account that at present only approximately 21% of the farmers in Grenada are young.
- 46. As vulnerability to climate change and variability are targeting criteria, it important to mention that in the parishes of St. Patrick and St. John, planting on steep slopes and soil erosion, as well as damming of rivers are issues that increase the climate change vulnerability. St. Andrew's vulnerability lies amongst others in coastal erosion, flooding, and damming of rivers. St. David, Carriacou and Petit Martinique are increasingly becoming more vulnerable due to the limited access to water (drought) and destruction of mangroves.
- 47. **Direct beneficiaries.** The total number of direct beneficiaries is estimated to be 7,500 individuals from equal number of households (see Table 4). The direct beneficiaries of the activities supported by IFAD are expected to be 4,500 people, of which approximately 75% would be rural youth with an age of equal or below 35 years. In addition, it is foreseen that around 3,000 households from rural communities would benefit from rehabilitated rural roads and drainage works (financed by CDB) that will improve and/or maintain climate resilience and access to markets in the Programme area.

	Youth (=<35 years)	Adults (> 35 years)	Total
Component 1	(=<55 years)	(> 33 years)	
Start up new business (up to 3 years)	500	0	500
Existing business development	50	100	150
CVQ/Job placement support	400	0	400
Component 2			
Climate change adaptation options awareness raising (through 4H ⁴¹ /MOA)	1 000	0	1 000
Climate change adaptation options awareness raising (extension and demonstration farms)	700	500	1 200
Climate Smart Agriculture training, technical assistance, and investment (including backyards)	700	500	1 200
Capacity building MOA, GIDC, Ministry Carriacou staff	50	0	50
Sub Total	3 400 (75%)	1 100 (25%)	4 500
Infrastructure – feeder roads and drainage			3 000
Total direct beneficiaries			7 500

Source: SAEP Design Mission, 2017

⁴¹ Age group: 7-17 years.

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⁴⁰ Exception are the activities with 4H/MOA with the age group 7-17 years.

48. As shown in table 5, half of the beneficiaries will be male and half female, granting priority to young female-headed households (single mothers).

Table 5. Direct SAEP beneficiaries, by main activities, by sex						
	Total beneficiaries	Men	Women	Men	Women	
New businesses	500	40%	60%	200	300	
Existing businesses	150	60%	40%	90	60	
VST & Job placement	400	40%	60%	160	240	
Climate change adaptation options awareness raising (through 4H/MOA)	1 000	50%	50%	500	500	
Climate change adaptation options awareness raising	1 200	50%	50%	600	600	
Climate Smart Agriculture training and investment (including backyards)	1 200	55%	45%	665	535	
Capacity building MOA, GIDC, Ministry Carriacou staff	50	70%	30%	35	15	
Roads	3 000	50%	50%	1 500	1 500	
Total	7 500			3 750 (50%)	3 750 (50%)	

Source: SAEP Design Mission, 2017

- 49. Within the target group, four sub-groups were identified, from amongst which the direct beneficiaries will come:
 - a) extreme poor (indigent);
 - b) poor:
 - c) less poor, but vulnerable to external shocks; and
 - d) small-scale commercial farmers⁴².
- 50. The main differences between these target sub-groups can be found in their educational levels, household size, land tenure, unemployment rates, assets, as well as income earning opportunities. A brief description of the households in each sub-group follows:
 - The extreme poor would lease the land where they live and where they farm (up to 0.25 acres); some might use family owned land. In this group, there would be many households that squat and others that do share cropping, using the land of another person in exchange of 50% of the harvest. In this group, the main crops would be vegetables, roots and tubers and other short cycle crops. Many would have a tiny backyard garden with seasonings, peppers, maybe a vegetable such as lettuce, and some flowers. They may own small ruminants (1-2) and some rabbits (5-6) and either own or mind 1 livestock for someone else. Basically, these are their savings, to be sold in case of emergencies, such as illness. The households of the extreme poor would have high number of household members, more than 6 (extended families are common). In this group, one would find many drop-outs, already at the primary school level. Income sources for this group are scarce, often one member of the household would be employed fulltime, but not in permanent jobs. Some might be farm workers (mainly men) or vendors (mainly women), and many would work on government programmes, such as road improvement (majority women) and make some money, especially around Easter, Carnival, and Christmas. Occasionally, members of these households will sell some of the little harvest they get or in order to gain some money and buy foodstuff; often of low nutritional value. This group has food security issues, especially in the months when few

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⁴² Agricultural Census 2012 (number of farms with size 2-9 acres).

fruits are available (October, November and December), and members of the household would reduce their meals to once or twice a day, instead of three meals. Many of the houses of the extreme poor are made of wood, many won't have electricity, they lack basic appliances, there is no running water, they still use latrines, and firewood would be used for cooking.

The extreme poor would benefit from the SAEP Programme, mainly through VST training and job placement, extension services, and CSA training, including assistance to improve their backyard gardens.

The **poor** are different from the extreme poor in that they would lease or rent between 0.25 – 0.5 of an acre of land to farm and some might own up to 1/8 acres; basically, there is no squatting in this group. Lease and rent agreements are often informal, limiting land tenure security. The household seize would still be above the national average of three, most likely to be around 6. The kind of crops they grow and animals they have is similar to the extreme poor (in type and number), but this group would also have tree crops and some poultry (up to 12). In their backyard garden, one could find besides seasonings, some vegetables, also for instance a passionfruit tree, a lime tree and a banana for selfconsumption or the occasional sale. In this group, it is normal to find that two of the household members hold fulltime, but not permanent jobs at shops, in agriculture or a supermarket. Many would be self-employed (part-time), for instance roasting corn and selling it at night at the street. Also, they would sell agricultural produce to the local market or on the road. In this group, one would find that the traditional Sou-sou savings mechanism is very much alive (an informal rotating savings group, where a group of people (often women) get together and contribute an equal amount of money into a fund weekly, bi-weekly or monthly. The total pool, is then paid to one member of the group on a previously agreed-on schedule; the pool rotates until all members have received their share). Whereas for this group their food security is secured, food quality is an issue. In this group, one would find many drop-outs, mainly from secondary school level, so most of the poor would have finished primary school in comparison to the extreme poor. The houses of the poor would still be made from wood and wouldn't have piping water, but most would have electricity and light, a radio, maybe a TV, but probably not a fridge or other large household appliances.

In view of the socio-economic context of the poor, the SAEP Programme's strategy includes their engagement in VST training and job placement, youth business start-up, training, support, and grants; existing business technical support; extension services; CSA training; and CSA grants, including assistance to improve their backyard gardens.

The less poor, but vulnerable are a target sub-group that at present live above the poverty line, but that with an economic or natural shock (e.g. increase in prices, natural disaster) would easily fall below the poverty line. The households in this group have normally more secure land tenure arrangements. The household seize would be below 6, but still above the national average. The educational levels of the members in the household are higher than in the previous two groups, and most would reach the final levels of secondary school or finish it; not many would have tertiary education, especially the young male. The kind of annual, perennial and tree crops they grow on the farm and backyard gardens and animals they have (small ruminants (5-6), livestock (1), poultry (12) is similar to what the poor have, but this group would also have one or some pigs. Many would be self-employed, some would have more formal micro enterprises, or would have temporary fulltime jobs. Like the poor, this group would sell agricultural produce to the local market or on the road or on-farm. With higher income levels, this group does have the possibility of saving some money, some might even be members of a Credit Union (for savings, rather than access to credit); and as with the poor the Sou-sou savings mechanism is very popular. For housing construction, many of the less poor would still use wood, but some would use other materials (brick, block). The houses would in majority have electricity, light, piping water, a bathroom and toilet facilities. For cooking this group would either use firewood or gas (LPG).

For the less poor the SAEP Programme's strategy would provide mainly the following services: youth business start-up, training, support, and grants; existing business technical support; extension services; CSA training; and CSA grants, including assistance to improve their backyard gardens.

The fourth sub group are the small-scale commercial farmers and entrepreneurs. This group has secure land tenure and might either lease, rent or own up to 7 or 8 acres. The households would be 5 members or less, and most would have finished secondary school and many would have tertiary education (higher among women than men). At least one of the adult household members would be self-employed e.g. as a fulltime vendor, or a microenterprise or would have a fulltime job, for instance in government or as a teacher (better paid than the jobs where the poor and less poor find themselves employed); other household members may work on the farm. Whereas they may grow similar food and tree crops as the previous groups, they would have larger quantities of all; also the livestock they own. Their arrangements with supermarkets, the Marketing Board are formal and provide for a more secure market outlet. Many would have irrigation systems, however, the technology used on the farms in general, would normally be outdated. Households in this group would employ around two people as part-time agricultural workers. In this group, one would find many members of Credit Unions and many would have savings, and access to credit (also from the formal banking system). The construction of housing would be block, cement or brick; and these households would have services like electricity, telephone (landline), cable TV, Internet, and gas for cooking, as well as a large amount of household appliances.

In view of their level of income, their needs and their potential to provide jobs for others, this group would benefit from SAEP through the following services: existing business technical support; extension services; CSA training; and CSA grants (e.g. soil conservation, drainage, with a 10% in-kind and 20% of cash contribution).

51. Table 6 gives an overview of these sub-groups: 13,900 poor rural households (extreme poor and poor), the rural less poor but vulnerable (approximately 5,000 households), and small scale commercial farmers (approximately 2,700). The Programme would support 21% of all extreme poor households, 36% of all poor households, 43% of all vulnerable households and 16% of the existing small scale farmers.

Table 6. Distribution of the target group, by target sub-groups						
Target sub-group	Total number of HH in Grenada	% of the sub group reached by SAEP	Number of HH reached by SAEP of each sub group	% sub group of total target group		
Extreme poor (indigent)	878	21%	180	2%		
Poor	13 022	36%	4 700	63%		
Vulnerable	5 121	43%	2 200	29%		
Small scale commercial farmers	2 700	16%	420	6%		
Total			7 500	100%		

Source: SAEP Design Mission, 2017

D. Strategy for Social Inclusion and Gender Equality

52. Social inclusion is the process of improving the terms for individuals and groups to take part in society. Programme design has ensured that marginalized groups can take advantage of

development activities and have access to its services; in particular, reference is made to the empowering and participation of youth and women (particularly of young female-headed households). Gender equality is part of social inclusion and will be mainstreamed in overall SAEP implementation and through specific affirmative actions.

- 53. The Programme's implementation will take into consideration, amongst others:
 - (a) experience of working with youth and gender equality will be included in the Terms of Reference of all PMU staff:
 - (b) experience of working with youth and gender equality will be included in the Terms of Reference and contracts and MOUs with key implementing partners and service providers;
 - (c) the participation of two (2) youth, male and female representatives of beneficiaries in the Programme Steering Committee⁴³;
 - (d) gender and age specific selection criteria in call for proposals and differentiated counterpart requirements have been established in the Programme Implementation Manual for the Matching grants and grants for Climate-Smart Agriculture initiatives;
 - (e) monitoring and evaluation will use disaggregated data (registration, collection, analysis and reporting) and the Programme's implementation strategy will be adjusted, if gender and youth targets are not met;
 - (f) a specific social inclusion/gender equality impact study will be carried out as part of the learning process and the elaboration of knowledge management products;
 - (g) awareness raising and training materials will be adequate and understandable for its specific audiences; and
 - (h) provisions would be made for training to be implemented as much as possible in rural communities and not in St. George's (to reduce transportation costs and make them more accessible to youth and women);
 - (i) women's and youth participation in any exchange visits organized or financed by the Programme will be facilitated.
- 54. Affirmative actions are specific activities designed to address inequities in a society and help members of a disadvantaged group or a more vulnerable group to overcome obstacles to equal access to development opportunities. The affirmative actions included in SAEP's design have the purpose of empowering the more vulnerable groups and creating an enabling environment for its two technical components to be successful. They include:
 - Various provisions within the Vocational and Technical Skills Training: (i) motivational
 activities oriented towards youth, especially the male youth who according to experience
 enroll less in vocational training programmes, (ii) initial 2-month life skills training as part of
 VST; (iii) provision of a stipend and travel allowance for VST participants; and (iv) provision of
 either day care facilities at CVQ Training Facilities or a day care allowance for VST
 participants that are single parents. Similar provisions have been made for GIDC
 implemented training for business development;
 - Differentiated counterpart requirements for Matching grants and grants for Climate-Smart Agriculture initiatives have been established for vulnerable groups (young men and women in the age group of 16-21 and single mothers);
 - Capacity building in gender equality for staff of key implementing partners: MOA, GIDC staff and Ministry of Carriacou;
 - 4H: Awareness raising of primary and secondary schoolchildren (male and female) not only
 of climate change and CSA, but also of social issues relevant to their age group; and
 - Support to the Gender Department for training of ministerial gender focal points.

⁴³ These would receive a stipend to cover traveling costs and a compensation for the time dedicated to the PSC.

- 55. **Vocational and Technical Skills Training.** The Programme would provide vocational and skills training, apprenticeships and job placement, especially oriented towards young men and women with the purpose of increasing their possibilities to become employed. Access to different CVQ levels will allow the young men and women to grow professionally according to the potential of each individual, providing for a wider scope and better paid employment opportunities. The Programme will support skills development and vocational training in areas including, but not limited to: (i) sustainable agriculture (especially areas attractive to young people); (ii) processing and marketing of agricultural produce; (iii) renewable energy technologies and their maintenance; (iv) food preparation, housekeeping, yachting, boat repair; and (v) Information and Communication Technologies (ICT).
- 56. It is important to note here that training provisions for young men and women would be based on market opportunities, not on the traditional division of labor. GNTA carries our annual labour market studies, but in addition the service providers such as NEWLO and TAMCC will be required to adjust the training they offer to what the market demands. A critical factor for Programme success lies in the selection methods and criteria to ensure that only people committed and genuinely interested in improving their living conditions are provided with those opportunities. Motivational activities, especially oriented toward the young male during the training courses have been found to be important in order to reduce the number of drop-outs.
- 57. The social problems and issues affecting the quality of life among the targeted rural men and women, households and villages/communities cannot be overlooked and addressing these issues is a key element of the affirmative actions. The purpose of life skills training is to identify, discuss and equip participants to address the crucial human relationship issues, challenges, abuses and constraints that impact on the individual, household, community, and consequently, the nation. These include, but are not restricted to, personal presentation, positive life skills, confidence-building, motivation and self-esteem, gender sensitization (how gender equality creates a better family relation and living environment), domestic violence, consequences of teenage pregnancies and irresponsible fatherhood. Nowadays, 2-months life skills are included in most of the VST programmes offered by TAMCC or NEWLO. MAREP's experience with life skills training has been very positive. The SAEP would develop MOUs with TAMCC, NEWLO, or other vocational and skills training programmes for the implementation of VST as described above.
- 58. Differentiated counterpart requirements for Matching grants and CSA initiatives. In recognition of the particular difficult situation of young men and women in the age group of 16-21 and of single mothers. The beneficiary contribution for Matching grants and CSA initiatives has been set to 10% of which 5% in-kind and 5% cash, whereby these groups may be awarded an exemption. The PMU and key implementing partners will also have to carefully design their interventions in order to comply with the agreed upon quota for male and female participation in the different SAEP interventions (see table 5) as well as the quotas for beneficiaries from target sub-groups (see table 6), which is why on an annual basis they may wish to revise the grant selection criteria in the call for proposals.
- 59. Capacity building in gender equality for staff of key implementing partners. The key implementers MOA, GIDC staff and Ministry of Carriacou, would receive training organised by the PMU in several topics, such as: social inclusion, male and female constraints for development and how to overcome them, gender equality, affirmative actions.
- 60. **4H**. In addition, the Programme would create awareness amongst at least 1,000 school children in the age group 7-17 through the MOA's 4H programme. The MOU with the 4H programme would have different objectives and activities.
- 61. The Programme will also leverage the social capital of existing youth organizations, including community-service organizations and sport associations, to engage youth in the planning, monitoring and evaluation of SAEP's activities. Horizontal exchange visits are envisaged as interesting mechanisms for youth to share experiences, learn and become proactive.

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62. Finally, the Programme will support youth inclusion in the discussion of policy issues of relevance to youth, such as access to land and finance. Annual conferences with male and female youth have been catered for with the objective of sharing of experiences, knowledge generation and engaging them in policy dialogue.

63. **Support to the Gender Department**. Training has been envisaged for the recently appointed ministerial gender focal points in order to strengthen their capacities to improve gender equality mainstreaming in their ministries, and in particular to engage the ministries in the implementation of the Gender Policy and Action Plan. Furthermore, professional capacity building of some staff from the Gender department itself is also foreseen.

E. Implementation Arrangements and Human Resources

- 64. Social inclusion, youth and gender equality are mainstreamed throughout the Programme objectives, activities and resources. Funds have specifically been catered for in the budget for: (i) motivational activities oriented towards youth participating in VST, especially the male youth; (ii) Allowances and stipends to facilitate access to VST (e.g. transportation, day-care); (iii) capacity building in gender equality for staff of PMU and key implementing partners; (iv) activities with youth through the 4H clubs; (v) conferences with youth and female beneficiaries with the objective of sharing of experiences and knowledge generation in relation to policy engagement; (vi) social inclusion/gender equality impact study; and (vii) support to the Gender Department for training of ministerial gender focal points.
- 65. The responsibility of the implementation of the targeting, youth and gender considerations lie with the Programme Manager, PMU staff and all institutions that implement and provide services to the Programme. Effective team-work within the SAEP PMU and with the key implementing partners (GIDC, MOA, Ministry of Carriacou) is essential for the efficient implementation of the two technical components and for the mainstreaming of youth and gender equality^{44.} The MOUs with the key implementing partners would include age and sex disaggregated targets and gender considerations to be taken into account during the implementation of activities agreed upon in the MOU.

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⁴⁴ References

Annex 1: IFAD'S targeting policy - design checklist

Questions Design Issues	Recommendations
1) Does the main target group - those expected to benefit most - correspond to IFAD's target group as defined by the Targeting Policy (the extremely poor and food insecure).	Yes. The target group comprises the rural poor and extremely poor, as well as the vulnerable groups. Only 6% of the target group refers to small scale commercial farmers, with the intention that these can create employment and opportunities for the poor.
 2) Have target sub-groups been identified and described according to their different socioeconomic characteristics, assets and livelihoods with due attention to gender differences. 3) Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups (self-targeting)? 	Yes. On the one hand, youth and young female household heads (single mothers) have been identified and described as a specific target group. Additional four sub groups were identified: indigent, poor, vulnerable, small-scale. Yes. Design took into consideration interests among male and female youth in VST, enterprise development and in specific agricultural activities (fast turn over, modern, with training, profitable). Workshops carried out by PROCASUR, NTA, as well as the National Youth Policy
4) Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy? The targeting strategy will involve either all or some of the following measures and methods.	gave insight in the interests of the target sub-groups. The targeting strategy starts with geographic targeting; describes targeting criteria; includes affirmative actions in design for gender equality and specific activities oriented towards youth; and describes direct targeting as a feature that is key to the functioning of the matching grant and cofinancing of CSA initiatives.
4.1) Geographic targeting – based on poverty data or proxy indicators to identify, for area-based projects or programmes, geographic areas (and within these, communities) with high concentrations of poor people.	On the basis of data on poverty, the Programme concentrates on rural poor and unemployed. Also, information on geographic concentration of farm activities was taken into consideration. Finally, evidence of vulnerability to climate change and variability was also mentioned under targeting.
4.2) Enabling measures – These include measures to strengthen stakeholders' and partners' attitude and commitment to poverty targeting, gender equality and women's empowerment, including policy dialogue, awareness-raising and capacity-building, and appropriate project/programme management arrangements (references in ToR, PCU composition); language in describing staff positions (s/he; masculine/feminine).	Specific affirmative actions, activities and investments are oriented towards young males and females. These are described in Section D. of Appendix 2.
4.3) Empowerment and capacity-building measures including information and communication, focused capacity- and confidence-building measures, organisational support, in order to empower and encourage a more active inclusion in planning and decision making of people who traditionally have less voice and power.	Design includes activities for youth to exchange experiences and become more engaged in policy dialogues. Also, there will be outreach to students (7-17 years) and awareness raising about social issues (besides climate change and CSA). The VST component will boost young male and female self-esteem and capacity.
4.5) Attention to procedural measures that could militate against participation by the intended target groups (such as, excessive beneficiary contributions; cumbersome legal requirements, etc.).	Beneficiary contribution will be differentiated according to the socioeconomic situation of the group. To facilitate access to project services of more vulnerable groups, awards can be extended for exemption of cash contributions. Also, stipends and allowances are foreseen to make VST and business training accessible to the poor.
5) Monitoring targeting performance. Does the design document specify that targeting performance will be monitored using participatory M&E, and also be assessed at Mid-term review.	Yes. Both Appendix 2 and 5 refer to monitoring of targeting performance. All people-related indicators would be disaggregated by sex and age, so that the PMU can monitor differential participation and impact by sex and age group.

Annex 2: Features of gender sensitive design

Questions Design Issues Recommendations 1. The project design document contains - and Design takes into consideration gender disaggregated project implementation is based on - genderdata when available (poverty, unemployment, data on farmers). Design makes mention of female headed disaggregated poverty data and analysis of gender differences in the activities or sectors concerned. households as a special target group. Targeting includes gender considerations and specifies targets by sex and by age group. 2. The project design report articulates - or the In the analysis of the present situation the design project implements actions with aim to: document (PDR and Appendix 2) presents information about the role of women, distribution of work, their access · Expand women's economic empowerment through access to and control over fundamental to support services. In the PDR and Appendix 2 (section D) a proposal is presented with overall activities for · Strengthen women's decisionmaking role in Programme implementation to ensure access to community affairs and representation in local interventions and co-financing by women (gender in ToR, adequate training methods and materials, etc.) and institutions: and · Improve women's knowledge and well-being specific affirmative actions. and ease their workloads by facilitating their access to basic rural services and infrastructure. 3. The design document describes-and the Overall female - male participation is 50%, and Table 5 project/programme implements-operational presents an overview of quota for each key intervention. measures to ensure gender- equitable participation Life skills training, stipends and allowances, as well as in, and benefit from, project activities. These will support to students age group 7-17 through 4H/MOA have been included in the Programme budget. generally include: 3.1 Allocating adequate resources to implement Paragraph 53 of Appendix 2, describes overall project the gender strategy; gender equality considerations, e.g.: include experience 3.2 Ensuring and supporting women's active of working with youth and gender equality in the Terms of participation in project related decision-making Reference of all PMU staff and contracts/MOUs with the bodies and committees; service providers; participation of male and female Ensuring that project/programme beneficiaries' representatives in PSC; gender specific management arrangements (composition of the selection criteria and differentiated beneficiary management unit/programme contributions grants; amongst others. coordination unit, project terms of reference) reflect attention to gender equality and women's Training in gender equality of PMU and key implementing empowerment concerns; and partners is foreseen. 3.4 Ensuring direct project/programme outreach to women (for example through appropriate Specific funds have been allocated in the budget to numbers and qualification of field staff), implement the affirmative actions in each component. especially where women's mobility is limited. 4. The project's logical framework and monitoring Monitoring (registration, collection, analysis and reporting) and evaluation (M&E) system specifies in design and evaluation will use disaggregated data by sex and and project M&E units collect - gender age group. The Logframe includes targets specifically for female-headed households. Also, a specific gender disaggregated performance and impact data. equality and social inclusion impact study has been planned and budgeted for Y5.

Appendix 3: Country performance and lessons learned

A. IFAD's Programme in Grenada

1. IFAD has been operating in Grenada since 1981, supporting 3 projects for a total cost of USD 18.6 million, which benefited up to 9,250 poor rural households, namely the "Artisanal Fisheries Development Project" (AFDP), the "Rural Enterprise Project" (G-REP) and the "Market Access and Rural Enterprise Development Programme" (MAREP).

Table 1. List of IFAD Projects in Grenada including financing structure						
N of project and period ⁴⁵	Project name	IFAD financing	Co-financing	Total		
071-GR (1981-1989)	Artisanal Fisheries Development Project	USD 1.5 million	USD 1.1 million	USD 2.6 million		
559-GD (2001-2009)	Rural Enterprise Project	USD 4.2 million	USD 4.3 million	USD 8.5 million		
1569-GD (2010-2018)	Market Access and Rural Enterprise Development Programme	USD 3.0 million	USD 4.5 million	USD 7.5 million		
Total		USD 8.7 million	USD 6.9 million	USD 18.6 million		

- 2. On average IFAD has financed 47 percent of total project costs, the Caribbean Development Bank (CDB) around 29 percent and the Government of Grenada (and beneficiaries) the remaining 24 percent. CDB^{46,} which has headquarters in Barbados, is hence a key partner for IFAD in the region.
- 3. While the disbursement rate reached 67 percent on G-REP, it is currently around 70 percent on MAREP, which is still on-going (with expected completion date in March 2018).
- 4. The time from approval to effectiveness was 8 months for AFDP, 1.5 years for G-REP and 4 months for MAREP. The implementation period was originally planned to be 4 years for AFDP (then extended to almost 8 years), 6.5 years for G-REP (including a 6 month extension) and 7 years for MAREP (including a one-year extension).
- 5. The total number of beneficiary households was estimated to be 2 000 for AFDP, 3 000 for GREP and 4 250 for MAREP, resulting in an average cost per household around US\$ 2 000. While this is on the high-end for IFAD projects, it can be explained by the high unit costs and lack of economies of scale and density in a Small Island Development State (SIDS) like Grenada. In particular, AFDP targeted fishermen, boat builders and fish vendors; G-REP aimed at reducing rural poverty in 1 000 indigent households and 2 000 poor households (in total 12 000 individuals); and MAREP has built on G-REP, targeting 4 250 rural households living in 50 communities (initially the target was 2 600 households and 12 360 direct users-beneficiaries).
- 6. In terms of geographical focus, all IFAD projects in Grenada have covered the areas over the tri-island state. AFDP covered the entire coastal zone of Grenada as well as the islands of Carriacou and Petit Martinique. G-REP and MAREP focused on rural communities, with the exception of the urban area around the capital of St. George and of the island of Petit Martinique.
- 7. IFAD lending terms in Grenada at present remain highly concessional, even if it is an Upper Middle Income Country (UMIC). This can be explained by the fact that Grenada is a Small Island Development State (SIDS), which is vulnerable to external economic and environmental shocks. The

⁴⁵ Time from approval to completion.

⁴⁶ The CDB has approved US\$ 237 million for Grenada between 1970 and 2013. It has an indicative resources envelope of USD 74 million to support Grenada in its 2014-2018 Country Strategy.

2016-2018 PBAS allocation for Grenada (IFAD 10) amounts to USD 3.4 million, which is close to the minimum size. The future 2019-2021 PBAS allocation will only be decided after the IFAD 11 replenishment and the review of IFAD's strategy for UMICs and SIDS. It is expected to be broadly in line with the current amount, even if no reassurances can be given.

- 8. Due to the small size of the PBAS and the limited number of projects in the lending portfolio (with only one project active at each moment in time), IFAD never prepared a Results-based Country Strategic Opportunities Programme (COSOP) for Grenada. According to the latest Operational procedures on country strategies" (dated August 2016), LAC has prepared a Country Strategy Note (CSN), which was approved on 12 May 2017.
- 9. The CSN establishes that IFAD's overall strategic goal is to contribute to the GOG's objective of reducing the vulnerability of the rural poor in Grenada to economic and climatic shocks, by promoting agricultural and non-agricultural employment opportunities and climate change adaptation practices. This overall strategic goal is articulated in two strategic objectives (SO): (i) SO1: enabling IFAD's target group to take better advantage of employment opportunities (self- and wage employment, onfarm and off-farm) by improving the supply of the required skills (technical training, entrepreneurial skills, mentorship) and the access to the required resources (e.g. land, financing); (ii) SO2: promoting climate smart agricultural practices (such as water harvesting, drip irrigation, aquaponics, hydroponics, organic agriculture), climate proof infrastructures and/or renewable energy sources, to increase the resilience of people in rural areas to climate change and variability.

B. Summary of the Artisanal Fisheries Development Project (AFDP)

- 10. Objectives: The AFDP aimed at improving the livelihoods of a target group composed of 1 800 fishermen (1450 full-time and 350 part-time), 50 to 60 boat builders and around 140 fish vendors. The average net income of the fishermen was estimated to be USD 1,250 per year, or USD 220 per capita (considering 5.5 dependents).
- 11. In particular, the projects objectives were: (i) the promotion of fish in the diet; (ii) better access to equipment and gear; (iii) better staffing and facilities in the fisheries centers; (iv) improvement of the marketing system; (v) improvement of the processing system; (vi) organisation of the sector; (vii) technical support.
- 12. <u>Components:</u> The main components of the project were: (a) Upgrading six old fishing centers and construction of two new ones, including cold storage; (b) Fish collection sheds and storage space for fishing gear and equipment; (c) a Line of Credit for fishermen; (d) Non-Credit investments for supporting services; (e) Technical Assistance; (f) Extension Services; (g) Monitoring and Evaluation.
- 13. Results achieved: According to a completion evaluation report dated February 1991 the following results were obtained: (i) the annual earnings of fishermen were increased by USD 430 (+35%) with the project; (ii) 299 loans with an interest rate of 8% were approved for fishermen (vs. an original target of 720 loans), out of 498 applications (60% approval rate). However, 73% of the loans were in arrear for more than 6 months and in 1987 the National Commercial Bank (NCB) suspended this rural line of credit.

C. Summary of the Rural Enterprise Project (G-REP)

- 14. Objective: The G-REP aimed at reducing rural poverty in a sustainable and gender equitable manner, by improving and enhancing the capacities and facilities of rural communities, their organisations, development service providers, business oriented farmers and rural workers.
- 15. The specific objectives were: (i) diversify, improve and sustain income earning activities; (ii) strengthen the capacity and build confidence at the level of the rural communities; (iii) strengthen rural service providers to meet community needs; (iv) promote efficient and environmentally sustainable production and processing activities; (v) foster sector and market linkages.

- 16. Components: The main components of the project were: (a) Community Development and Participation; (b) Enterprise Development; and (c) Rural Financial Services.
- Results achieved: According to the Project Completion report (PCR) dated November 2009: (i) the relevance of the project was moderately satisfactory, being based on a demand-driven approach. However, the design lacked a clear operational strategy for enterprise development and did not adequately take into account that this innovative approach was to be implemented by institutions that had limited capacity in participatory methodologies and in business approaches. In light of the many implementation problems, after 2004 there was a modification in the project strategy by focusing almost all activities on the first component of community strengthening and empowerment. The revised strategy responded to the needs of the target population, but had a limited scope in terms of raising production and family income to overcome poverty; (ii) the effectiveness of the project was moderately unsatisfactory, since the project was characterized by an extremely slow start and slow pace of delivery, and low management capacity within the Project Coordination Team (PCT). It is only during its ending period that the project achieved a better implementation, but many project's objectives were not met, apart from building a human capital base; (iii) the efficiency of the project was considered to be low. The overall disbursement was 67% of committed resources due to implementation delays associated with island-wide destruction by hurricanes in 2004 and 2005, and staffing difficulties. The average costs per beneficiary were within normal ranges, but the analysis suggests that there were significant inefficiencies: the total cost of the project seems high compared to the limited scope of the intervention; the implementation costs seem high vis a vis the tangible benefits that rural poor received; most of the benefits are intangibles, but there is a lack of information on the quality of deliverables, so as to assess the cost.

D. Summary of the Market Access and Rural Enterprise Development Programme (MAREP)

- 18. Objective: MAREP aimed at increasing the income of the identified target groups, through the establishment and strengthening of rural businesses and microenterprises, and the creation of employment opportunities, better linkages to production chains, and greater access to markets. The target group of MAREP comprised rural men and women, including young people, involved in part-time or full-time (a) small scale farming either of subsistence or market- oriented production; (b) artisanal fishing; (c) micro- and small-scale rural businesses and enterprises; and (d) unskilled labour provision. The development goal was to rise 4 250 poor and rural beneficiaries above the poverty line by the end of the programme.
- 19. In particular, the programme's objectives were: (i) to contribute to the empowerment of rural communities and the male and female members of social and economic organizations by building their human and social capital, strengthening their effective organizational, managerial and decision-making capacities, within an explicit participatory, sustainability and gender equity perspective; (ii) to generate income and employment through the establishment and/or consolidation of profitable and competitive rural businesses and microenterprises, by means of their integration in local, intra-regional and external markets, improvements in sustainable agricultural production, increased processing and value-adding capacities of family production units and producer associations, and increased entrepreneurial skills; and (iii) to create employment opportunities for the identified target groups, through skills/vocational training and job placement.
- 20. Components: The three components of the programme are: (a) Human and Social Capital Building (HSCB) and Inclusion of Vulnerable Groups, with the following activities: community organization and organizational support to producer associations and other economic groups; capacity building, youth skills and vocational training/job placement, social awareness and advocacy campaigns (gender, youth, poverty issues), and literacy programmes; and a Rural Investment Fund social investments, i.e. community infrastructure which sustains social cohesion and focuses on the needs of rural women and other vulnerable groups. (b) Market Access and Rural Enterprise Development (MAED), including: rural technical and entrepreneurial services (agricultural extension;

specialized technical, entrepreneurial and business development services); market access support; agricultural production and enterprise development funding, i.e. on-farm investments (micro-irrigation; small livestock, etc.); value-adding/ processing equipment and infrastructure; and support for new and existing businesses (agricultural and non-agricultural), through a Rural Investment Fund-Enterprise Investments; and assistance for accessing suitable (commercial) financial services, i.e. savings, credit, including a Credit Line (to be implemented by the CDB, the programme's co-financier) and funding for the pilot development of innovative financial products and the expansion of service points in order to address the needs of the target groups: (c) Programme Management.

- 21. Results achieved: After almost six years of implementation, in terms of RIMS by end 2016 around 1,593 people in community groups were strengthened, 393 people received vocational training, 573 people in groups managing infrastructure were formed and 1,116 individuals received project services. In terms of the Logframe, the following results were observed at the outcome level at end 2016: under the HSCB component (i) 66 rural organizations were strengthened in their membership, human and social capital (75% of the target at design); (ii) 82 trainees have obtained employment; by the end of the programme (in March 2018) a total of 250 people are expected to have obtained employment (around 52% of target); under the MAED component: (iii) 17 microenterprises have increased assets (7% of target); (iv) 57 new enterprises have been linked to value chains (190% of target).
- 22. Overall, in MAREP (as under G-REP) progress has been more effective in the human and social capital component and weaker under the market access and enterprise development component, which was co-financed by the CDB and found to be more challenging.

E. Lessons learned

- 23. (a) Need to increase focus on business development and impact of projects in enterprise development. Support to production, marketing and new businesses needs to be the core of future projects, fostering diversification and the rise in productivity. A critical selection of the opportunities at hand for smallholders is a key factor to ensure impact. Future projects need to create and update a portfolio of market opportunities available and include a good knowledge management platform. Significant training will be needed in this area including project staff and partner institutions. At the same time it is important to move away from the idea of perfect and complete Business Plans (prepared by consultants) and to go towards a learning-by-doing approach, based on a trial-and-error process, leading to an informed update of emerging opportunities.
 - The business intervention in MAREP lacked sufficient staff and focus, which meant that a wide range of businesses were supported dispersing energies and preventing synergies. As a result, there were limited opportunities for building expertise on specific sectors and supporting innovations and the creation of new ventures. There was a reduced number of Business Development Officers (BDOs), who had to link with a wide range of stakeholders to receive the necessary specialized support. Future interventions need to prioritize promising sectors, where rural poor are involved, in close coordination with the private sector, increase the number of BDOs and promote a demand driven approach.
 - Entrepreneurship drive has to be identified at early stages and needs to be accompanied beyond the business plan up to business management. Technical training and entrepreneurship training need to be combined to lead to a viable business plan ready for implementation. In the case of MAREP, those trainees that expressed interest in starting a business also received entrepreneurship training, although the programme did not have all the instruments to support potential new entrepreneurs to better identify, start and run their own business. Since employment opportunities are scarce in rural areas, future interventions should explore and support opportunities for becoming self-employed through viable business ideas.
- 24. (b) Loan financing of agricultural activities (including fisheries) and of rural start-ups is extremely difficult in Grenada. Need to consider working with matching grants, also to involve

youth. Both public as well as commercial banks and credit unions consider the agricultural sector to be too risky (also due to the effects of climate change and variability), and especially IFAD's target group. Due to the high levels of arrears observed in the sector, the financial institutions request collaterals, which IFAD's target group typically does not have. The existing regional insurance schemes against climate events are interesting at the national level, but do not help individuals to access credit.

- Under the AFDP, the financing of fisheries was envisaged to occur though the National Commercial Bank (NCB), which was 99% publicly owned. In general the fisheries sector (in which boats can be used as collateral) is considered to be the more attractive for banks than agricultural activities. Nonetheless, in AFDP the credit component of the project (originally projected to represent 26% of total project costs) incurred various problems, due to excessive security/collateral requirements by the NCB and high levels of arrears. It took various years to become effective and was suspended in 1987.
- Under G-REP, the third component related to rural financial services was never implemented.
- Under MAREP the financing of rural micro-enterprises was expected to occur through the Grenada Cooperative Bank Limited (GCBL), which however did not show sufficient interest and capacity to engage with rural households. In 2016 the Grenada Development Bank (GDB) was involved in the programme. GDB is 100% publicly owned and has previous experience in managing public funds for rural projects, albeit with high delinquency rates. It has only one central office in St. George's, and is hence not close enough to rural areas to make an accurate credit assessment of rural initiatives. By end 2016, only 9 non-agricultural micro-enterprises under MAREP had accessed financial services (11% of the target) and only 8 farmers and fishermen (13% of the target).
- The latest project of the World Bank (WB) in the agricultural sector of Grenada (the "OECS Regional Agricultural Competitiveness Project") foresees matching grants (and not loans) to support the development of agricultural value chains and productive alliances. IFAD's target population is clearly less creditworthy than the WB's target population.
- 25. (c) Designs need to be more simplified and adapted to the management capacity and experience of the local staff. For recognized and experienced institutions (private or public), the contract with the project is only one operation within a larger portfolio and the benefits of changing methodologies is not obvious (as they are getting contracts from other sources that are less demanding) or feasible (due to the shortage in staff). This has caused delays in service provision, creating frustration among beneficiaries and reducing the quality of participation in the programme. It is hence important to improve the coordination with the key institutional partners in order to ensure timeliness of the technical support delivery. Rather than having cooperation agreements focused on activities, the partner institutions should be made responsible for programme outcomes and impact, should participate in the preparation of the Annual Work Plan and Budget (AWPB) and be given the required resources.
 - As stated in the CDB Assessment of G-REP, "this is an 'ownership' issue; the key being that design must be fully comprehended by Borrowing Member Country professionals and seen as viable within their human resource endowments".
 - Under MAREP, the project management unit faced difficulties in involving the key institutional partners in the process (e.g. the Ministry of Works MoW, the Ministry of Health MoH, the Ministry of Agriculture MoA, the Grenada Investment Development Corporation GIDC, the Grenada Bureau of Standards GDBS, etc). Memoranda of Understanding (MoUs) were developed with all relevant stakeholders, but this was not enough to get the required attention from partner institutions. Most of the time there was no increase in resources or salaries for the staff responsible for delivering the services, only an additional workload that did not show in their own annual plans and targets. These key stakeholders did not participate in the preparation of the AWPB, and only received MAREP's requests, when their own working plans had already been developed. Their performance was

- measured against the institution's targets regardless of MAREP's targets. The result was lack of ownership of MAREP's objectives, poor coordination and long delays for beneficiaries to have all scopes of works ready to make the investments.
- Also the procedures for accessing the Rural Investment Fund (RIF) under MAREP were overly complex and time-consuming (even for small projects). The access to grant funding for start-ups should be transparent and simple, not too prescriptive in terms of selection criteria, procurement guidelines and procedures. The RIF, set up to provide grants for fixed assets to formal or informal groups with a viable business idea, did not manage to support sufficiently similar initiatives. The main constraints in the implementation of the RIF relate to the reluctance of farmers and micro-entrepreneurs to engage in groups to access financing, and to the reduced number of suppliers to comply with the financiers' procurement guidelines. Most groups were created for the sole purpose of accessing the funds, but production and marketing would be conducted on an individual basis. As a result, resources allocated to prepare business plans are not yielding the expected results. The experience suggests that typically members of the same family group feel confident to implement a business, but are not used to include members of other families. The procurement process of MAREP was also too complex as it required at least three quotations or suppliers from member countries of the CDB. The reduced size of the island implies that for some specific equipment there might be less than three suppliers in the island, sometimes only one. Regional sourcing posed an additional constraint, as the most convenient prices and wider range of products were found outside the region. These requirements caused delays and frustration for many groups.
- 26. (d) GREP's and MAREP's implementation strategy of having Community Officers (COs) and Business Development Officer (BDOs) linked directly to the PMU proved successful for community mobilization, but is limited and non-sustainable. This strategy would need to be modified for future interventions, as enterprise development projects become the focus. A more collaborative environment between all parties should be attained along programme implementation through clarifying roles at all levels and increased communication. Contracts between the project and Co-Implementing Agencies (CIAs) must be clear, deliverables specified in a way that allow an objective assessment of performance, and payments delivered in a timely manner.
- 27. (e) Targeting based on the community data of the CPA is an adequate tool for identifying the most vulnerable communities, but a stronger focus on youth and entrepreneurial skills is needed to improve impact. Overall IFAD projects have reached the intended target population. In order to select communities, groups and individuals for projects addressing income earning activities, the potential to start sustainable businesses and create employment needs to be evaluated, so that specific selection procedures must be added. In addition, future projects need to have a specific focus on youth (the group with the highest rates of unemployment according to CPA) for skills and entrepreneurship training. Young men and women are more prone to behavioral and cultural change and constitute a suitable target group to instill a new business approach.
 - G-REP and MAREP focused on youth as part of the target group, devising specific instruments following GOG guidelines. The support to youth focused mainly on Vocational Skills Training (VST). This approach has proved meaningful to participants, although it only partially achieved the target of permanent job placement for trainees. There are some lessons learnt that proved successful: providing 100% transportation support to the poorest trainees, and possibly even some additional funding for uniforms or small tools, in order to prevents drop outs (at the beginning the drop-out rate was very high, with less than 50% completing the course); poor rural youths require mentoring to open bank or credit union accounts filling forms and obtaining the required documentation for receiving financial support (this is also a first step in becoming a full citizen and a required one to receive a salary); including an initial Life Skills Module is key for the trainees to be ready for the training and was recognized by the Grenada National Training Association (GNTA) and replicated in the IMANI Programme; and, the efforts of trainers were

sometimes not adequate to achieve effective job placement, and a more active role in terms of mentorship and job placement would be needed.

- 28. (f) Gender issues require a regular effort with specific staff and clear operational strategies. A project focusing on income earning activities needs to assist women to move from traditional activities, which usually lead from subsistence businesses to more innovative and sustainable initiatives. A gender balanced Project Coordination Team (PCT) in community mobilization and in business development will contribute to encourage men and women to go beyond traditional roles and engage in all types of project activities.
 - It needs to be pointed out that in the Caribbean the gender focus also has to cater to
 young males, who are a vulnerable group at risk of being involved in illicit activities. Under
 MAREP at the beginning male participation was scarce so that the programme selected
 more adapted types of trainings that allowed for greater male participation, such as
 construction, mechanic repair, agriculture and cruise ships to ensure gender equity.
- 29. (g) Exit strategies to ensure sustainability of the interventions need to be devised since the beginning of the project. Partnerships with other institutions may create opportunities to devise and implement the exit strategy for institutional support and for maintaining the works and equipment. The role of each party in the management and maintenance of infrastructure needs to be discussed and settled before the project hands over the goods / facilities. Permanent institutions responsible for youth development (like GIDC) could benefit from the experience and knowledge of qualified project staff and reorient their approaches and strategies according to the lessons learnt. They should be actively involved in the implementation process and could become a means to attain institutional sustainability. Business sustainability is also a major challenge. The strategy for ensuring support after project completion and catering for growth and expansion needs to be incorporated by establishing links of the beneficiaries with the local financial institutions (for example, the credit unions). Finally, it is clear that future projects will need to address a number of environmental threats (climatic change and variability) and the issues related to environmental sustainability will require attention in a project focused on income earning activities.
- 30. (h) The preparedness for implementation needs to be considered and addressed as a critical success factor. The management team needs to consider the adoption of a pre-field activity stage, allowing it to put things in place in order to avoid delays and frustration among the beneficiaries and stakeholders. New projects need to make use of existing experiences and qualified staff to avoid going through the lengthy training process again. The main conditions to meet at project launching in order to provide an adequate response to the needs of the target population, when developing activities at field level, are complete staffing and proper capacity at the PMU, empowerment of project design by the PMU through a careful assessment and review of the project's strategies (supported by technical assistance of donor agencies), and a fully operational M&E system in place. A thorough review of project design after one year of implementation of field operations, conducted by the PMU, with active involvement of GOG authorities and donor agencies, would ensure empowerment of the design by the PMU and timely adjustments to approaches and strategies.
- 31. (i) Supervision needs to be more proactive to address the challenges along implementation; flexibility during programme implementation is important. The situation in rural areas in a SIDS may change rapidly with changes in the macro-economic situation. The programme needs to be ready to rapidly respond to opportunities emerging in the target area. It is hence important to design a programme and log-frame that can be easily adapted, at mid-term review for instance. MAREP suffered from a lack of review of the LogFrame at mid-term review. Supervision has to provide technical and administrative support to validate such changes, with the involvement of the main counterparts of the GoG.
- 32. (j) M&E capacities have traditionally been weak and have required a lot of time to be established. IFAD's M&E requirements should be more pragmatic: in AFDP the M&E was established in 1983 (8 months after loan effectiveness) and ended in 1986, after various changes in

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personnel. Also MAREP suffered from changes in the personnel in charge of M&E, until a capable professional was found. At the same time, the Logical Framework of MAREP was too complex and not sufficiently adjusted at Mid-Term Review. A simple and feasible M&E system needs to be put in place from the beginning, with the key indicators indicated at project design. Such a system should allow for the regular and timely analysis of output, impact and effectiveness, as well as to evaluate data on the cost efficiency of the intervention. M&E should be viewed a useful management tool, and not as a bureaucratic reporting requirement.

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Appendix 4: Detailed programme description

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- 1. The Programme aims at two basic outcomes for achieving the development objective: (i) start-up businesses and new enterprises in rural areas are supported through capacity building, technical services and financing schemes; and (ii) farmers have increased access to CSA practices. It is expected that through the SAEP: at least 400 job opportunities will be created for rural poor, either becoming employed or self-employed; approximately 120 fully sustainable businesses will be established or consolidated; about 400 farmers will be increasing production by 20%; and, 3000 will report improved physical access to markets.
- 2. The Programme will be implemented through two main components: the Entrepreneurship and Business Development (EBD) component, and the Climate Smart Agriculture (CSA) component. Both components seek to increase income levels and sustainability in rural communities: promoting the development of sustainable businesses linked to markets by young men and women will bring innovation and youth to a prominent position in their rural communities; building resilience to Climate Change (CC) will secure and improve the supply and quality of agricultural goods, providing grounds for micro-enterprise consolidation in the long term and creating opportunities for businesses along the value chain, as new practices are adopted.

A. Component 1: The Enterprise Business Development (EBD)

- 3. The Enterprise Business Development (EBD) aims at supporting start-ups and new enterprises in rural areas through capacity building, technical support services and financing. This component has a strong focus on youth, assisting this vulnerable group to improve their income levels by becoming employed or self-employed. The component will: support young men and women with the entrepreneurial drive to consolidate or start-up businesses, starting from an identified market opportunity and enhancing their entrepreneurship skills; providing technical support to a limited number of existing businesses with potential for upscaling and creating employment; and support unemployed young men and women to receive Vocational Skills Training to become employable.
- 4. The promotion of innovative start-up businesses is at the core of this component. At present there are a series of constraints that prevent poor youth to start-up new businesses or consolidate their on-going initiatives. There is limited access to support services to develop the idea and build the required capacities to become sustainable or to have the minimum financial support required to test the product, the market and the management scheme. This component will seek to increase the availability of these services, promoting innovation and the engagement of young people in the most promising sectors of the rural economy, including farming and non-farming activities.
- 5. Most young men and women do not feel attracted to agricultural activities because they do not consider these as a profitable business. They engage in farming as a last resort, following traditional approaches that lead to low productivity levels, market gluts and no profits. Nonetheless, farming and agro-processing activities could be approached as a business with fair chances of success, if the appropriate support services are available.
- 6. The EBD component will have three main outputs: vocational skills training for youth for becoming employed, a comprehensive business support package to youth for consolidating/starting-up new businesses and a grant financing scheme for new businesses.

Output 1.1 Youth receive vocational skills training

7. Youth unemployment in rural areas is extremely high and at the root of prevailing high poverty rates. These young men and women lack the skills, qualifications and experience required by employers. The Programme would provide Vocational and Skills Training (VST), apprenticeships and job placement, especially oriented towards males and females from 16 to 35 years old with the purpose of increasing their possibilities to become employed through certified training.

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- 8. Vocational Skills training is conducted by several public and private sector institutions, such as the T.A. Marryshow Community College (TAMCC) or the New Life Organization (NEWLO), under the supervision and certification scheme of the Grenada National Training Agency (NTA), responsible for the introduction and management of the Caribbean Vocational Qualifications (CVQs) in Grenada. The CVQs demonstrate competence according to Regional Occupation Standards. The Programme will finance access to courses recognized for the different Caribbean Vocational Qualifications (CVQ) levels, allowing young men and women to grow professionally according to the potential of each individual, providing for a wider scope and better paid employment opportunities. The Programme will also finance short courses to enhance the skills that beneficiaries already have in a specific area. These competence based training would also lead to certification based on the practical knowledge of the trainee for a certain task, e.g. construction or electric/mechanic repairs. The enhancement or skills in an area where the applicant has already shown interest, may contribute to reduce the drop-out rate, particularly among male participants.
- 9. The Programme will support skills development and vocational training in areas including, but not limited to: (i) sustainable agriculture (especially areas attractive to young people); (ii) processing and marketing of agricultural produce; (iii) repair services, either electric or mechanic; (iv) renewable energy technologies and their maintenance; (v) food preparation, housekeeping, yachting; and (vi) Information and Communication Technologies (ICT). The SAEP VST training will include apprenticeship and other job placement activities that provide trainees with relevant work experience according to their new capacities, as a means to increase the chances to become permanently employed. As a lesson learned from MAREP, all VST training service providers will be required to secure apprenticeship after theoretical training. At present this has become a standard practice that improves overall achievement of targets. Even though the Programme has a specific group of activities for youth with entrepreneurial drive leading to starting up new businesses, the VST training could include entrepreneurship training as a means to instil self-reliance and a pro-active and positive attitude towards addressing hardship and frustrations.
- 10. It is important to note that training provisions for young men and women would be based on market opportunities, not on the traditional division of labor. A critical factor for Programme success lies in the selection methods and criteria to ensure that only people committed and genuinely interested in improving their living conditions are provided with these opportunities.
- 11. The social problems and issues affecting the quality of life among the targeted rural men and women, households and villages/communities cannot be overlooked. Addressing these issues is a key element of the affirmative actions. The purpose of Life Skills training is to identify, discuss and equip participants to address the crucial human relationship issues, challenges, abuses and constraints that impact on the individual, household, community, and consequently, the nation. These include but are not restricted to personal presentation, positive life skills, confidence-building, motivation and self-esteem, gender sensitization (how gender equality creates a better family relation and living environment), domestic violence, consequences of teenage pregnancies and irresponsible fatherhood.
- 12. As an innovative feature of the SAEP, the Life Skills training will also include a nutrition module, contributing to improve health and wellbeing in the medium and long term, ensuring a life cycle approach. This training will go beyond a food-based approach to nutrition. It would address:
 - the links between poverty and nutrition;
 - nutrition as a family issue and not as a woman's affair only;
 - early pregnancies and the impact on nutrition and health for both the child and the mother;
 - healthy diets and food choices;
 - · household economies for a healthy diet;
 - the economic burden of overweight and obesity.

- 13. At present 2-months life skills are included in most of the VST programmes offered by TAMCC or NEWLO. MAREP's experience with life skills training has been very positive. The SAEP would develop MOUs with TAMCC, NEWLO, or other vocational and skills training programmes for the implementation of VST, as described above.
- 14. The Programme will implement the VST activities through contractual arrangements with the NTA and/or service providers. The selection of beneficiaries will be carried out by the training providers applying the targeting criteria established by the Programme and will be based on a communication plan agreed with the SAEP. Applicants for VST will fill a form with personal data and household data that will be used to verify the application of targeting criteria and as a baseline survey to measure Programme's impact on beneficiaries.
- 15. It is expected that 400 young men and women will benefit from VST and that at least 20% will be able to find a permanent job.

Output 1.2 Start-up and new businesses receive technical support services for business development

- 16. Another key action to reduce unemployment in rural areas is to promote sustainable self-employment. At present, businesses outside the St George's area are poorly connected to markets, have no records on sales and profits to present to financial institutions, have little or outdated technical knowledge on how to increase production and meet quality standards, and most of them are informal and cannot link to formal institutions or more dynamic markets, such as supermarkets or hotels.
- 17. This sub-component/output is planned for tackling these issues, promoting the consolidation of on-going business initiatives or creation of new businesses by young men and women in the framework of a comprehensive capacity building process designed to increase the chances of success on a sustainable basis. The Programme will seek to identify entrepreneurship drive among selected youth and boost their potential with massive training, hand-holding support, mentorship and initial grant financing until the business becomes sustainable. All business ideas will originate in a market opportunity: the capacity building process and the different instruments of the project will contribute to effectively testing the product, the market and the organizational structure until the business reaches a sustainable stage, with the capacity to grow, invest and create employment.
- It is expected that a number of businesses will be linked to new technologies in agricultural production - hydroponics, aquaponics, organic production - and to agro-processing, eco-tourism, health and wellness eco products and services, solar systems installation and maintenance. The wide range of skills required means that a great number of institutions will participate in the training and support. The Grenada Investment Development Corporation (GIDC) is the specialized institution in Grenada for providing entrepreneurship and business development services. Its Business Development Centre (BDC) is responsible for entrepreneurship development, business development, technical assistance, training, export readiness, start-ups, upgrade and expansion of existing businesses and promotion of an enabling environment. The BDC was responsible for implementing the Caribbean Youth Empowerment Programme (2012-2013), targeting marginalized youth that had dropped out of school and came from the poorest parts of the country, including young single mothers as well as youth at risk of juvenile delinquency. The Programme offered market driven technical, vocational and life skills plus entrepreneurship training and career guidance. The targets were met and surpassed and GIDC was strengthened with new approaches to entrepreneurship keeping trainees' interest ensuring very low drop-out rates. It also promoted more intense networking with other training institutions to achieve the overall objectives.
- 19. The SAEP will implement the youth business development activities through contractual arrangements with the GIDC. The Programme will call potential beneficiaries to apply for participating in the component activities by implementing a strong communication strategy that will make use of inter alia mass media, social networks, youth organizations and community groups. There will be a

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selection process, including screening criteria based on the Programme's targeting criteria and minimal educational attainment –primary school completed-, tests and interviews, which will ensure that the candidates belong to the target group and have a high commitment and potential to fulfil the capacity building process. Representatives of the private sector will be part of the selection process, as well as all stakeholders involved in supporting youth (like training providers and the Ministry of Youth, Sports and Religious Affairs). The Programme will link with the Ministry of Youth, Sports and Religious Affairs (MoY) to disseminate the opportunities of the Programme among youth organizations. Applicants for the entrepreneurship and business development training will fill a form with personal data and household data that will be used to verify the application of targeting criteria and as a baseline survey to measure Programme's impact on beneficiaries.

- 20. Selected candidates will go through a training process that will enhance their basic skills Life Skills, including nutrition as described above, basic numeracy and literacy, Information and Communication Technology (ICT) and identify their entrepreneurship drive through specific entrepreneurship training. The entrepreneurship training will be based on the Competency based Economies, Formation of Enterprises (CEFE) methodology that uses an action-oriented approach and experiential learning methods to develop and enhance the business management and personal competencies of participants. CEFE's main objective is to improve the entrepreneurial performance through: a guided self-analysis, stimulating enterprising behavior and building-up business competencies in participants.
- 21. There are essentially six stages in a CEFE training approach. The first stage is awareness, in which participants are encouraged to examine who they are, clarify their own values, and evaluate their own personality, motivations, capabilities and personal resources. The second stage is acceptance or recognition of one's own strengths and weaknesses not everyone has to be a leader or hero, but being more creative, innovative, and competent is likely to produce rewards in any profession. The third stage is goal setting, where the emphasis is placed in developing clarity of purpose in one's short and long term goals of life. The fourth stage involves developing strategies or action plans which are oriented to generating growth, based on the analysis that started on the first stage and includes the upgrading of knowledge about economics and entrepreneurial decision-making. The fifth is direct experience where the emphasis is on doing; structured learning experiences and encountering "real life" situations assist in building up this experience in which strategies are tested, evaluated and modified. The last stage is transformation and empowerment where the competencies acquired come together into a pattern which matches personal strengths and weaknesses with goals.
- 22. CEFE's overall guiding principle to the training is the ownership of the process which is acquired through the time and energy that participants must invest into the highly demanding schedule of each course. By moving through these stages from awareness to transformation, the participant is given the opportunity to experience personal growth and to develop a more enterprising approach to life. The amount of empowerment that actually takes place is in direct proportion to the investment made by the participant and to the increase of economic opportunities.
- 23. Along the training process, young men and women will develop a business idea while supported by a comprehensive package of technical support services, which will provide hand-holding and mentorship until the business is sustainable. GIDC will provide training and will provide business development services: there will be Business Development Officers specifically assigned to the startups, providing orientation along the training process to develop the different aspects of the business idea and guide the young entrepreneurs through the different steps (research, networking, registration, procurement, record keeping, etc.). Specific technical skills training will be provided at this stage based on needs and in collaboration with specialized institutions or through consultancies. It is envisaged that some of the selected candidates may not proceed to start up a business, but it is expected that the capacity building process will assist them to become employable or to link with other more successful participants.

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- 24. Given the vulnerability that the targeted youth present, the Programme will include counselling to address specific problems that may hinder their ability to benefit from the training, such as domestic violence, abuse or related issues.
- 25. It is expected that the Programme will select 500 young men and women to participate in the youth business development activities, whereby it is expected that at least 80% will complete the training and develop a basic business concept.
- 26. According to GIDC experience, the start-up phase lasts approximately three years. The Programme would ensure that several types of support are provided throughout this period, when there are high chances of failure and frustration. As part of the Programme's activities to promote employment, a limited number of on-going businesses run by adults, in need of technical assistance to become sustainable, will be supported with business development services to grow, consolidate and create employment. The selection of these businesses will take into account their potential to upscale, their market prospects and the capacity to develop linkages with the start-up businesses, as buyer or supplier in a mutually beneficial relationship. GIDC will provide the business support services to these businesses through offices established in the rural areas. It is expected that approximately 150 rural poor will benefit from this support. Applicants for the business development services will fill a form with personal data and household data that will be used to verify the application of targeting criteria and as a baseline survey to measure Programme's impact on beneficiaries.

Output 1.3 Youth start-up businesses access grant financing

- 27. The financial sector in Grenada is not currently financing start-up businesses. The Grenada Development Bank (GDB) owned by the GOG implemented two funds for start-up businesses on concessional terms in the past few years, the Small Business Fund and the Youth Business Fund. Both are currently under review due to high delinquency rates: borrowers perceived public sector funding as grants and there were no measures in place to promote sound business selection and commitment to repayment. GDB is no longer financing start-ups; it is demanding a minimum of two years' experience in business and the corresponding records, which most of the small business lack. MAREP has implemented a Credit Line through the Grenada Cooperative Bank —a private bank-which was cancelled due to the barriers for accessing loans that the Cooperative bank could not waive due to the Supervisory rules, namely collaterals, records, property documents and paper work. The Credit Union sector is also under a supervisory body, the Grenada Authority for the Regulation of Financial Institutions (GARFIN), but is generally more flexible with requirements. However, the CU core clientele are consumers and service businesses; their portfolio for agro-processing, agriculture and fisheries is less than 4% of total loans. The CU are not financing start-up businesses because they perceive that the risks are too high.
- 28. The lack of access to finance represents a great constraint for rural poor with a business idea. For non-poor, the family savings and assets finance the new business venture, but rural poor do not have this alternative at hand. The Programme will implement a matching grant scheme to tackle this market deficiency, promoting a step by step approach and putting in place implementation arrangements that select only feasible and potentially profitable and sustainable business ideas, promoting accountability and complementarity with the financial sector.
- 29. As soon as young entrepreneurs have identified a business idea, the Programme will support the initial steps for implementing the most innovative and potentially profitable proposals with small grants, in order to start a trial and error process, which will contribute to improving the business plan and identifying the capacity building gaps.
- 30. The grants for this purpose, called "First push", will be small with a ceiling per participant equivalent to USD 1,000, including 5% contribution of the trainee, in cash or in kind and only available for those participants that approve the Entrepreneurship training. Group proposals involving more than one participant, will have a maximum funding of USD 2,500 per initiative including the beneficiary 5% contribution in cash or in kind. The grant will finance a specific output, that is, a short term

objective towards implementing the business idea, e.g. to prepare sample products, brochures or pay for space or transportation to participate in fairs and exhibitions, to set up a small hydroponic garden, buy small equipment to improve quality, or buy inputs and hire temporary staff to produce enough products to display in a market event. The grant amounts should be sufficient for advancing towards the business concept but not enough for implementing the full business proposal, so that the young entrepreneur may have a first actual experience on his/her new venture, yet not arising unreal expectations and keeping risks under control. GIDC Business Development Officers (BDOs) would support the implementation of proposals with the aim to identifying those with potential to proceed to the business planning stage. These would be supported with a more intense hand-holding scheme, including technical, business and mentoring services, in order to develop a business plan to be submitted to the selection committee to access a second, larger grant that aims at financing a viable business.

- 31. The selection of proposals will consist of a competitive process. Proposals will be ranked according to a set of criteria relating to: a) the capacity to upscale and become sustainable according to market potential; and, b) the commitment and achievement of the trainee in the training process. The Programme will set up a Business Grant Selection Committee (see Appendix 5). The Selection Committee could waive the beneficiary contribution for the youngest entrepreneurs -17 to 21 years old- and for the most vulnerable members of the target group (unemployed single parents).
- 32. The type of expenses financed may include small investments and purchase of goods and services, such as –inter alia- small equipment, transportation, printing services, inputs and raw material, certifications and permissions, laboratory analysis, temporary labour and specialized technical assistance. The Programme will not finance land purchase or lease, refinancing or payment of debts, house improvements not related to the business idea, activities that might harm the environment such as farming on steep slopes, deforestation (slash and burn), overuse of chemicals, brick or charcoal manufacturing, etc,
- 33. Procedures for disbursement should be speedy enough to avoid frustrations, while ensuring transparency and accountability. Payments would be done directly by the Programme Management Unit (PMU) to suppliers, whenever possible.
- 34. Those proposals that successfully undergo this process of trial and error will be supported to develop a full business plan. These would be developed by the young entrepreneurs with the support of GIDC staff. The business plans will analyze all aspects of the business venture: market and marketing strategy, technology, management structure, costs and benefits. The format should be simple and adequate to the educational attainment levels of the beneficiaries to ensure empowerment. The type of formats and content should be also chosen in consultation with financial institutions with operations in rural areas, such as the Credit Unions (CU) and the Grenada Development Bank (GDB).
- 35. Those business plans that the GIDC considers mature enough for implementation, would be submitted to the Business Grant Selection Committee to provide additional grant financing for implementing the full proposal. The selection would be a competitive process and would establish deadlines for submission of business plans every year. The selected businesses would be technically feasible, market oriented, environmentally sustainable and profitable. The Business Grant Selection Committee would select proposals for financing based on sound business criteria. A hand-holding technical support will provide back-up for using the grants and linking to markets, improving product quality or developing a new product line, as required in the business plan.
- 36. This sub-component will develop criteria for establishing priorities in grant selection that will take into account inter alia the market prospects, the innovative features and the capacity of the business to upscale, become sustainable and create employment. The Programme would promote the participation of financial institutions including GDB and the CUs- in the selection committee to seek complementarities and have their expertise in assessing business proposals (see Appendix 5). The selected business plans would receive a maximum grant financing of USD 9,300 per initiative,

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including a beneficiary's contribution of 10%, being 5% in cash. More ambitious proposals involving more than one participant within the same business would have a ceiling equivalent to the number of trainees involved multiplied by the individual limit, with a maximum funding of USD 30,000 per business including the beneficiary contribution of 10%, being 5% in cash. The cash contribution could be waived by the Selection Committee for the youngest entrepreneurs -17 to 21 years old- or vulnerable members of the target population –unemployed single parents-. The funds would be disbursed in tranches according to identified steps in the implementation of the idea and subject to positive reports on the progress of implementation.

- 37. The Programme will link with financial institutions to explore possible partnerships to expand their clientele among these new businesses. The Programme would promote that the new businesses manage to access loans from these institutions in the future, by establishing record keeping practices since the onset, in order to provide evidence of the business performance and reduce collateral requirements. Eligible expenses include investment and purchase of goods and services, such as inter alia- small works, land access legal advice, land preparation, equipment, vehicles, machinery, inputs, specialized technical assistance, permissions and certifications, laboratory analysis, temporary labour, brochures and printing material. The above mentioned restrictions for grant financing apply to this case.
- 38. Even though the Youth Business Grant Fund is a demand driven fund, it was estimated that 400 trainees would access the First Push and 120 new enterprises would be created in order to calculate the fund allocation. According to this estimate, there would be 400 beneficiaries of the grant scheme, with approximately 240 –assuming on average 2 trainees involved in each business plan- receiving financial support to become fully sustainable and create employment.

B. Component 2: Climate Smart Agriculture (CSA)

39. The CSA component will aim at increasing sustainability of small farmers through the adoption of CSA practices. This component will assist the farmers and members of rural communities, including the very young ones, to have a better knowledge on CC issues and CSA and to adopt CSA practices. Farmers need to increase their resilience to the expected above-average temperatures and below-average dry-season rainfalls, meaning longer lasting drought periods that lead to increased demand for water. The component will promote the adoption of more efficient water management and conservation measures, as a key component to address changing rainfall patterns. These measures include drip irrigation systems, rain-water harvesting systems, terracing, mulching and small drainage works. The component will also support the rehabilitation of feeder roads and drainage systems that will bear the impact of increasingly extreme events, such as heavy rainfall, with increasingly unpredictable patterns.

Output 2.1 Farmers and MoA extensionists and vulnerable people in poor rural communities receive training on Climate Smart Agriculture

- 40. The Programme will provide technical training to farmers and members of rural communities on CSA practices that aim at increasing production and income on a sustainable basis. This includes:
 - (a) Build capacity of farmers and farmer organizations (including young farmers) to understand the effects of CC in agriculture, and identify and implement CSA practices;
 - (b) Provide training to MOA extension service to enhance their capacity to address CC issues, assess CSA practices and approaches and interpret climate information.
- 41. This output includes two types of training: specialized technical training to MoA staff and training activities to rural communities through the activities of the extension and the 4H departments of the MoA.
- 42. The CSA component will strengthen the capacity of extension services by implementing a comprehensive training package to be made available to young extension assistant staff of the MoA,

young agronomists in the private sector and selected young members of farmers' organizations with the capacity to develop horizontal technical assistance (farmer to farmer).

- This training will include CC concepts and issues and CSA approaches and practices. It is expected this specialized training will be provided by selected institutes in the Caribbean region such as the Inter-American Institute for Cooperation on Agriculture (IICA), the Caribbean Community CC Centre (CCCCC), the International Centre for Tropical Agriculture (CIAT), the Caribbean Agricultural Research and Development Institute (CARDI) or similar. The selection of topics and training providers will be conducted in consultation with the Environment Division of the Ministry of Education and the MoA. Other key areas for training include: update on agricultural practices and technologies, including irrigation systems and water management systems; the use of ICT to develop new approaches that reduce operational costs; the increase in scope of the technical advice to provide guidance on marketing issues and business development, particularly record keeping; social inclusion and gender issues. It is expected that the trainees will also receive training on business development, marketing and ICT technologies applied to extension services. This training should be procured by the Programme in close consultation with the MoA. There are several institutions that could provide this type of support at the regional level, including the Institute for Cooperation for Agriculture (IICA) and the Food and Agriculture Organization (FAO). At the local level, the GIDC could provide training on marketing and business development.
- 44. SAEP training to extensionists will also include nutritional concepts and approaches to nutrition-sensitive value chains. Agricultural extension services are focussing mainly on production and productivity. Nutrition is not a genuine part of the service. And if at all, nutrition education is based on very traditional/conservative approaches like the food pyramid, the colour principle and/or food and its role in the human body. It usually does not engage in socio-cultural issues such as gender divides, food beliefs and taboos, nutrient values for human nutrition, household economy, cash versus food crops. Even utilization of non-traditional crops such as pak choi is not part of the extension programmes. Therefore, SAEP strengthening extension services and capacity development has a great potential to address nutrition-sensitive agriculture in its programme. A nutrition module will be included in the development of the training programme for extension staff.
- 45. The Programme will finance the implementation of demonstration models at schools, community and farmers' organizations or individual farms. These will be used by extension services to disseminate innovative technologies and CSA practices among targeted farmers. These demonstration plots will show farmers the feasibility and benefits of different CSA practices, putting into practice the recommendations of research institutions and test them at field level, providing a valuable feedback to extension services.
- 46. In addition, the Programme would raise awareness on CC and CSA practices among at least 1,000 school children in the age group 7-17 through the MoA 4H department. The support to the 4H programme would have different objectives and activities:
 - (a) Promote a positive vision of agriculture at an early age as something fun, innovative and necessary, not as something that is dirty, backbreaking, for older people and as a last resort. The 4H programme already has in place several activities at the 4H school-clubs that can be supported by SAEP. In addition, other ways to promote a new image of agriculture are to: include visits to local farms in school activities; implement positive awareness programs and campaigns to sensitize youth on the importance of agriculture: economic, health and social benefits; ask students to show successful farmers' achievements (video, blog), or showcase innovative ways of doing agriculture and other rural activities (agricultural project initiatives have been implemented in schools around the island and include school gardens, poultry and goats).
 - (b) Create awareness about climate change, adaptation, and climate-smart agriculture. In SAEP's approach youth will not be considered as a problem but rather as a strategic asset. The project will leverage their comparative advantage as early adopters of new

- technologies and higher risk-taking attitudes and support young people to come up with innovative ideas, building their capacities.
- (c) Create awareness about social issues, as they are relevant to a particular age group: self-esteem, gender equality, the effects of alcohol and drug abuse, domestic violence (and where to find help), consequences of teenage pregnancies and irresponsible fatherhood. The MOA 4H programme already liaises with specialized institutions to provide talks on these topics. In addition, field trips could be undertaken; contests could be held for students to write essays, prepare short videos on these topics. Also, a national or regional famous "role model for youth" could be invited as a keynote speaker at a national conference organized around one or several topics. The topics could also get special attention and be discussed at the 4H Annual Leaders Convention.
- (d) Promote a better understanding of nutrition and food security issues, including healthy nutritional habits.
- 47. In the absence of regulatory measures by the Government e.g. taxation of unhealthy food stuff and labelling of products, nutrition education at all levels is the most preferred intervention. In a cash-deficient population, selling will be always the priority but guiding the selection of nutrient-rich food to grow in the backyard coupled with nutrition education will improve healthy food choices.
- 48. In order to implement a successful school garden programme common problems experienced in the past need to be addressed: poor management in general (e.g. proper record keeping, m&e, comprehensive capacity building for teachers etc.); non availability/accessibility of appropriate tools and seeds; non or limited extension service provided to the schools (pupil gardener); no proper delegation of responsibilities, including a plan for school holidays; too small to produce sufficient food for the school canteen; objective not always clear (some decided to sell all to receive money for something different e.g. sports equipment); and, nutrition education completely left out.
- 49. A nutrition-sensitive school garden would have to take care of the nutrient value of the chosen crops (and trees and small livestock) e.g. preference of orange flesh sweet potato over lettuce. It would also go beyond the production and tackle utilization. A comprehensive and tailored nutrition education programme to be developed needs also to address socio-cultural impacts on nutrition such as gender and teenage pregnancies.
- 50. School gardens are a good intervention to promote appropriate agricultural practices like Climate Smart Agriculture but also to promote nutrition and healthy diets/life style as well household economies. This part of nutrition learning is 'nutrition in the life cycle'.
- 51. Assistance and capacity building in nutrition in the 4H department of the MoA is needed to carry out the nutrition-sensitive approach successfully. The 4H programme should also be fully integrated in the MoA extension service. Mutual learning will develop capacities in the MoA to address nutritional issues. The Food and Nutrition Council is able to facilitate nutrition education activities.
- 52. The type of activities to be implemented with the 4H clubs will be planned with the 4H Department of the MoA and the involved schools. Most of them will consist of training, demonstration farms, fairs, exhibitions and dissemination material. The Programme will support the MoA to adopt the proposed approaches financing consultancies whenever required. The 4H department and involved schools will gather personal data and household data on attending students.

Output 2.2. Farmers receive extension services on CSA practices and on improving marketing links

53. The Programme will give emphasis to CSA for resilient livelihoods, including new technologies and practices resilient to CC impacts and backyard gardens. The core of this approach is the recognition that useful synergies exist for adaptation and mitigation in the agriculture sector, relevant to food security and rural livelihoods. These include a wide set of strategies that lead to conservation and restoration of soil, water, and ecosystem services by improving their quality, availability and

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efficiency of use. Promoting new approaches to agriculture as a business on a sustainable basis requires technical input with updated knowledge on such CSA practices.

The capacity of the MoA to lead this process is a key success factor. At present, the extension services are going through a transition period: 12 out of a total of 17 experienced extension staff are retiring in the next two years. The impact of such decrease in experienced staff is significant in terms of the coverage and the quality of extension services. In this scenario, the access to extension services to poor farmers is likely to suffer and the chances for adopting CSA practices would be seriously compromised. At present, there are around 45 Extension Assistants (EA) working under the fully qualified extension officers. The MoA is developing a succession plan that aims at training part of this cohort to perform as extension officers: approximately 15 will be trained by FAO, in coordination with TAMCC, to achieve an associate degree level in three years. As extension officers retire, all young EAs will be required to take on new tasks and responsibilities.

- 54. Since this is a critical factor for promoting CSA practices, the design proposes contributing to address the shortage of MoA extension staff at the district level in the short term by training —as described in Output 2.1- the EAs to take on additional and more demanding responsibilities. The MoA and the Programme, would select a group of approximately 10 of these trained assistants to be seconded to the SAEP for the implementation of Component 2. The Programme would pay a complement to the salary to cater for additional responsibilities, such as report writing and providing training to beneficiaries. These EAs would be deployed at the district level to provide training and technical support to farmers, targeting the adoption of CSA practices and technologies. The Programme would recruit a Coordinator, responsible for supervising the EAs, coordinating the training and other activities of the component with the MoA.
- 55. EAs, in collaboration with the Programme's M&E system, will fill a form with assisted farmers' personal data and household data that will be used to verify the application of targeting criteria and as a baseline survey to measure Programme's impact on beneficiaries. This information will be updated periodically based on evidence gathered at extension visits.
- 56. The MoA has assessed different public or private extension models and has taken the decision that the public sector approach is the most adequate for Grenada. The SAEP will promote exploring Public-Private Partnerships (PPP) with farmer organizations. These pilot experiences consist of assigning or attaching the selected EAs to farmers' organizations. The Programme would request that these organizations be inclusive of rural poor and provide a quality service to the SAEP target population. In this way the Programme is introducing an innovative approach with great potential for improving the quality of service, and for triggering replication and scaling up. The organization would identify young men and women within their membership that would receive training to become a focal point for providing specific technical support for the members of the organization (e.g. vaccination, soil testing, maintenance of irrigation systems, etc.).
- 57. The farmers' organizations would report to SAEP on the quality and regularity of the services. Extension workers have an activity log that records all field activities, which allows monitoring the focus on rural poor by the Programme. The M&E system would also make random checks and field visits to ensure that the financed staff is primarily supporting the SAEP target population. It is expected that after Programme completion, these MoA staff will have developed a bond with beneficiaries that will sustain results in the long term.
- 58. The Ministry of Carriacou and Petit Martinique Affairs (MCPMA) also faces staff constraints. All line ministries were affected by the Home Grown Programme and had to reduce their staff. At present the MCPMA is promoting the adoption of technologies, with a particular focus on youth. It has developed a business centre open to all the community members for a small fee, which has modern technology for on-line training linked to existing services in Grenada, such as GIDC.

- 59. It is expected that the Programme will hire one extension officer in collaboration with the MCPMA, This extension officer will be trained by the Programme and will be absorbed by the MCPMA after three years of formal and in-the-job training.
- 60. The Programme will also hire specialized consultants -not necessarily on a full-time basis, basically hired through retain contracts- to provide guidance and on the job training to the MOA's EA. These consultants will be selected and recruited by the Programme in consultation with the MOA and will have expertise on the main farming activities of the small farmers and the CSA practices to be promoted (e.g. small ruminants, crops, fisheries, irrigation/water management, poultry).
- 61. Therefore the Programme would tackle the challenges of extension services with a multifaceted approach, strengthening the MoA current staff to ensure sustainability and continuity of support services while the succession plan is not completed, complemented with specialized back up to maintain quality and contribute to on-the-job training. It is expected that the Programme will cover the island of Grenada and Carriacou and Petit Martinique, providing technical support to at least 1,200 farmers. The specific fields crops, livestock, forestry and fisheries will be selected based on the needs of rural poor and the availability of farmers' and fishermen' organizations interested in joining the scheme.
- 62. The PMU will have a Marketing Officer (MO) responsible for supporting farmers to diversify markets and access more dynamic outlets, making use of production planning to benefit from the high prices at the peak tourism season. The MA will conduct training and support farmers to improve their marketing skills; he/she will also keep a database on buyers that should include at least, type of product, quantities demanded, regularity of supply required, prices paid and payment scheme. This data base should be accessible to all farmers participating in the Programme making use of ICT to make the process transparent and easily accessible. At present the MAREP has a MA who has valuable information for marketing, after an extensive research among buyers (including supermarkets and hotels). She is presently approached by buyers asking for specific products and makes contact with farmers that could use the opportunity. The SAEP will build on this experience, improving the links to extension services, in order to involve extension officers in marketing assistance.

Output 2.3 Individual farmers and/or groups receive grant financing for CSA initiatives

- 63. The CSA component will promote investments that improve resilience to CC as well as improve income, nutrition and market linkages. The adoption of CSA practices will be promoted through a grant scheme that will be open to groups or individual to enable poor farmers to increase resilience and income on sustainable basis. The initiatives will be developed by individual farmers of farmers' groups with the support of the extension workers. The Programme will release calls for proposals among beneficiaries of SAEP's extension services, establishing the objectives of the call and the terms and conditions to be applied according to the characteristics of the beneficiary and the type of initiatives and expenses. Simple formats will be developed, adequate for the educational levels of the target population, to describe the objectives, activities, costs and benefits of the initiative.
- 64. Priorities will be linked to the impact of CC according to the geographical location and analysis of the farm conducted by the extension services. There are three main types of CSA practices and investments to be supported by the SAEP: (i) those contributing to increase water availability, either through increasing access or improving efficiency of water management; (ii) those that reduce soil run-off in case of heavy rain; and, (iii) backyard gardens.
- 65. Water related practices and investments are intended to address longer drought periods and thereby enabling production planning to target higher prices in the dry season mulching. These CSA investments include inter alia drip irrigation systems, efficient water harvesting systems, solar panel pumps, mulching, terracing and shredding contributing to keep moisture in vulnerable eco-systems such as grazing lands. For livestock farmers, these practices would also include pens and fencing, cut and carry pastures and compost production from droppings, promoting a more efficient use of

chemicals that are damming the rivers, particularly affecting the parishes of St George's, St John, St Patrick and St Andrews. Water harvesting and fencing to improve fodder management and availability along dry periods would be promoted in Carriacou, where the climate is drier, there are less sources of surface water and 60% of the land is classified as shrubs or grassland used for goat rearing. The CSA practices oriented to adapt to heavy rainfall include small on-farm drainage works, intercropping and shade houses.

- 66. Grants will also be available for backyard gardens which, in the country context of Grenada, do not equal kitchen gardens, which have the main purpose to increase consumption of nutrient-rich vegetables. Backyard gardens are often managed as a small holder farm with the priority on selling the produce and only secondary to increase consumption at home. This makes sense for the producer if the cash gained through selling can be translated into more convenient and preferred cheaper food staff and soft drinks. From a nutritional point of view this would be detrimental for nutrition. In the absence of regulatory measures by the GoG, e.g. taxation of unhealthy food stuff and labelling of products, nutrition education at all levels is the most preferred intervention. In a cash-deficient population, selling will be always the priority but guiding the selection of nutrient-rich food to grow in the backyard coupled with nutrition education will improve healthy food choices.
- 67. There are already examples that backyard gardening is not limited to plant production only but also integrates small livestock/fish which is in favour of promoting a balanced diet of plant and animal sourced nutrients. Some of the food crops might need additional training on how to use/prepare them as some crops are not a traditional part of the dietary habits e.g. pak choi. Recipe development and cooking demonstration are part of the proposed activity.
- 68. In particular, availability and accessibility of vegetables and fruits is determined by seasonality. Therefore, demonstration plots should indicate which plants are most suitable for which month in a year. Demonstration plots should also promote dietary diversity as some crops might be attractive for selling and maybe even consumption but have little nutrient value from the nutritional point of view, like lettuce or cassava.
- 69. An average size of a backyard garden ¼ acre or less seem to be manageable. Water scarcity in some areas will be addressed by promoting Climate Smart Agriculture e.g. water harvesting and terracing for better water retention, so this should not be a limitation for carrying out the activity.
- 70. Innovative agricultural production using for example hydro-culture and identifying conservation and preservation techniques to increase availability and accessibility of food throughout the year e.g. solar drying of selected fruits will potentially impact on the nutritional outcomes as well as on increased production.
- 71. Backyard gardens, in particular when principles of Climate Smart Agriculture will be applied, have the potential to improve food security and nutrition and thereby to strengthen the resilience of the beneficiaries. In the project context backyard gardens will be defined as plots close to the beneficiaries with an average size between 1/8 and ½ acre. Crops to be selected are those with high nutrient value like orange flesh, sweet potatoes, cabbage, carrots and green leafy vegetables. These are also crops classified by MNIB as having high market value. Vegetable gardens can also be mixed with fruit trees or the multipurpose Moringa tree. When possible, integrated homestead food production (IHFP) with small livestock such as goats, chicken and rabbits should be preferred over backyard gardens exclusively focusing on vegetable and fruit trees. Adding animal sourced protein in the diet will increase dietary diversity and nutrient supply for nutrition vulnerable beneficiaries (women and children). A seasonal calendar will provide the information which crops have to be planted at what time to increase the accessibility of food throughout the year.
- 72. Backyard gardens/IHFP need to be accompanied by agricultural extension services, but also tailored nutrition education. Home consumption is priority and only surplus should be sold. Rainwater harvesting used for drip irrigation, composting, mulching but also the cultivation of legumes will

improve the quality of the soil. Priority beneficiaries shall be female headed households and povertystricken households with nutritional challenges.

- 73. In order to avoid negative environmental effects, the SAEP would not finance land purchases or house improvements not conducive to improving farming activities or nutrition of the household, activities that might harm the environment such as inter alia farming on steep slopes, deforestation (slash and burn, uprooting perennial crop), brick or charcoal manufacturing. In addition, the programme will monitor the adequate use of chemicals and the adoption of appropriate waste disposal and management practices (as part of the Environmental and Social Management Plan ESMP).
- 74. The Programme would set up a CSA Grant Selection Committee for grant approval (see Appendix 5). The Programme could hire consultants to assess proposals and score them according to the criteria established for the call for proposals. Proposals will be ranked according to a set of criteria relating to: a) the severity of the impact of CC on production and income; and, b) the socio-economic condition of the beneficiary, that is, to the contribution to improve the livelihood of the most vulnerable sectors of the target population, either by improving income or nutrition. The specific geographic and sectoral priorities for each call will be established in consultation with the Environment Department of the Ministry of Education and the MoA, to comply with the overall guidelines and best practices for addressing CC impact in Grenada, and the targeting strategy of the Programme.
- 75. The selected proposals would be sent to the National Climate Change Committee for clearance and coordination with other funding available for CC adaptation to ensure synergies with other projects promoting CC adaptation.
- 76. The maximum grant financing per individual farmer will be the equivalent to USD 8,000 and the contribution of beneficiaries will be set at 10% including a 5% cash. Group proposals will have a ceiling equivalent to the number of members multiplied by the individual limit with a maximum of USD 30,000 per initiative, including a 10% contribution of beneficiaries, 5% being in cash. The backyard gardens would have a maximum funding of USD 1,000 per household including a minimum contribution of 5% in kind or in cash. The beneficiary contribution may be waived for unemployed single parents. Small commercial farmers, farming more than 2.5 acres of land, are expected to participate in Component 2 activities, representing 6% of Programme's total beneficiaries (see Appendix 2). For this particular group of beneficiaries, the contribution would be set at 20%, 10% being in cash. Even though this is a demand driven fund, it was estimated that the Programme would finance 180 initiatives along its implementation, including 60 backyard gardens, in order to calculate the allocation of the grant fund.
- 77. The CSA initiatives supported will be highly correlated to financial sustainability as well as environmental sustainability, so that the Programme will link with financial institutions to explore possible partnerships to expand their clientele among the beneficiary farmers. The Programme would promote that extension services will train farmers to have simple record keeping practices, in order to fulfil one of the basic requirements of financial institutions to reduce collateral requirements. Eligible expenses include –inter alia- small works, land access legal advice, land preparation, equipment, vehicles, machinery, inputs, specialized technical assistance, permissions and certifications, laboratory analysis, temporary labour, brochures and printing material.

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Output 2.4 Rural roads are rehabilitated to improve and/or maintain access to markets

- 78. The CSA component will also include support to rehabilitate existing feeder roads and drainage systems that will bear the impact of CC. The interventions will be selected based on the assessment of needs, the potential number of beneficiary farmers and the scope for reducing transportation costs and for promoting improved linkages to markets, in consultation with the Ministry of Works and the MoA. The Programme will take the necessary safeguards to avoid negative impacts for the environment at the local level.
- 79. The length and unit cost of the rural road rehabilitation component is expected to vary significantly, depending on the types of works. Data from the previous programme MAREP (cofinanced by IFAD and CDB) was used to evaluate the rural roads component. As shown in the table below concerning 12 links of rural roads and once bridge, under MAREP the length ranged between 0.17 km and 2.4 km (averaging 1.15 km) and the rehabilitation works also included parts of bridges. On average for every kilometer of road, 25% of the length on one side was constructed with box drain, 25% with a slipper drain, two cross culverts with head walls and catch pit were installed, and 33% of the roadway was rehabilitated.

MAREP Farm Access Roads constructed/rehabilitated 2014-2016 Information

Name of the Farm Access	Community &	Direct: No. of	Indirect: No.	Acreag	Length	Type of Crops
Road	Parish	Beneficiaries	Beneficiaries	е	of the	
		(Farmers	(Community		road	
		accessing the roads)	Persons)		(km)	
Bellair Cocoa Road	Mt Rich,	· · · · · · · · · · · · · · · · · · ·	470(402 M 67 F)	80		Cocoa , Nutmeg
Bellair Cocoa Road	St Patrick	40	170(103 M, 67 F)	80	0.17	Cocoa, Nutifieg
Granton Road	New Hampshire,	150	901 (457 M, 444F)	220		nutmeg, root crop & vegetables
	St. George	_			0.55	
Grantin/Mango Road	New Hampshire,	120		250	0.20	vegetables , root crop , nutmeg & citrus
	St George				0.20	
Boplan Road	Maran, St. John	60	362 (187M, 175F)	180	0.29	Cocoa, citrus, nutmeg,
Resource Bye Road	Resource, St Mark	25	258(138M, 120 F)	86	0.23	Cocoa, nutmeg, banana, Soursop, golden apple
Pearls Bridge	Pearls, St. Andrew	60		150	0.8	Vegetable, coconut, citrus
Lower St. John (Ghutt)	Lower St. John,	45	29 (12M, 17F)	200	2.4	Cocoa, Nutmeg, Banana, Citrus
Road	St. Andrew				2.4	
Mt. Dor/Grand Bay Road	Mt. Royal, Carriacou	60	195 (100M, 95F)	60	1.2	Livestock (small ruminants), Short crops
Grand Bras- La Kabacay	Grand Bras,	20	290 (150M, 140F)	200	1.2	Cocoa, banana, vegetables, citrus
Bridge	St. Andrew				1.2	
Rose Hill/Chambord Road	Rose Hill,	120	553(289M, 264F)	150	1.6	Root crops, vegetables, livestock
	St. Patrick				1.0	
La Poterie/ Conference	La Poterie,	75	455(234M, 221F)	200		Sugar cane, fruits, coconut, vegetables, banana
Road	St. Andrew				2.4	
Phase 1						
Ahoma Road	Tivoli,	120	58(27M, 31F)	320	2.4	Cocoa, nutmeg, fruits, root crops, banana, vegetables
	St. Andrew					
Fountain Road	Fountain,	100	118(59M,59F)	100	2.4	Cocoa, nutmeg, root crops, vegetables
	St. Mark					
TOTAL		995	3,389 (1756M, 1633F)	2,196	15.04	

- 80. Under the new Programme, the roads will be selected based on the utilization rate by farmers, current production & potential for increase in agricultural production/income, as well as the interest of the farmers to provide self-help maintenance of the roads. The key missing links in the Programme area will be identified, that suffer damages/interruptions in case of flooding. The drainage of the roads will be improved to make them climate proof and resilient, and allow their use even in case of heavy rainfall.
- 81. The design standards will be based on the OECS (Organization of Eastern Caribbean States) Building Code and Guidelines. Drains will be built to accommodate the volumes of water and cross

culverts will be installed, where necessary to dispose of the water and avoid overflow. Since the works will regard established roads, very little excavation will have to be done to the road. Only trees exactly in the roadway will be cut, while branches overhanging will be cut only where necessary. The banks with the vegetation will not be disturbed, except where retaining walls and drains will be constructed. All construction will be adequately reinforced and build to withstand adverse weather conditions.

82. It is envisaged that approximately 30 feeder roads and drainage works will be rehabilitated throughout Programme implementation. These activities will be implemented through an MoU with the Ministry of Works.

C. Component 3: Programme Management (PM)

- 83. The Programme Management (PM) component aims at ensuring the effectiveness and efficiency of the Programme, establishing key management systems and processes that will achieve the expected outputs and outcomes with the funds provided. It will benefit from the experience and capacities built throughout MAREP implementation, reducing start up delays, particularly in setting up an operational Monitoring and Evaluation (M&E) system, accounting and financial systems. It is also expected that the MAREP impact study will be planned and implemented to be used as the SAEP baseline study, reducing costs and advancing required activities of the new Programme.
- 84. The PMU will be established at the Ministry of Finance and will make use of MAREP's office space and equipment, as a means of reducing costs and building on existing capacities, reducing the preparation stage. It is expected that upon agreement with the MoF the contracts of some key staff of MAREP will be amended and extended to be involved in SAEP's PMU. The Programme will have its main office in Sauteurs, linking with the MoF in St George's, where it would have a minimal work space. The field presence outside of St George's has been key success factor of MAREP to promote beneficiaries' participation and empowerment.
- 85. The SAEP implementation approach will significantly reduce the number of staff required for the PMU. The latter will focus on the core services of financial management, technical coordination and M&E (see Appendix 5). It is expected that the Programme will partially finance the recruitment of an IT officer that will support the Programme, dedicating at least one day a week to solve any issue arising in the ICT area to ensure connectivity and continuousness in day to day operations. The technical support services to beneficiaries will be provided by the implementing partners and/or service providers. This approach introduces more flexibility for introducing changes, if the progress and/or deliverables are not as expected and required.

Appendix 5: Institutional aspects and implementation arrangements

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A. Implementation Strategy

- 1. The implementation strategy is based on four basic principles: (i) building upon the Market Access and Rural Enterprise Development Programme (MAREP) lessons learnt, as well as the capacities built, to reduce the extended preparation period that characterized and negatively affected the implementation of previous IFAD financed projects in Grenada; (ii) improving the contractual arrangements with implementing partners to ensure empowerment of the Programme's objectives and targets fostering efficiency and accountability; (iii) strengthening specific areas of main service providers to ensure quality and timely support services to beneficiaries; and (iv) ensure social inclusion and gender equality.
- 2. The MAREP experienced difficulties in recruiting qualified staff, particularly at the Specialist level. There were lengthy periods in which the positions of the component heads were not filled and later on had to be filled through internal promotion due to lack of suitable external candidates, representing a major setback for the progress in implementation. As a lesson learnt, the new Programme will propose to retain key qualified staff from MAREP, making use of existing capacities built during implementation. The existing MAREP equipment and office space will also speed up the preparation stage for the new programme.
- 3. The approach to contractual arrangements with implementing partners is detailed in Section D below. The specific measures for social inclusion and gender equality are presented in detail in Appendix 2 and mentioned in the different sections of this document.

B. Organizational Framework

- 4. Following the proposed principles, the Programme will be implemented through a Programme Management Unit (PMU) established at the Ministry of Finance (MoF) reporting directly to the Permanent Secretary (PS). This PMU will have the core services of accounting and financial management, Monitoring & Evaluation (M&E) and technical coordination (see Annex 1. Organizational Chart).
- 5. The Programme Management Unit will have a reduced staff and will be a coordinating, supervising and facilitating body. This represents a major change with respect to the MAREP implementation strategy: the SAEP PMU will almost not have staff allocated for directly implementing activities with beneficiaries, since these tasks will be performed by the specialised implementing partners. This strategy was already explored in MAREP for the Vocational Skills Training: the Programme only selected beneficiaries, had a Memorandum of Understanding with the Grenada National Training Agency (NTA) and selected training providers to perform the activities. The MAREP role was to plan the activity in close collaboration with the implementing partner (field of training, number of students, dates, location, job placement and follow-up) and to make the funds available for implementation to the partner institution. The new Programme will take an additional step and leave the selection of beneficiaries to the implementing partner based on the targeting criteria established by the SAEP. In this way, the partner will be fully responsible for the results achieved and accountable in front of the PMU for attaining or not attaining the planned deliverables.
- 6. It is expected that, upon agreement with the Government of Grenada (GoG) and assessment of capacities and performance, a number of staff positions could be filled with MAREP staff, implicating a change in scope of current contracts based on the Terms of Reference for the new Programme. This strategy for filling the PMU staff positions could drastically reduce the preparation period for SAEP, benefitting from the learning process generated by MAREP's implementation. It would also address one of the main obstacles for attaining targets in due time. The PMU will include two new positions that were not included in the MAREP PMU, a procurement officer and an Information Technology (IT)

officer. The first one is required to allow for separating the recording from the procurement tasks, as recommended by IFAD financial guidelines and best practices; the IT officer is required to improve the flow of communication with the MoF in St George's. The SAEP will only pay half of the salary of the IT officer, since this officer will not be allocated full time to the Programme, only on an ad-hoc basis to solve the issues arising in day-to-day operations ensuring the flow of work. He/she will be selected in coordination with the IT Department of the MoF.

- 7. The SAEP will establish a Programme Steering Committee (PSC) where all stakeholders will be represented, including: a representative of the MoF that will chair the PSC; two beneficiary representatives, representing youth, female and male beneficiaries; private sector representatives such as the National Hotel and Tourism Association (NHTA) and the Grenada Chamber of Industry and Commerce (GCIC); and, public sector institutions such as the the Ministry of Youth, Sports and Religious Affairs (MoY), the Gender Department of the Ministry of Social Development and Housing and a representative of the Department of the Environment of the Ministry of Education, currently acting as Secretariat of the National Climate Change Committee (NCCC). The PSC will have an overall guidance role, establishing the main strategies and approving the Programme Operations Manual, the agreements and contracts with service providers, the Annual Work Plan and Budget (AWPB), the M&E reports and other reports submitted by the PMU for adequate supervision and quidance. Main implementing partners and service providers, such as the Grenada Investment Development Corporation (GIDC), the Ministry of Agriculture (MoA), the Ministry of Works (MoW), the Grenada National Training Agency (NTA), would be invited to participate in the PSC meetings to allow for an additional level of coordination and networking among stakeholders. These institutions would be excluded from decisions; their participation is intended to provide more insight to the PSC on the progress of implementation.
- 8. The PSC will be chaired by the MoF and will be convened at least twice a year to discuss in depth the findings of the M&E progress reports and the proposed working plan. Only beneficiaries will receive an stipend for attending meetings. The PSC could establish sub-committees in order to increase efficiency and operational capacity, these sub-committees should include at least the MoF representative (chair), 2 beneficiaries and 2 representatives of the private sector and 2 representatives of public sector institutions.
- 9. Technical support will be provided through specialized service providers. In the case of Grenada, most of the support services required by SAEP are provided by the public sector. The MAREP worked with the Grenada Investment Development Corporation (GIDC), the NTA and the MoA as main institutional partners. The contractual arrangements were established in Memoranda of Understanding that established the basic responsibilities of the parties. The Annual Work Plan and Budget was prepared by the MAREP PMU with little or no participation of implementing partners, which caused many difficulties and disconnections during implementation and long delays for beneficiaries. The Programme will build on the lessons learnt by MAREP, regarding the contractual arrangements with these institutions, addressing the issues that may cause delays in the delivery of services to beneficiaries.

C. Main implementing partners

a. Entrepreneurship and Business Development Component (EBD)

- 10. The EBD component will be implemented through contractual arrangements with the GIDC for business development services and with NTA, the New Life Organization (NEWLO) and other training service providers for vocational skills training.
- 11. **Vocational Skills Training (VST)**. The T.A. Marryshow Community College (TAMCC) is a national tertiary education institution in Grenada. The College has schools of agriculture, technical and vocational education, applied arts and technology, continuing education, and a teachers' college. TAMCC has a strong outreach programme with schools in St. George, but also in rural St. Patrick, St. Andrew, and Carriacou. The New Life Organization (NEWLO) was established in 1984 and provides

skill training opportunities to disadvantaged young people between the ages of 15–24, mainly from rural areas. MAREP has positive experiences in working with and through both institutions.

- 12. The Grenada Council for Technical and Vocational Education and Training (GCTVET) Act of 2009 established the Grenada National Training Agency (NTA) and the Council. Under the Act, (i) the GCTVET was vested with the responsibility for providing guidance and supervision to the NTA and to advise the Minister of Education on TVET, and (ii) the NTA has responsibility for overseeing the development and delivery of TVET in Grenada and is accountable to the Council.
- 13. The Agency spearheads the introduction and management of Caribbean Vocational Qualifications (CVQs) in Grenada. CVQs are awarded to candidates that demonstrate competence up to the Regional Occupational Standards. There are different paths for accessing CVQs: a person can obtain a CVQ at his/her job through the workplace competence certification route; a person can also obtain a CVQ through training providers, such as schools and technical institutes or through community-based programmes that have successfully used workplace activities to the satisfaction of the NTA Registration and Approval System. The NTA promotes Prior Learning Assessment and Recognition (PLAR), which recognizes an individual's acquired skills and knowledge no matter how, when or where the learning occurred. The person's skills and knowledge are assessed against approved occupational standards. Full or partial qualification can be achieved. Where necessary, further training in specific areas are identified and addressed. The CVQs apply whenever a standard has been developed and approved at the Caribbean level. There are jobs with high demand on the market without an available standard approved, i.e., cruise ship services, which is a training provided by MAREP.
- 14. Under the EBD component the Programme will develop MoUs with the main training service providers (e.g. TAMCC, NEWLO, and other private service providers) for the Vocational Skills Training activities. The training will include Life Skills training, as has been standard in MAREP and reported as highly beneficial by trainers and trainees. The new modules on nutrition and nutritional habits to be introduced will be developed by consultants under the guidance of the Food and Nutrition Council.
- 15. The MAREP experience shows that it is possible to make contractual arrangements directly with service providers for courses that provide training in areas that have good prospects for job placement, but do not lead to certification by NTA due to lack of standards. The PSC may identify these potential demands in the market and recommend the PMU to enter into such arrangements, when necessary and/or of interest. The MoUs with the training service provider will establish the responsibility of the training service provider to select beneficiaries according to the Programme's targeting criteria. Applicants for VST will fill a form with personal data and household data that will be used to verify the application of the targeting criteria and as a baseline survey to measure Programme's impact on beneficiaries. The MoUs will also establish minimum retention rates that the trainer commits to attain; the final 20% payment will be subject to the attainment of targets. This approach is currently applied by the NTA.
- 16. The POM will include the selection criteria for VST to be applied by implementing partners and/or service providers, as well as the expenses covered by the SAEP, the amounts and procedures for disbursement. Following MAREP's lessons learned and best practices, the cash disbursement for trainees will be implemented on a reimbursement basis. Disbursement through bank accounts should be promoted, since opening a bank account becomes a first step in the process of becoming employed and a learning practice for trainees. The service providers will report to the PMU and the PMU will disburse funds in tranches according to attendance of trainees and attainment of targets agreed in the contractual arrangements. The PMU M&E system will monitor through visits and random inspections the application of targeting criteria and quality standards.
- 17. **Business development services**. The Grenada Investment Development Corporation (GIDC) was created by the GoF in 1985 as a statutory body to stimulate, facilitate and encourage the establishment and development of industry. GIDC has since evolved from mainly granting concessions to being an economic development corporation. The core activities include Investment

Promotion, Investment Facilitation and Business Support Services. The GIDC also owns three Business Parks, renting facilities to businesses ranging from manufacturing to Business Process Outsourcing (BPO). In 2016, with oversight of the Board of Directors, GIDC underwent a complete reform based on the results of intensive specialist audits and evaluation of its operations, its mandate, and its human capital. Part of the changes are geared to develop its human capital capabilities and improving the workplace to function effectively through the adoption of best practices.

- 18. As part of the reform, the Business Development Centre (BDC) is headed by a vice-president reporting to the Chief Executive Officer and the Board of Directors. This unit has its own mission and objectives, operational plan, budget, leadership and identity brand. Its main area of responsibility is entrepreneurship, business development, technical assistance, training, export readiness, start-ups, upgrade and expansion of existing enterprises and the creation of an enabling environment.
- 19. The BDC was responsible for implementing the Caribbean Youth Empowerment Programme (CYPE) financed by the Youth Development Foundation in 2012-2013. The objective of the Programme was to offer marginalized young people in Grenada a holistic way of securing work and regaining hope. The programme targeted youth that had dropped out of school and came from the poorest parts of the country, including young single mothers as well as youth at risk of juvenile delinquency. The Programme offered market driven technical, vocational and life skills plus entrepreneurship training and career guidance. The targets were met and surpassed: 503 youth applied (the set target was 250) after a strong communication strategy was designed and implemented; 146 were enrolled after a careful selection process that included literacy and numeracy exams and interviews conducted by a panel where different institutions participated (the GIDC, NEWLO, GCIC, MoY and the Grenada Development Bank GDB). Participants received a series of basic courses remedial English and Mathematics, Life Skills, Information and Communication Technology (ICT) that enabled them to take full advantage of the training in entrepreneurship and vocational skills.
- 20. The staff of GIDC was trained in St. Lucia on the Competency Based Economies through the Formation of Enterprises (CEFE) methodology, which is designed to evoke enterprising behavior and competence in a wide variety of situations (see Appendix 4). It presents a comprehensive suite of learning tools with the aim of developing and enforcing the management and personal skills of entrepreneurs in the context of revenue increase, opening of new job posts and substantial economic development. This methodology was developed by the German Ministry of the Economy and has been spread out in more than 130 countries. It has been assessed by participants as a useful tool for developing entrepreneurial skills, for personal development and for developing a business idea.
- 21. The programme surpassed its targets regarding training: 136 graduated and only 10 dropped out. In the limited time span the CYEP was implemented, 44 youth started a business, but only 4 got loans approved from the Youth Small Business Fund managed by the GDB and established by the MoY47. The implementation of the Programme originated a series of valuable lessons learnt for GIDC: the training methodology and approaches applied contributed to hold the interest in training and to reduce the number of drop-outs; the model for networking and partnering with recognised and financially sound institutions (whose objectives and mandate were aligned with that of the project to deliver training and business support services to youth interested in starting their business) was also successful to provide a comprehensive support package. The final evaluation of the CYEP in Grenada mentions that achieving gender equity was a challenge, since only 38% of applicants were male.
- 22. The EDB component will implement the Entrepreneurship training and the business support services to youth start-ups and adult on-going enterprises (those that have been active for approximately three years and require technical support for becoming sustainable) through a Memorandum of Understanding (MoU) with GIDC. The SAEP will support GIDC to have field

⁴⁷ This fund is non-operative and under review by the GDB due to its high delinquency rates.

presence in rural areas, thus increasing coverage of business development services among the rural population refurbishing the Seamoon Industrial Park facilities in St Andrews to establish a fully equipped training centre. GIDC will commit to absorb any additional staff recruited for providing business development services to the target population to ensure sustainability of support after project completion. The Memorandum will identify concrete outputs related to training and business development activities with its corresponding budget, targets and performance indicators. Overall, the training will have minimum retention and approval rates that GIDC will commit to attain; the business development services performance will be linked to the percentage of business plans approved for financing, either within the Programme's financing facilities or by the financial sector. Stipulations in the MoU will link the final 20% payment in each output to the attainment of the agreed targets.

- 23. The selection of candidates for the Youth Start-up Business facility will be conducted through screening criteria established by the SAEP Operations Manual and applied by GIDC, with a selection panel composed of the Project Manager, GIDC, a representative of the training agencies (NEWLO or T.A. Marrishow Community College, TAMCC), the MoY, and a representative of the private sector (the CU, GCIC or the NHTA). Applicants for the business development services will fill a form with personal data and household data that will be used to verify the application of targeting criteria and as a baseline survey to measure Programme's impact on beneficiaries.
- 24. **Grant financing for youth start-up businesses**. The selection of youth start-up business initiatives for grant financing will be conducted by an ad-hoc committee established by the PSC and GIDC. This Business Grant committee will be composed of the SAEP Programme Manager; two representatives of the financial sector, one from the Credit Unions and one from the Grenada Development Bank (GDB), one representative of the Marketing and National Importing Board (MNIB) and one representative of the Grenada Hotel and Tourism Association (GHTA). The GIDC will support the committee as the technical secretariat, with no right to vote. The Committee would meet as often as required and would decisions if 3 members are present. The Programme could hire specialized consultancies at request of the Committee, if required to further assess a proposal.
- 25. "First Push" Grants will be available for youth that develop a business idea and have a satisfactory performance in the Entrepreneurial Training. Larger Business grants will be available for youth that have approved the entrepreneurship training, have tried the business concept with the First Push and have developed a full business plan for their proposal. In both cases the selection of proposals for financing will be based on competitive processes. The GIDC and the Programme will establish specific deadlines every year for receiving concept notes or business plans from participants. Detailed eligibility criteria and procedures for accessing the grants will be established in a specific section of the Programme Operations Manual (POM) (see Appendix 11). The grant disbursements will be managed by the PMU, based on decisions of the Business Selection committee and on the progress reports on the use of funds submitted by GIDC. All grants will be disbursed in tranches and payments will be done directly to suppliers, whenever possible.
- 26. The selection of proposals will consist of a competitive process. The Business Grant proposals will be ranked according to a set of criteria relating to: a) the capacity to upscale and become sustainable according to market potential; and, b) the commitment and achievement of the trainee in the training process. The Selection Committee could waive the beneficiary contribution for the youngest entrepreneurs -17 to 21 years old- and for the most vulnerable members of the target group (unemployed males at risk and unemployed single mothers).
- 27. The type of expenses financed may include small investments and purchase of goods and services, such as –inter alia- small equipment, transportation, printing services, inputs and raw material, certifications and permissions, laboratory analysis, temporary labour, brochures and printing material, packaging and labelling. The Programme will not finance land purchase or lease, refinancing or payment of debts, house improvements not related to the business idea, activities that might harm the environment such as farming on steep slopes, deforestation (slash and burn), overuse of chemicals, brick or charcoal manufacturing, etc.

- 28. Procedures for disbursement should be speedy enough to avoid frustrations, while ensuring transparency and accountability. Payments would be done directly by the Programme Management Unit (PMU) to suppliers, whenever possible.
- 29. Procurement will be conducted by the beneficiaries with supervision and support from GIDC, following simple rules and procedures ensuring transparency and accountability, as well as considering the adequacy of the amounts involved. This should be regarded as a step in the capacity building of the potential entrepreneur.

b. Climate Smart Agriculture Component

- 30. **Extension services**. The Ministry of Agriculture (MoA) is the line Ministry responsible for providing a wide range of support services to farmers in the island of Grenada. The Ministry of Carriacou and Petit Martinique Affairs (MCPMA) is responsible for support services in the islands under its responsibility. The MoA has a wide range of activities and projects that address the main needs and constraints of farmers. It provides technical assistance services for livestock, fisheries, crop and forestry; it keeps the records on land use and facilitates access to land; it controls the use of chemicals and has specialized laboratories for control and research.
- 31. In the recently developed National Agriculture Plan (NAP) 2015-2030, the MoA presents the vision of a globally competitive agricultural sector that contributes to economic growth, food and nutrition security, poverty alleviation and environmental conservation. It identifies five strategic focus areas: (i) increasing agricultural production and exports, strengthening the linkage between agriculture and tourism; (ii) enhancing food security by reducing the food import bill; (iii) strengthening resilience and improving preparedness to address CC impacts and extreme events; (iv) investment in infrastructure and institutional and human resource capacity development; and (v) fostering partnerships with regional counterparts and development partners. The NAP identifies priority commodities and classifies them according to their utilization for increasing food security, exports, supply of the tourism industry or import substitution. Most of the crops and livestock products identified are produced by the smallholder sector, such as fruit trees (nutmeg, cocoa, mangoes, breadfruit and soursop), vegetables (hot peppers, tomatoes, cabbages and callaloo), roots and tubers (dasheen, sweet potatoes, cassava), poultry, pigs and goats.
- 32. The MoA has a number of specific activities under implementation of interest for the SAEP. It launched a series of actions since 2013 in the framework of the Zero Hunger initiative, to promote agricultural production and improvement of nutritional habits, such as the campaign "Buy local, Eat local" designed to sensitize consumers on the health benefits of purchasing local fresh products. This campaign is aligned with the main priorities of the NAP, increasing domestic production and reducing the food import bill. The MoA has also joined a task force with the Royal Grenada Police Force (RGPF) for addressing praedial larceny. The task force gathers statistics, convenes meetings with farmers to raise awareness, providing available data and proposing measures to reduce incidents. The RGPF conducts random checks on ports and markets to verify the source of produce. Lack of human resources is mentioned as the main cause for not making arrests. The problem cannot be solved without a strong involvement of farmers and market vendors, organizing local watches or identifying sellers with no linkages to producers.
- 33. At present the MoA is about to start two important projects, one relating to access to land and the other to the development of value chains. The first project will be executed by the Food and Agriculture Organization (FAO) and will establish a pilot Land Bank within the Land Use Division of the MoA, linked to the Land Management System Information and based on lease mechanisms. It will provide training and a proposal for a financing mechanism to ensure sustainability. This project will address a major constraint for youth interested in agriculture and will build synergies with the SAEP.
- 34. Another important project coming on stream is the "OECS Regional Agriculture Competitiveness Project" for Grenada and St Vincent and the Grenadines financed by the World Bank. It aims at promoting linkages between selected farmers and fishermen FF on one hand, and

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aggregators and agro-processors - AA - (producers' organizations, cooperatives, wholesalers, traders, lead farmers and industrial agro-processors) on the other hand, developing strategic alliances to boost local production and enhance market access and sales for individual or organized farmers or fishermen. The project has three components: the first one will promote participation of all stakeholders, will identify business opportunities and provide support for the preparation of business plans for potential beneficiaries through an arrangement with FAO. The second component will support the implementation of business plans through matching grants of viable business plans: the financing will include training, technical assistance and investments. The maximum amounts per initiative is set at USD 120,000 for AA and USD 8,000 for FF, with a maximum of USD 120,000 for all FF in a single project. The third component aims at capacity building, providing training to extension officers, facilitating access to trade fairs and study tours, conducting technical studies and implementing a voucher programme that will improve quality and keep control over inputs financed under the grant component. The MoA will create a small unit reporting directly to the Permanent Secretary for coordinating the activities within the Ministry, while the responsibility of financial management, procurement and safeguards will be vested in the existing Project Coordinating Unit located in the Ministry of Finance.

- 35. The MoA also has a focus on youth: the 4H organization at the MOA caters for 68 4H clubs at primary and secondary schools, involving over 2,000 youth (80% in the age range of 7-13 years old and 20% between 14-17 years old) in agriculture related activities (nurseries, school gardens, poultry rearing, water harvesting, composting), educational, and cultural activities. Students and teachers work on a voluntary basis: the 4H is active in Grenada and considered an interesting opportunity to change young people's image of agriculture and involve them in CC initiatives.
- 36. The Structural Adjustment Programme (or Home Grown Programme HGP) applied since 2012 reduced significantly the resources for the MoA services. The "3 for 10" rule, meaning that only 3 out of 10 vacancies would be filled in the public sector, was part of the commitments adopted by the GoG. As a result, the replacements for retiring officers were drastically reduced and the capacity of the services to cover the target population compromised. The HGP has successfully attained its goals, yet the GoG is committed to reduce the number of public servants in the coming years.
- 37. At present, the MoA has approximately 17 extension officers, 12 of them retiring in the next two years. There are 45 young Extension Assistants (EA) working under the supervision of these experienced officers, not ready to replace them in terms of qualifications and field experience. The impact of such a decrease in experienced staff is immense in terms of the coverage and quality of extension services. The MoA is planning on a succession plan that will allow to replace these officers in the next few years, that is, along the implementation of SAEP.
- 38. Starting in 2017, the MoA will implement training to 15 EAs with FAO support to take them to an associate degree. This training is full time and these assistants will be ready to lead the extension services after three years. In the meantime, the tasks and responsibilities at field level will fall into the other EAs as the experienced officers retire, but EAs are not ready to take these additional duties without proper training and guidance. The CSA component will contribute to address this gap at the district level in the short term by supporting the EAs with training and technical support. A group of approximately 10-12 trained EAs would be seconded to the Programme to deliver extension services to the target population. The assistants would be assigned to SAEP on a yearly basis, renewable depending on performance.
- 39. The pool of EA would report to a Coordinator, with recognized expertise and experience in extension, responsible for the supervision and guidance of the EAs. This position would have to be recruited on a competitive basis at the beginning of SAEP implementation. The Coordinator will work at the PMU office in Sauteurs and will be the link between the Programme and the MoA. The Programme would also hire a number of consultants (not necessarily on a full-time basis, basically hired through retain contracts) to provide technical support and on the job training to the EAs. These consultants will be selected and recruited jointly by the Programme and the MoA and will have

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expertise in the main farming activities of the small farmers (e.g. small ruminants, crops, fisheries) and in the CSA practices to be promoted (e.g. irrigation/water management).

- 40. The MoA has assessed different public or private extension models and has taken the decision that the public sector approach is the most adequate for extension services in Grenada. The SAEP will promote exploring Public-Private Partnerships (PPP) with farmer organizations. These pilot experiences consist of assigning or attaching the selected EAs to farmers' organizations. The Programme would request that these organizations be inclusive of rural poor and provide a quality service to the SAEP target population. The Programme will hence support the transition period for the extension services by promoting these innovative models that could be scaled up and replicated. The farmers' organization would report to SAEP on the quality and regularity of services. Extension workers have an activity log that records all field activities, which allows monitoring their focus on rural poor by the PMU.
- The PMU would sign a MoU with the MoA for ensuring quality technical assistance to the target population and, whenever possible, exploring innovative ways of delivering the services. The stipulations of the MoU will state that: the staff financed by the SAEP will be focused on poor farmers; the selected farmers' organizations for the pilot experiences would be agreed upon between the SAEP and the MoA; and, that the MoA commits to continue delivering services to the target population after programme completion by absorbing the trained staff. The MoU between the Programme and the MoA would establish a work plan leading to: a) organizing training for the EAs. young professionals of the private sector and farmers, focusing on CC and CSA practices; b) selecting among EA that have successfully finished the training -at least 10- to be seconded to the Programme to provide extension services to the target population as required by the Programme; c) providing the selected EAs with equipment, budget support for mobilization and a complement to the salary to cater for the added responsibilities, financed by the Programme; d) organizing demonstrations farms at schools, farm organizations and individual farms, as required; e) organizing the training and dissemination activities on CC awareness, CSA practices and nutrition, involving the extension services and the 4H department. The MoU will establish annual targets for extension services, training, demonstration plots and dissemination activities.
- 42. The training to EAs would be contracted to specialized service providers with recognized expertise in the Caribbean region. The contents of the training and the selection of trainers will be agreed between the SAEP and the MoA, in consultation with the Department of the Environment. There are specialized institutions in the Caribbean with expertise in CC and adaptation, such as the the Caribbean Community CC Centre (CCCCC), the International Centre for Tropical Agriculture (CIAT), the Caribbean Agricultural Research and Development Institute (CARDI). It is expected that the trainees will also receive training on agricultural technology and extension services approaches, business development, marketing and ICT technologies applied to extension services. This training should be procured by the Programme in close consultation with the MoA. There are several institutions that could provide this type of support at the regional level, including the Institute for Cooperation for Agriculture (IICA) and the Food and Agriculture Organization (FAO). At the local level, the GIDC could provide training on marketing and business development.
- 43. SAEP training to EAs will also include nutritional concepts and approaches to nutrition-sensitive value chains. This module could be developed by consultants procured by the Programme, in close consultation with the Food and Nutrition Council.
- 44. The MoA would establish a Unit reporting directly to the Permanent Secretary (PS) consisting of a coordinator and of the selected young EAs deployed at the district level. The Programme will provide the necessary equipment except for vehicles to operate effectively (ICT equipment, soil testers, etc.). The number of crop, livestock, forestry and fisheries officers to be assigned per district/organization will be agreed upon between the SAEP and the MoA according to the needs of the target population.

- 45. The PMU will sign a similar MoU with the Ministry of Carriacou and Petit Martinique Affairs (MCPMA), which is in charge of the provision of extension services on the two smaller islands. In this case, the Programme would hire an extension officer to provide technical assistance to the target population and the MCPMA would commit to absorb this staff after a three year period to continue supporting SAEP's farmers. The extension staff of the MCPMA would participate in all technical trainings provided by the Programme to EAs.
- 46. **Grant financing for CSA initiatives**. Initiatives for adopting CSA practices will be developed by eligible beneficiaries with the support of the SAEP extension services. The MoA and the PMU will agree on simple formats to present the proposals, adequate for the educational levels of the target population. The PMU and the MoA will jointly make calls for proposals on an annual basis among farmers receiving extension services from SAEP. The Programme would set up a CSA Grant Selection Committee for grant approval, composed of the SAEP Programme Manager; a representative of the Department of the Environment, an expert on CSA practices from the MoA, and representatives of the MNIB and the GDB to bring in expertise in business assessment. The Programme could hire consultants to assess proposals and score them according to the criteria established for the call for proposals. The SAEP will build upon the formats and scoring methodologies applied by the Department of the Environment.
- 47. Proposals will be ranked according to a set of criteria relating to: a) the severity of the impact of CC on production and income; and, b) the socio-economic condition of the beneficiary, that is, the contribution to improve the livelihood of the most vulnerable sectors of the target population, either by improving income or nutrition. The specific geographic and sectoral priorities for each call will be established in consultation with the Environment Department and the MoA, to comply with the overall guidelines and best practices for addressing CC impact in Grenada, and the targeting strategy of the Programme.
- 48. The selected proposals would be sent to the National Climate Change Committee for clearance and coordination with other funding available for CC adaptation. Grenada has re-established its National Climate Change Committee (NCCC), which provides overall guidance and support on CC activities in the country. The Committee consists of 13 members, who are assigned to different working groups for which they are responsible. Within these working groups, members of civil society, private sector, academia and government officials are designated. Meetings of the working groups are organized by the respective NCCC working group member(s). The Secretariat, via the Chair, reports monthly to the Senior Management Board, and quarterly to Cabinet. The NCCC Secretariat support is provided by the Climate Change Focal Point within the Environment Division.
- 49. The Integrated Climate Change Adaptation Strategies (ICCAS) Project financed by the German Cooperation has strengthened the Committee to perform its responsibilities and has presented its projects to this Committee for approving initiatives for grant financing. The Committee is already established and reporting directly to Cabinet and will allow coordinating with other projects addressing CC and promoting CSA adoption, ensuring synergies and avoiding duplication and inefficient use of resources.
- 50. The POM will establish the detailed grant selection criteria and procedures (see Appendix 11). Procurement will be conducted by the beneficiaries with supervision and support from the MoA, following simple rules and procedures ensuring transparency and accountability, as well as adequacy of the amounts involved. There will be no cash disbursements to farmers or groups; payments will be done by the PMU directly to suppliers, based on the decisions of the CSA Grant Selection Committee and the reports of the corresponding EA. This will contribute to control the use of chemicals and the quality standards of inputs and equipment financed.
- 51. **Rural roads**. The rehabilitation of roads and drainage systems will be implemented through an MoU with the Ministry of Works and will be financed by the CDB. The designs will be aligned with the Caribbean standards to ensure climate-proof works. There will be no new roads or infrastructure to be financed, meaning that there will be no need for additional environmental studies. The selection of

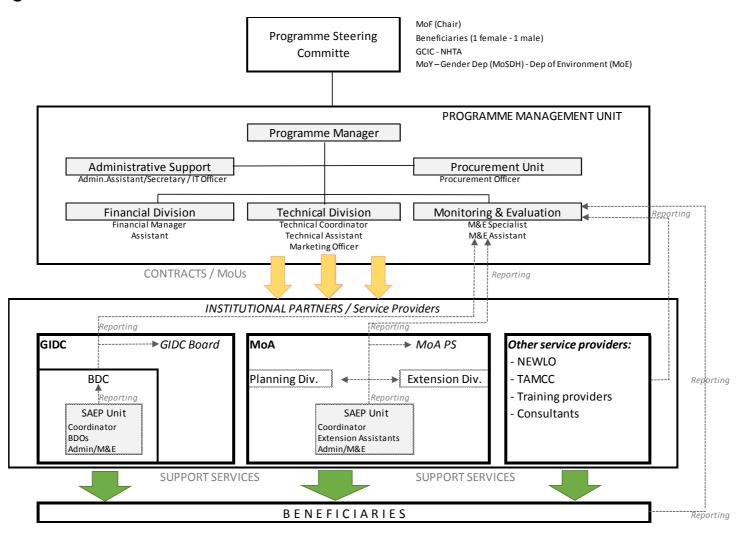
roads would be coordinated with the other activities promoted by SAEP (especially under the CSA component, i.e. with the MoA, EAs and the SAEP PMU). In terms of the Environmental and Social Management Plan, the risk of sand mining and the adoption of climate proof maintenance methods will have to be monitored. The MoW has in place environmental guidelines that ensure close monitoring during bidding processes and implementation of works.

D. Approach to Contracts and Memoranda of Understanding

- 52. A key component of the implementation strategy is to have effective and efficient contractual arrangements with implementing partners. MAREP's experience shows that service providers need to be empowered and own the Programme's targets; the activities financed by the Programme have to be explicitly mentioned in the institution's corporate plan and staff should report on progress to Boards and Permanent Secretaries. Another important lesson learnt relates to planning: implementing partners should be responsible for planning the activities to attain targets, having an intense participation in the preparation of the Programme's Annual Work Plan and Budget. The MoUs will establish the objectives, the targets, activities and budget, the responsibilities of the parties, defining the eligibility criteria for beneficiaries and the type of services to be provided. On an annual basis, the PMU and service providers will make a joint review of the previous period and agree on targets, activities and budget for the following cycle to be included in the AWPB.
- 53. The PMU of SAEP would be composed of 12 staff: the Programme Manager, Programme Accountant, Accounts Clerk, Administrative Officer, Procurement Officer, Technical Coordinator, Technical Assistant, M&E Specialist, M&E Officer, Driver, Cleaner and IT Officer. The latter would be a technician hired for the IT Department of the MoF and would be only partially paid by the SAEP. The recruitment of this IT Officer is considered crucial for solving the communication issues with the MoF Headquarters and the understanding is that this staff would dedicate at least one day a week to address SAEP's specific problems. Most of the positions under SAEP will have a similar responsibility as under MAREP and could be filled with experienced MAREP staff. The PMU positions that would be recruited with competitive processes at the beginning of the implementation period would include the Technical Coordinator, the Procurement Officer, and the ICT Officer.
- 54. The PMU of SAEP would be located in Sauteurs (at the premises of MAREP), yet an office space in St Georges would be made available by the MoF to hold meetings and be able to carry on working between meetings.
- 55. Contracts and MoUs will be signed for three years, allowing for reviewing the implementation arrangements at the Mid Term Review. Whenever possible, MoUs will have built in indicators to measure progress, so that payments would be based on performance. This approach to performance based MoUs is not new in Grenada. NTA has started to include stipulations that link the final 20% payment to the attainment of a minimum retention rate of attendants (or maximum drop-out rates). This approach could be applied for the implementation of VST with training providers and with GIDC for Entrepreneurship Training.

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Annex 1: Organizational Chart



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Annex 2: TORs of key programme staff

TORS: Programme Manager

Objective

The Programme Manager (PM) will be ultimately responsible for: the efficient and effective delivery on the Programme objectives and targets in a comprehensive and sustainable manner. In addition the PM will provide effective and efficient leadership to Programme Management Unit (PMU) staff, coordinating activities of rural service providers (RSPs) and supervising service providers contracted under the Programme.

Reporting

The PM will report to the Programme Steering Committee (PSC).

Qualification and Experience

A university degree in an area related to the main components of the Programme or related to rural development (business, economics, agriculture, social sciences or a related field).

At least five years of proven experience in:

- Projects financed by external donors at a management position;
- Leading technical teams and managing human resources;
- Developing, negotiating and managing contracts for consultancies and technical services;
- Liaising with public and private sector institutions at the management level;
- Planning and reporting based on targets;
- Working in rural areas, particularly rural poor.

Desirable Skills and Personal Qualities

- Experience with IFAD, WB or CDB financed projects;
- A solid understanding of rural development, with a focus on business development and entrepreneurship;
- Experience and/or disposed to work with vulnerable youth:
- Recognized as a confident leader and an excellent communicator;
- Capacity for personnel and team management (including mediation and conflict resolution);
- The willingness to work outside of formal working hours and days;
- Willing to promote and conduct regular meetings with all stakeholders.

Position Responsibilities

The Programme Manager specific responsibilities include:

- a) Preparation of all strategic Programme planning, management and related documents that are important to overall efficient and effective Programme implementation, particularly the Programme Operations Manual to be presented for approval to the Programme Steering Committee (PSC).
- b) Establish and maintain on behalf of the Programme excellent relations with the International Fund for Agricultural Development (IFAD) and the Caribbean Development Bank (CDB) and all direct Programme partners (Ministry of Finance (MoF), Ministry of Agriculture (MoA), Grenada National Training Agency (NTA), Grenada Industrial Development Corporation (GIDC), Minitry of Work (MoW), National Climate Change Committee (NCCC), others) and with other agencies sharing the objectives of the Programme so that synergies can be maximized.
- Represent the Programme in forums where the Programme is participating or its results are being featured.

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- d) Participate in the selection of the PMU staff.
- e) Oversee all Programme' contracting, delegating where appropriate to PMU staff.
- f) Monitor the performance of staff of the PMU and service providers.
- g) Lead the development of a results oriented-Annual Work Plans and Budgets (AWPBs) for the Programme in close collaboration with the PMU and implementing partners and present the AWPB to the PSC annually, ensuring that an approved AWPB is sent to IFAD and CDB in a timely manner as stated in the Programme Operations Manual.
- h) Monitor implementation of the AWPB, making adjustments as necessary; and work closely with the Monitoring & Evaluation (M&E) Specialist on setting benchmarks and gender/age disaggregated indicators assessing for Programme delivery and impacts.
- i) Ensure the implementation of the Programme according to the implementation strategy as foreseen in the Final Design documents and ensure gender equity is included and cross cutting in the Programme Monitoring and Evaluation as well as in the annual planning.
- j) Develop, maintain and update Programme Operational Manuals informing the legal and other regulations governing the implementation of the Programme.
- k) Establish networking with other agencies and stakeholders to ensure implementation of the activities as detailed in the AWPB.
- I) Execute all procurement in accordance with IFAD/CDB Loan Agreements.
- m) Manage the budget of the programme and ensure that all expenditures are in keeping with the Programme objectives and activities.
- n) Finalize the drafting of all Programme reports, presenting the documents to the PSC when required.
- o) Forge linkages with other national and regional programmes to ensure complementary of effort and involvement in rural development in Grenada.
- p) Collaborate with private sector initiatives.

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TORS: Financial Manager

Objective

The Financial Manager (FM) will be responsible for: managing and coordinating the overall financial management activities of the Programme in strict compliance with the requirements of the Financing Agreements between the Government of Grenada and IFAD and CDB respectively; the Programmer Operations Manual (POM) and appropriate financial management best practice and international accounting standards. He/she will provide all possible support to the Programme Management Unit (PMU) of which he/she is a member, in order to achieve successful implementation.

Reporting

The FM will report to the Programme Manager (PM) and will be responsible to the PM and MoF for the proper performance of the duties. The Financial Manager shall report to the Programme Manager on all matters related to Financial Management of Programme implementation, ensure compliance with the FM requirements of *Article IX of IFAD's General Conditions for Agricultural Development Financing (2014) (GC)* and as per these TOR, endorse and submit all reports to the Programme Manager, the PSC, MoF, IFAD and CDB as required.

Qualification and Experience

A university degree in Accounting.

At least three years of proven experience in:

- Projects financed by external donors at a management position:
- Preparing balance sheets according to Government of Grenada guidelines and international standards;
- Preparing withdrawal applications for external funding agencies;
- Liaising with the Ministry of Finance for replenishment of project accounts from external funding and for making payments to suppliers, service providers and staff;
- Planning and presenting financial needs according to Government of Grenada budgetary cycle and procedures based on activities planned;
- Working in rural development projects, particularly involving rural organizations and groups.

Desirable Skills and Personal Qualities

- Experience with IFAD, WB or CDB financed projects;
- A solid understanding of GOG accounting practices and systems;
- A practical understanding of external source financing procedures;
- Leadership skills and ability to operate effectively in a team and contributing positively to working relationships;
- The willingness to work outside of formal working hours and days;
- Willingness to link with service providers to verify the use of standard accounting practices in reporting.

Position Responsibilities

The Financial Manager's specific responsibilities include:

- Implement and update the financial management procedures applying to programme receipts and payments, and ensure that the funds are used for the purposes intended, in an open and transparent manner; ensure that the Programme Manager (PM) is aware of risks arising from any weaknesses in the internal control system, and take steps to minimize the risks.
- Ensure that all financial documents relating to the programme (expenses, and all other ledger transactions, registers, Payroll records including benefits, contributions and tax deductions, invoices and all vouchers) are retained by the PMU and are made available for inspection by MoF, external auditors and joint IFAD/CDB supervision mission teams.

- The implementation and maintenance of the MoF accounting system and ensuring that the chart of accounts and reporting system thereof will provide information linkages between the Programme activities by category, component and funding source. This will require close liaison with the Projects Department of the MoF and training and configuration in MoF Reporting tools for both the budgeting and accounting/financial reporting tools. In the initial stage, until these reporting tools are configured for roll-out, ensuring that PMU Quick books system balances are in agreement and preparation of journal entries as required for reconciliation with MoF ledger entries for SAEP in the Single Treasury account.
- Managing and administering all payments for contracts, MOUs of Implementing Partners
 MOUs and grant beneficiary goods' proposed payments in accordance with the CDB and
 IFAD Guidelines, Grant Selection Committees, PSC deliberations and any other
 applicable national Guidelines.
- Maintenance and regular update of the following: Fixed Assets, Staff, Grant Beneficiary, MoU and Contract Registers. Conduct an inventory of Programme assets at quarterly invoices and ensure insurance coverage thereof.
- In close collaboration with the Monitoring and Evaluation Specialist, assists the Programme Manager with the preparation, monitoring, consolidation and review of the SAEP Annual Programme of Work (POW) Plan and Budget in, as follows:
 - (i) Provide training and guidance to Programme beneficiaries and Implementing partners for POW activity submissions and participate in the development and implementation of plans, and procedures for budget request submission activities to ensure that Programme objectives are achieved in compliance with SAEP strategy and that informed decisions are taken;
 - (ii) Consolidation of budget plans and activities after review for consistency; provide advice to the Programme manager on optimised use of resources;
 - (iii) Calculate the cost of services analyses; translating activity requirements into financial information for PSC review and guidance, identify the problematic areas and propose the actions to be taken to improve the cost-efficiency of the services, without affecting the quality;
 - (iv) Monitor and provide advice on advance financing to implementing partners, monitor and analyse activities undertaken by these in accordance with POW;
 - (v) Review and propose alternative financial solutions to the Programme Manager and PSC to facilitate the transparent and efficient allocation of resources for the activities of the Programme;
 - (vi) Prepare monthly projected liquidity flow statements, analyses and timely requests to MoF for projected counterpart funding due for expenditure financed by the Government;
 - (vii) Reconcile and review expense statements for Withdrawal Application requests to IFAD and CDB every quarter;
 - (viii) Review insurance coverage of assets during implementation/construction;
 - (ix) Review all payroll and relevant worksheets, payments to suppliers, utilities, contractors, Grant related payments, service providers and implementing partners prepared by the accounts clerk;
 - (x) Prepare interim and yearly financial statements for management, IFAD and CDB and liaise with the external auditors and internal audit department of MoF.
- The Financial Manager will supervise the Disbursement/Accounts clerk and organize appropriate training /career development plan /guidance to ensure successful attainment of tasks assigned.
- The incumbent is expected to visit programme areas periodically as part of monitoring of the activities.
- Perform any other Financial Management duties that may be assigned by the PM.

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Article IX – Financial Reporting and Information

Section 9.01. Financial Records

The Project parties shall maintain separate accounts and records in accordance with consistently maintained appropriate accounting practices adequate to reflect the operations, resources and expenditures related to the Project until the Financing Closing date, and shall retain such accounts and records for at least ten (10) years thereafter.

Section 9.02. Financial Records

The Borrower/Recipient shall deliver to the Fund detailed financial statements of the operations, resources and expenditures related to the Project for each Fiscal Year prepared in accordance with standards and procedures acceptable to the Fund and deliver such financial statements to the Fund within four (4) months of the end of each Fiscal Year.

Section 9.03. Audit of Accounts

The Borrower/Recipient shall:

- (a) each Fiscal Year, have the accounts relating to the Project audited in accordance with auditing standards acceptable to the Fund and the Fund's Guidelines on Projects Audits (for Borrowers' Use) by independent auditors acceptable to the Fund:
- (b) Within six (6) months of the end of each Fiscal Year, furnish to the Fund a certified copy of the audit Report. The Borrower/Recipient shall submit to the Fund the reply to the management letter of the auditors within one month of the receipt thereof;
- (c) If the Borrower/Recipient does not timely furnish any required audit report in satisfactory form and the Fund determines that the Borrower/Recipient is unlikely to do so within a reasonable period, the Fund may engage independent auditors of its choice to audit the accounts relating the Project. The Fund may finance the cost of such audits by withdrawal from the Loan and/or Grant Accounts.

Section 9.04. Other Financial Reports and Information

In addition to the reports and information required by the foregoing provisions of this Article:

The Borrower/Recipient and the Project Parties shall promptly furnish to the Fund such other reports and information as the Fund shall reasonably request on any financial matter relating to the Financing or the Project or any Project Party.

Appendix 5: Institutional aspects and implementation arrangements

TORS: Technical Coordinator

Objective

The Technical Coordinator (TC) will be responsible for: the efficient and effective delivery of support services to beneficiaries, coordinating activities of rural service providers (RSPs) and supervising service providers contracted under the Programme.

Reporting

The TC will report to the Programme Manager (PM).

Qualification and Experience

A university degree in agriculture or related to business and rural development (business, economics, social sciences or a related field).

At least three years of proven experience in:

- Development projects or environmental projects financed by external donors at a technical management position;
- Developing, negotiating and managing contracts for consultancies and technical services;
- Liaising with public and private sector institutions at the technical level;
- Planning and reporting based on targets;
- Working in rural areas, particularly rural organizations and groups.

Desirable Skills and Personal Qualities

- Experience with IFAD, WB or CDB financed projects;
- A solid understanding of rural development, business development, marketing and entrepreneurship;
- A solid understanding of CC issues and CSA practices;
- Experience and/or disposed to work with vulnerable youth;
- Knowledge of institutions linked to business and agricultural development, their responsibilities, approaches and practices;
- Leadership skills and ability to operate effectively in a team and contributing positively to working relationships;
- The willingness to work outside of formal working hours and days;
- Willingness to make on-site visits to beneficiaries and service providers on regular basis.

Position Responsibilities

The Technical Coordinator specific responsibilities include:

- Review the final design documents of the SAEP and prepare a proposal for the components' implementation operational eligibility criteria and procedures to be included in the Project Operations Manual.
- Conduct workshops, discussions and interchanges with the main implementing partners on the design of the Programme, the operational targeting criteria to be applied and the communication plan to be implemented to the target group, until reaching a detailed proposal for implementation.
- Preparation of draft Memoranda of Understanding (MoU) with the Grenada Investment Development Corporation (GIDC) for the implementation of the start-up business support to youth and business development services for new businesses based on the final design report and in close collaboration with the GIDC.
- Preparation of draft MoUs with the Grenada National Training Agency (NTA) and/or the New Life Organization (NEWLO) and/or TAMCC for the implementation of vocational skills training to youth based on the final design report and in close collaboration with the partners.
- Preparation of draft MoUs with the Ministry of Agriculture and Fisheries (MoA) and the Ministry of Carriacou and Petit Martinique (MCPM) for the implementation of the extension

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services to beneficiaries based on the final design report and in close collaboration with the partners.

- Plan, lead and coordinate, in close collaboration with the M&E Specialist, the Financial Manager and implementing partners, the preparation of the technical content of the Annual Work Plan and Budget (AWPB) for both components
- Coordinate the implementation of annual work programmes as agreed with partners.
- Conduct field visits to beneficiaries and implementing partners to discuss the progress in implementation, eventual problems and means to better achieve objectives and targets.
- Propose appropriate action, including the amendment of the MoUs, if deliverables and/or progress is less than agreed and expected.
- Prepare, in coordination with the Ministry of Agriculture and Fisheries (MoA) and the Ministry
 of Carriacou and Petit Martinique Affairs (MCPMA) and the Procurement Officer, the Terms of
 Reference (ToR) for the recruitment of staff,and consultants and procurement of goods and
 services for the implementation of the corresponding MoUs
- Prepare, in coordination with the MoA, the ToRs for the specialized regional training of extension officers in CC issues and CSA practices.
- Monitor performance and supervise the work of the Technical Assistant and the Marketing Officer.
- Coordinate with the GIDC and the MoA the release of calls for proposals for grant financing for each technical component, including the communication plan.
- Coordinate with the GIDC the establishment of selection committees for grant financing.
- · Coordinate with the MoA the establishment of the CSA Grant Selection Committee
- Coordinate with the CSA Grant Selection Committee the recruitment of specialized support for assessing/scoring CSA grant proposals
- Coordinate with the CSA Grant Selection Committee and the National Climate Change Committee (NCCC) the submission of approved proposals.
- Coordinate and ensure that all relevant information is presented to the selection committees for the grant financing.
- Coordinate and ensure that beneficiaries are informed on the status of their proposal and the results of the selection process.
- Coordinate with beneficiaries and implementing partners the procurement of goods and services for the implementation of initiatives financed by the Programme.
- Coordinate with the Financial Division, beneficiaries and implementing partners the flow of funds under the grant financing schemes, ensuring transparency and accountability.
- Coordinate with implementing partners and beneficiaries the flow of information to the M&E system regarding the implementation of both technical components.
- Prepare draft progress reports on the technical components as required by the M&E system.

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TORS: Technical Assistant

Objective

The Technical Assistant (TA) will be responsible for: supporting the Technical Coordinator in coordinating with all implementing partners for an efficient and effective delivery of support services to beneficiaries, liaising with beneficiaries and rural service providers (RSPs) and facilitating logistics and flow of information with service providers contracted under the Programme.

Reporting

The TA will report to the Technical Coordinator (TC).

Qualification and Experience

CSEC or bacherlor's degree in agriculture or social sciences.

At least three years of proven experience in:

- Development projects or environmental projects financed by external donors;
- Liaising with public and private sector institutions at an administrative and logistics level;
- Report writing;
- · Working in rural areas, particularly with rural organizations and groups.

Desirable Skills and Personal Qualities

- Experience with IFAD, WB or CDB financed projects;
- An understanding of rural development issues;
- Experience in working in rural areas and rural organizations;
- Experience and/or disposed to work with vulnerable youth;
- Ability to operate effectively in a team and contributing positively to working relationships;
- The willingness to work outside of formal working hours and days;
- Willingness to make on-site visits to beneficiaries and service providers on regular basis.

Position Responsibilities

The Technical Assistant specific responsibilities include:

- Support the TC in coordinating the meetings with rural organizations and implementing partners.
- Support the TC in coordinating logistics for the day-to-day agenda and for keeping all stakeholders informed on the progress of Programme activities.
- Support coordination with implementing partners for conducting communication strategies, implementation of activities as planned and flow of information to the M&E system.
- Support the coordination of workshops and meetings with implementing partners leading to the preparation and implementation of annual work programmes.
- Coordinate and attend field visits to beneficiaries and implementing partners to discuss the progress in implementation, eventual problems and means to better achieve objectives and targets.
- Follow up on information/documents requested / to be provided to stakeholders and any further action proposed.
- Request quotations and/or specifications to potential service providers of technical goods and services.
- Keep records of meetings with implementing partners.
- Support the TC for ensuring completeness and accuracy of the M&E system regarding the technical components of the Programme.
- Support the TC to coordinate and ensure that all relevant information is presented to the selection committees the grant financing.
- Support grant beneficiaries with procurement processes and documentation.
- Support the TC to coordinate and ensure that beneficiaries are informed on the status of their proposal and the results of the selection process.
- Support the TC to coordinate with beneficiaries and implementing partners the procurement of goods and services for the implementation of initiatives financed by the Programme.

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• Facilitate the flow of documentation between beneficiaries of the grant financing schemes, implementing partners and the Financial Division, ensuring transparency and accountability.

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TORS: Marketing Officer

Objective

The Marketing Officer (MO) will be responsible for: supporting the Programme Technical Coordinator and the Ministry of Agriculture (MoA) Programme Unit Coordinator in marketing issues, training extension workers and farmers in marketing concepts and strategies and developing/updating a database on market information to make available to beneficiaries and technical support staff.

Reporting

The MO will report to the Technical Coordinator (TC).

Qualification and Experience

A bachelor's degree in agriculture or social sciences.

At least three years of proven experience in:

- Development projects financed by external donors;
- Liaising with MNIB, supermarkets, restaurants, hotels and other market outlets for agricultural and non-agricultural products;
- Report writing;
- Working in rural areas, particularly with rural organizations and groups.

Desirable Skills and Personal Qualities

- Experience with IFAD, WB or CDB financed projects;
- An understanding of rural production and markets and agricultural market's dynamics;
- Experience in working in rural areas and rural organizations;
- Experience and/or disposed to work with vulnerable youth;
- Ability to operate effectively in a team and contributing positively to working relationships;
- The willingness to work outside of formal working hours and days;
- Willingness to make on-site visits to beneficiaries and service providers on regular basis.

Position Responsibilities

The Marketing Assistant specific responsibilities include:

- Support the TC in developing a database on purchasers, quantities, prices, requirements and payment schedule for main agricultural and non-agricultural products.
- Conduct regular market surveys to update the database.
- Plan and deliver marketing training to extension workers in close consultation with the MoA Programme Unit Coordinator and the MCPMA.
- Conduct workshops and seminars with farmers' organization leaders on how to interpret market information and how to take appropriate production/market decision making.
- Liaise with MNIB, hotels, supermarkets, restaurants and local vendors to facilitate marketing of beneficiaries' products and promote/develop a continuous flow of information to beneficiaries.
- Promote and coordinate the logistics for the participation of beneficiaries in local / national / regional fairs and events to display their products.
- Identify needs for specialized technical support to beneficiaries regarding quality standards, postharvest handling, packaging and labelling issues, developing the corresponding ToRs for procuring the services.
- Support beneficiaries in the development/procurement of promotional material, brochures, logos and social media advertisement.
- Conduct on-site visits to beneficiaries with extension workers to further understand, discuss and address the issues involved in improving market linkages.
- Support coordination with public and private stakeholders regarding quality standards (GBS) and marketing (MNIB) to ensure timely support to beneficiaries.
- Coordinate the flow of information to the M&E system regarding marketing issues.
- Follow up the implementation of annual work plans and budget regarding marketing issues.

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TORS: Planning, monitoring and evaluation, and knowledge management specialist

Objective of the Position

The Planning, Monitoring and Evaluation, and Knowledge Management Specialist is responsible for guiding the overall M&E strategy and implementation of related activities within the Programme and via key implementing partners, plus providing timely and relevant information to Programme stakeholders. This entails close communication with all involved in Programme implementation and coordination: the Steering Committee, the Programme Manager, PMU and partner staff; and Programme beneficiaries.

Reporting Officer

The Planning, Monitoring and Evaluation, and Knowledge Management Specialist would report directly to the Programme Manager.

The Planning, Monitoring and Evaluation, and Knowledge Management Specialist would be supported by an M&E Officer.

Qualification and Experience

A university degree in development studies, statistics, social science or a related field.

At least three years of proven experience with:

- Planning and implementation of M&E systems;
- M&E methods and approaches (including quantitative, qualitative and participatory);
- The logical framework approach and other strategic planning approaches;
- Training in M&E development and implementation:
- Facilitating learning-oriented analysis sessions of M&E data with multiple stakeholders;
- Information analysis and report writing;
- Development of evidence based knowledge products.

Desirable Skills and Personal Qualities

- Experience in M&E system design and implementation;
- A solid understanding of rural development, with a focus on participatory processes;
- Experience of working with age and gender disaggregated indicators;
- Report writing and computer skills (certain experience in data processing);
- Leadership qualities, personnel and team management (including mediation and conflict resolution);
- The willingness to work outside of formal working hours and days;
- Willing to undertake regular field visits and interact with different stakeholders, especially primary stakeholders.

Position Responsibilities

The Planning, Monitoring and Evaluation, and Knowledge Management Specialist will be responsible for the:

- Programme Start-up workshops in coordination with PMU staff and Programme stakeholders.
- Annual planning process (development of AWPB) with participation of key stakeholders, this
 includes the organization of annual planning and evaluation workshops with beneficiaries and
 key implementing partners (GIDC, MOA).
- Ensuring that all service provider contracts include specifications for internal monitoring required of them the reporting systems and the penalties for failure to report as specified.
- Drawing up the TOR for design and cost out a computerized M&E and Management Information System and supervise the consultancy.

- Developing a computerized M&E and Management Information System for use by different stakeholders that satisfies the information demand of project stakeholders and provides an ongoing monitoring of project activities (AWPB), LF and RIMS output and higher-level results, including targeting performance and gender equity. The system must be set up to be useful for day-to-day management purposes, strategic decision making and for providing information for evaluating Programme activities.
- Proactively monitoring compliance of the targeting strategy and the outreach to vulnerable groups.
- Monitoring (data collection and registration, analysis and feedback) of progress of the implementation of the AWPB, in coordination with PMU staff and key implementing partners (GIDC, MOA). This needs to be supported by facilitating stakeholders to value, have appropriate capacities for and undertake their own M&E activities, and to link these into an overall assessment of SAEP progress and corrective measurements.
- Guide the process for identifying and designing the key indicators for each component, to record and report physical progress against the AWPB. Also steer the process for designing the format of such progress reports.
- Guide the process for identifying the key performance questions and parameters for monitoring Programme performance and comparing it to targets. Design the format for such performance reports.
- With stakeholders, set out the framework and procedures for the evaluation of Programme activities.
- Elaborating a comprehensive and detailed M&E plan and manual that provides all the information required for stakeholders to understand what has to be done, how to do it, when to do it, and who is responsible. This Plan should cover all the components of the M&E and MIS system, including the planning stage.
- Training and supporting PMU staff and key implementers such as MOA, GIDC in the use of the M&E and Management Information System.
- Ensuring the quality of the data, and that information is registered according to the agreed upon timing and frequency, and the database up-to-date.
- Responding to specific information needs of the PM, the PSC, the Borrower, IFAD and CDB.
- Drawing up the TOR for design and cost out a baseline survey and impact studies (RIMS and LF indicators). Supervise consultants that are contracted to implement the surveys and studies required for evaluating Programme effects and impacts.
- Guiding staff and implementing partners in preparing their progress reports. Together, analyze these reports in terms of problems and actions needed. Prepare consolidated progress reports for Programme management to submit to the relevant bodies, in accordance with approved reporting formats and timing.
- Review monitoring reports, evaluate the impact, and identify the causes of potential bottlenecks in Programme implementation.
- Make regular reports to the PMU and PSC, highlighting areas of concern and preparing the documentation for review at meetings.
- Undertake regular visits to the field to support implementation of M&E and to identify where adaptations might be needed.
- Guide the regular sharing of the outputs of M&E findings with CBO members, Programme staff, implementing partners, primary stakeholders, public media, and social media.
- Plan for regular opportunities to identify lessons learned, knowledge generation and knowledge sharing. Assist with feedback of Programme lessons learned and relevant experiences to policy makers and IFAD.
- Coordinate with the Project Manager and Programme stakeholders, and the Final Evaluation Manager with the planning and implementation of the "Closing Workshops".
- Assist the Project Manager and Consultants as needed in the execution of the Final Evaluation and the preparation of the Programme Completion Process and Report.

Appendix 5: Institutional aspects and implementation arrangements

TORS: Procurement officer

Objective

The objective of the appointment is to effectively manage the procurement processes of works, goods and services required for the implementation of the Programme in accordance with **the SAEP** established procurement procedures, laws and regulations.

Qualifications and experience

The Procurement Officer should have:

- A Bachelor's Degree in Management Studies, Engineering or Procurement Management or other related field from a recognized university
- Computer competence in software packages: Microsoft Word, Excel and Programme Management.
- Familiarity with Donors, and in particular IFAD procedures, is desirable but not necessary
- Knowledge of IFAD, and other lending agencies procurement policies is desirable but not necessary.
- Excellent written, oral and interpersonal skills.

Position Responsibilities

The Procurement Officer will:

- Plan, supervise and coordinate procurement activities of the SAEP for goods and services.
- Prepare and submit in a timely manner the annual procurement plans of the SAEP in accordance with its Annual Operating Plans.
- Examine relevant documents and liaise with suppliers to verify and develop specifications of purchase requests to determine the need for purchases.
- Consult price lists and catalogs and communicate with possible suppliers to obtain information on prices and services available, quality and availability of products and compare data to determine the best suppliers.
- Advise the Programme Manger Coordinator of inherent contractual rights and obligations and valuates contract performance for compliance.
- Prepare and evaluate bidding documents and associated contracts, in accordance with the SAEP established procurement procedures, laws and regulations.
- Draw up tender lists based on Programme's requirements and study bids, comparing prices and specifications.
- Arrange for the Selection Committee to review tenders and prepare relevant paper work.
- Complete and forward Purchase Orders or Contracts to Suppliers or Consultants; negotiate and follow-up as required with respect to delivery of goods and services.
- Maintain records and support documents that are necessary to account for all purchases and distribution of goods and services related to the implementation of the Programme.
- Arbitrate claims or complaints occurring during performance of Contracts.
- Undertake any other duties and responsibilities that may, from time to time, be reasonably requested by the Programme Manager of the SAEP.

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TORS: Ministry of Agriculture and Fisheries (MoA) Programme Unit Coordinator

Objective

The MoA Programme Unit Coordinator (MoAC) will be responsible for: the efficient and effective delivery of extension services to beneficiaries, coordinating the activities of the Climate Smart Agriculture (CSA) Component between the Programme Management Unit (PMU) and the MoA.

Reporting

The MoAC will report to the Permanent Secretary of the MoA.

Qualification and Experience

A university degree in agriculture, preferably with a post-graduate studies un rural development, extension services and/or CC.

At least three years of proven experience in:

- Extension services at a technical management position;
- Developing Terms of Reference and supervising contracts for consultancies and technical services;
- Liaising with public and private sector institutions at the technical level;
- Planning and reporting based on targets;
- Working in rural areas, particularly rural organizations and groups.

Desirable Skills and Personal Qualities

- Experience with IFAD, WB or CDB financed projects:
- A solid understanding of the agricultural and CC institutional framework (MoA and Ministry of Carriacou and Petit Martinique Affairs, Department of the Environment, Ministry of Education);
- A solid understanding of rural development and extension methodologies;
- A solid understanding of CC issues and CSA practices;
- Experience and/or disposed to work with vulnerable youth;
- Knowledge of institutions linked to agricultural development, CC and agricultural research and marketing, their responsibilities, approaches and practices;
- Leadership skills and ability to operate effectively in a team and contributing positively to working relationships;
- The willingness to work outside of formal working hours and days;
- Willingness to make on-site visits to beneficiaries and service providers on regular basis.

Position Responsibilities

The Technical Coordinator specific responsibilities include:

- Review the final design documents of the SAEP and collaborate with the PMU for the preparation of the MoU with the MoA.
- Review the final design documents of the SAEP and make suggestions for the eligibility criteria and procedures to be included in the Project Operations Manual.
- Review background and conduct interviews with the Extension Assistants of the MoA to assess their qualifications and performance.
- Select the EAs to be seconded to the Programme in coordination with MoA authorities and the PMU.
- Develop a training plan for EAs.
- Prepare the technical ToRs for the regional training on CC and CSA practices for extension workers.

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- Prepare the technical ToRs for the national training on marketing and business development for extension workers.
- Support implementation of training to extension workers, including selection of participants.
- Prepare the technical ToRs for the agricultural / fisheries experts supporting extension workers.
- Prepare a work plan for the technical support of the agricultural / fisheries experts and monitor its implementation.
- Prepare the annual work plan and budget of the MoA Programme Unit activities, in close coordination with the PMU.
- Support and supervise the work of EAs and liaise with the farmers' organizations.
- Conduct field visits to beneficiaries and farmers' organizations to assess the progress in implementation, eventual problems and means to better achieve objectives and targets.
- Liaise with the Ministry of Carriacou and Petit Martinique Affairs for training and technical assistance to extension officers of the MCPMA.
- Support the PSC in establishing the CSA Grant Selection Committee.
- Prepare a draft call for proposals for the CSA Grant Financing each year, in coordination with the Department of the Environment, establishing priorities.
- Liaise with the PMU for releasing annual calls for proposals for the CSA Grant Financing.
- Develop the forms for presenting grants proposals in close consultation with the PMU.
- Conduct an initial assessment of proposals to ensure technical, eligibility and procedural requirements are met before sending to the CSA Grant Selection Committee.
- Support beneficiaries and EAs with procurement procedures of goods and services for implementing grant proposals.
- Coordinate with grant beneficiaries and the PMU the flow of funds for implementing the grant proposals.
- Prepare progress reports on the activities carried out under the CSA component, as required by the Programme M&E system.
- Supply all information required by the MoA, the PMU, the PSC, IFAD and CDB on the activities implemented under the Programme.

Appendix 6: Planning, M&E and learning and knowledge management

A. Proposal for M&E and Knowledge management

- 1. **Objective**. The main objective of monitoring and evaluation (M&E) is to provide the Programme stakeholders with data and information to ensure an efficient use of resources and timely dealing with problems in order to allow the Programme to achieve its objectives, expected outcomes and targets within the foreseen timeframe, as well as to provide the capacity to measure Programme impact. The main objective of knowledge management on the other hand is to provide stakeholders with knowledge as an input for scaling up strategies and policy engagement.
- 2. The specific objectives of the M&E and Knowledge management would be to:
 - Provide the Borrower (MOF), the Programme Steering Committee (PSC), key implementers such as MOA, GIDC, Ministry of Carriacou and Petite Martinique, and other relevant stakeholders, as well as IFAD, with data regarding Programme progress in relation to the Logical Framework and RIMS indicators;
 - Provide the information on progress and problems encountered that would help the PMU in decision making in favor of a successful implementation of the Programme;
 - Generate and share knowledge from Programme experiences that can lead to further innovation, replication by others and possibly up scaling of best practices;
 - Provide the MOA, GIDC, Ministry of Carriacou and Petite Martinique Affairs and other stakeholders such as the Ministry of Youth, Sports, and Religious Affairs, as well as IFAD, with information and knowledge that will be a useful input to the policy dialogue.
- 3. **SAEP M&E strategies and mechanisms**. Monitoring and evaluation would be conducted using a participatory approach through which stakeholders will be fully engaged in the recollection of field data, discussion and analysis of this data, and decision making regarding changes that might be required for a more effective or efficient Programme implementation. This means that key implementers such as the MOA, GIDC and the Ministry of Carriacou and Petite Martinique Affairs will play an active role in data collection; they will analyse data to monitor progress on the implementation of their respective AWPB, whereas the PMU is responsible for the analysis of all data and monitoring the overall SAEP progress, including the AWPBs of MOA, GIDC and the Ministry of Carriacou and Petite Martinique Affairs that are an integral part of the SAEP AWPB. The PMU will provide feedback to the PSC, PM, and key implementers regarding implementation progress⁴⁸ and together will discuss and decide upon corrective measures that might be required. The level of detail of the information to be analysed will be high at the level of the key implementers and will decrease at the level of the PSC.
- 4. Data collection would be kept simple, not time consuming and would ensure the reliability and especially the usefulness of the data collected. Generally, IFAD projects tend to collect too much data while not having the capacity (human resources) to analyse all the information. Another weakness in many projects is that there are no feedback mechanisms in place to share among stakeholder the knowledge that is generated from the analysed data. This results in a system that just extracts information from project clients for the benefit of donors and government statistics, rather than a learning and results-based management system.
- 5. The Programme's Planning, Monitoring and Evaluation cycle would include the following key elements:
 - Start-up;

Planning with participation of key stakeholders;

• Monitoring (data collection and registration, analysis and feedback);

⁴⁸ In relation to AWPB, LF and RIMS indicators.

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- Reporting (quarterly, half yearly and annual reporting to the Borrower and IFAD);
- Evaluation (baseline, annual evaluation and planning workshops, impact studies);
- Knowledge generation and knowledge sharing;
- Programme Supervision; and
- · Programme Completion Process and Report.
- 6. **Start-up**. The Programme would have two start-up workshops, one on the main island "Grenada" and one for "Carriacou and Petite Martinique". The main objective of these workshops is to inform governmental and non-governmental institutions and the target group of the project scope, objectives, expected results, components, and intervention strategies. Participation in these workshops by representatives of youth organisations is essential. The workshops would help the Project Management Unit with networking/coordination efforts and to forge strategic alliances that would contribute to ensuring complementarity of activities and avoiding overlap.
- 7. **RIMS.** Since 2003, IFAD has adopted a system for measuring and reporting the results and impact achieved by the projects it finances: the Result and Impact Management System (RIMS). The RIMS has recently been revised and a new Manual with Outreach and Core Indicators (CIs) that are mandatory, when relevant, to be included in project M&E, was approved by IFAD in April 2017. IFAD has developed an Operational Results Measurement System (ORMS), that offers a single online platform that will link expected results (as per the Logframe in project design reports), through progress toward results (as documented in supervision reports), to results actually achieved (as reported in project completion reports). The CIs are the cornerstone of this system: they will be tracked throughout the project cycle and aggregated to provide a snapshot of IFAD's results at any point in time.
- 8. In order to bring SAEP in-line with the new RIMS manual and for the programme's results to be compatible with the ORMS, some of the Core Indicators have been used in the Programme's LF, others, when relevant, will be included in the Programme's M&E system and MIS. The purpose of RIMS is to continuously monitor the commitment towards achieving intended results, as this should guide the management strategy and the implementation of activities. Lessons based on experience must be applied in order to address shortcomings and increase the likelihood that the intended results will be achieved.
- 9. **Planning.** The Annual Workplan and Budget (AWPB) is the outcome of the annual project planning process. Through annual work planning, the PMU decides what activities will be carried out over the next 12 months, by whom, the resources and the time needed to complete them. The AWPB is therefore a planning and management tool that specifies what is expected to be done during the year, by whom, how and at what cost. In the AWPB, the annual planned RIMS first-level results should be specified.
- 10. On an annual basis, the PMU would implement in both "Grenada" and "Carriacou and Petite Martinique", Evaluation and Planning Workshops. These workshops (minimum 2 days) would bring together representatives of key implementers (MOA and GIDC), other stakeholders and direct beneficiaries (including youth and women) in order to: (i) take stock of progress made during the year; (ii) identify obstacles encountered during implementation and proposals to avoid them in next year's planning, and (iii) identify activities for next year's planning. The result of the workshops is a draft AWPB's for key implementers that are an integral part of SAEP's overall AWPB.
- 11. The timing of these workshops would be such that the results can feed into the Ministry of Finance budget cycle, the elaboration of next year's AWPB and its timely submission to IFAD.
- 12. A comprehensive and detailed M&E Plan should be designed by the M&E Specialist that provides all the information required for stakeholders to understand what has to be done, how to do it, when to do it, and who is responsible. This Plan should cover all the components of the M&E system, including the planning stage. Guidelines for all implementing partners on the type of contribution

Appendix 6: Planning, M&E and learning and knowledge management

expected from them in the preparation of the AWPB should be prepared, taking into account the IFAD template.

- 13. **Monitoring.** Monitoring means tracking the key elements of programme performance on a regular basis (inputs, activities, outputs and outcomes). A monitoring system can be defined as an observation system for the programme managers to verify whether the programme activities are happening according to planning and whether means are used in a correct and efficient manner. The system must supply programme management with a continuous flow of information throughout the course of the Programme to make it possible to take the right decisions. Monitoring is limited to the relation between the implementation of the activities and the results, assuming that the results are directly and only determined by the programme activities.
- 14. The design of the M&E/Management Information System (MIS) will be based on MAREP's experience, but will aim at including innovations, such as a dashboard for performance management and monitoring of the implementation of the AWPB, and the utilization of ICT tools for information transparency and knowledge sharing. It is expected that the MIS will generate information for three distinct functions: (i) management; (ii) accountability; and (iii) learning and policy engagement.
- 15. The M&E/MIS should assist implementers with monitoring progress on:
 - · Compliance with targeting strategy;
 - Implementation progress of the AWPB; and
 - Achievement of Logical Framework and RIMS indicators.
- 16. As most of the implementation of both technical components will be executed by MOA and GIDC, the PMU should play a proactive role in monitoring compliance of the targeting strategy. Disaggregated (by age and sex where relevant) data is used in order to allow the monitoring of the targeting strategy and the outreach to vulnerable groups. Monitoring of progress of implementation of the AWPB and achievement of LF/RIMS indicators will be a shared responsibility between the PMU and the key implementing partners (MOA, GIDC and the Ministry of Carriacou and Petite Martinique).
- 17. In order to verify compliance with the targeting criteria, but also in order to measure changes in the lives of beneficiaries, the implementing partners need to develop in close coordination with the M&E Specialist, an "intake" (base line) and "monitoring" form for each beneficiary they are supporting. This would include personal data (name, sex, age, address, educational attainment, employment, monthly income, marital status, number of children), data on the household (members, income sources or employment status of other HH members, HH members educational attainment), data on the business (type of product/service, type of market outlet, sales, income from business, number of employees, amongst others) or data on the farm (size, land tenure, type of crops, type and number of livestock (small ruminants, poultry, pigs, other), number of partime/fulltime employees, participation of household members in production, income from farm, type of market outlet, main climate change vulnerability, amongst others).
- 18. The "intake" form would be filled out at the application stage and could later on verified during the interview process in case of VST and businesses; it would serve as evidence of the correct use of the targeting criteria and why certain individuals were rejected, and for those that would become SAEP beneficiaries it would be their personal baseline. Similar activity would be carried out by the extension officers. All the data (intake and monitoring forms) would be uploaded to the MIS and would allow the PMU, GIDC and MOA to measure some of the indicators of the LF, such as increase in production and assets.
- 19. Building on MAREP experience, the Programme will collect data directly in the field by key implementing partners (extension workers, business development staff) through the use of tablets in which easy to fill out forms can be accessed. The information will be uploaded using an Internet connection to the MIS located at a server at the PMU. While access to MIS data will be readily available for all programme stakeholders (so they can monitor the activities they are responsible for

stakeholders on a timely basis and according to their specific needs.

and remain informed as to overall implementation progress), the PMU would maintain a key responsibility in analyzing the data and providing feedback to the implementers and other

- 20. Training and support would be provided to PMU staff and key implementers (MOA, GIDC and the Ministry of Carriacou and Petite Martinique Affairs), in the use of the data collection system and the M&E procedures. The M&E Specialist and Officer would be responsible for ensuring the quality of the data, and that information is registered according to the agreed upon timing and frequency, and the database is up-to-date.
- 21. While setting the priorities concerning the information that is needed, it is also important to consider the information flows: who will give which information to whom, what happens with the information at different levels, which information is gained where, how is the feedback organised for (i) management decisions at programme implementation level (PM/PMU, MOA, GIDC and Ministry of Carriacou and Petite Martinique Affairs) and (ii) policy decisions (PSC and Borrower).
- 22. **Reporting.** Quarterly progress reports, measured against the AWPB, would be submitted by PMU and staff from key implementers to the M&E Specialist who would be responsible for the integration of these reports into an overall SAEP Progress report to be submitted to the Programme Manager (PM), who would endorse them for presentation to the PSC. More detailed mandatory sixmonthly and annual reports to the Borrower and IFAD would be prepared with input from all Programme staff members and consolidated by the M&E Specialist. The latter would be presented to and approved by the Steering Committee before submission. These reports would inform on progress with regard to the AWPB as well as the Logframe indicators.
- 23. **Evaluation.** Evaluation is the periodic assessment of the change in targeted outcomes and their indicators that can be attributed to the project intervention. It tries to describe the changes in life and wellbeing of the final users, while trying to compare the situation ex-ante (Baseline) and ex-post and analyse the positive or/and negative evolutions. In the evaluation process, external factors that can interfere with the activities to reach a certain impact on the target group are also taken into account. The PMU in close collaboration with key implementers such as GIDC and MOA is responsible for this assessment of changes generated by the intervention to the target population, as well as of the progress toward objectives and goals; the MIS should be developed as a system that registers the required data (overall and by beneficiary) and provides reports for the PSC, PMU and implementers to measure changes in the Programme's indicators.
- 24. **Baseline and impact study.** In order to be able to evaluate over time progress made and impact achieved, it is essential to have access to baseline data. The minimum requirement of data for the baseline is that they provide the information required to be able to measure the indicators defined in the Logframe (LF) and RIMS Outreach and Core Indicators. As the MAREP Programme is still operational until March 31, 2018, it was decided that the SAEP Baseline would be carried out at the same time as the MAREP Impact study. For this, under MAREP, a service provider would be contracted through a procurement process within the Caribbean region; thus, ensuring that the SAEP PMU will have a Baseline Study readily available at programme start-up. An Impact study and analysis of LF and RIMS indicators in Y6 has been planned and budgeted for, as well as a specific impact study on social inclusion and gender equality (Y5).
- 25. **Mid-Term Review.** A Mid-Term Review (MTR) would be carried out three years after Programme start-up; this would be an external review led by IFAD. The scope of the MTR would be wide-ranging so as to assess progress in implementation and achievement of LF and RIMS indicators, programme objectives and outcomes, effectiveness of institutional arrangements, resources used and allow time for adjustments to be made in programme implementation. The MTR would also assess the effectiveness of the targeting approach and of the youth and gender equality strategy. It is anticipated that it would specifically assess the timeliness of response to requests made for Vocational and Skills Training (VST) and to the "matching grants" and funds for Climate Smart Agriculture, and the extent to which these funds have helped the target group improve their assets,

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income and climate change resilience. The MTR would also carefully analyse the level and quality of implementation of the MOUs with GIDC, MOA, and the Ministry of Carriacou and Petite Martinique Affairs.

- 26. **Programme supervision.** IFAD's supervisory function will be ongoing and support will be provided for implementation and resolving issues that arise. Supervision missions from the Latin America and Caribbean Division (LAC) will take place once a year and will be organized by IFAD's Country Programme Manager (CPM) in coordination with the Borrower, the PMU, MOA, and GIDC. The Supervision missions will pay particular attention to smooth and timely implementation of the Programme and to achieving its intended objectives and outcomes and to the progress made on achieving the LF and RIMS indicators.
- 27. The key tasks to be undertaken by the supervision missions, are presented in the table below.

Table 1. Key Tasks for Supervision Missions

Help identify and discuss actual and potential/emerging problems and constraints, and agree on solutions, changes or improvements and the responsibilities for their implementation.

Assess the appropriateness of the targeting strategy and its effective execution by the PMU and key implementing partners, making necessary adjustments to increase outreach and review programmme performance in terms of youth and gender-equity considerations.

Review the programme's implementation progress against Final Design Report targets and the AWPB, using the key indicators as defined in the Logframe.

Discuss with PMU and representatives of key implementing partners their perception of the Programme and their participation in its implementation; actively seek their opinion on improving programme performance.

Discuss with beneficiaries their perception of the Programme, the level of their participation and access to Programme services and results achieves to date; actively seek their opinion on improving programme performance.

Explore the adequacy of the M&E and Management Information System and its use by different stakeholders; assess whether the system satisfies the information demand of project stakeholders and provides an ongoing monitoring of project activities (AWPB), LF and RIMS output and higher-level results, including targeting performance and gender equity.

Examine programme expenditures and make realistic estimates as to whether the Programme can be expected to be completed within the original cost estimates (foreign currency and local currency).

Identify possible cost overruns/savings on IFAD financed categories and ascertain the need for a reallocation between categories, or cancellation due to savings.

Review the progress of procurement and disbursement; based on comparisons of the records of IFAD and the Programme, verify the terms of the contracts awarded and the commitments and disbursements made; and obtain copies of approved contracts not yet submitted to IFAD.

Check a sample of Statements of Expenditure to verify their accuracy against IFAD records.

Review the financial and accounting systems of the Programme and implementing partners, and ensure that these systems are adequate for IFAD's reporting requirements.

Review compliance by the Borrower with loan covenants.

Explore such other matters related to the Programme that may delay or adversely affect programme implementation and that would impact the achievement of the development objectives.

Undertake field visits to the programme area to spot check and verify reported physical progress.

28. **Programme Completion Process and Report.** The completion review is a process undertaken by the Borrower in close coordination with IFAD at the end of the project implementation cycle in order to report on the results achieved through programme interventions. The main purposes of the completion review process are to promote accountability, reflect on performance and elicit

lessons learned to inform new project design, and to define an appropriate post-project strategy. The learning dimension of the completion process should be regarded by both IFAD and the Borrower as the foundation for improvements in future project design and programming. The completion review process is also critical for identifying opportunities for scaling-up best practices (IFAD, 2015).

- 29. A well-managed completion process is of key importance for identifying the ways and means to enhance the sustainability of programme interventions. It provides all stakeholders with a unique opportunity to reflect on overall programme performance and generate useful lessons learnt from implementation. Key findings of the completion review are summarized in a standard Project Completion Report (PCR).
- 30. At the end of the Programme, the PMU will plan and implement "Closing Workshops" in Grenada and in Carriacou and Petite Martinique, with the objective of discussing experiences with stakeholders, programme results and success stories, as well as obstacles encountered during implementation, as input to the Project Completion Report (PCR).
- 31. **Knowledge generation and knowledge sharing.** Communicating and showcasing success stories of young male and female farmers and entrepreneurs is important to change the image of farming and to motivate other youth to take up farming and develop their potential business ideas. In addition, knowledge generation and knowledge sharing is also important for policy engagement and scaling up.
- 32. Specific evidence-based knowledge products will be developed on the basis of Programme experiences, in order to extract lessons and best practices, replicate innovative solutions, achieve better outcomes and greater impact from development resources, and strategically disseminate the knowledge generated to support national decision making and policy processes.
- 33. Some of the knowledge products that would be produced by SAEP (PMU and implementing partners) include: working papers, case studies, research reports, videos, blogs and vlogs, policy briefs). Dissemination would take place as an interactive process of communicating this knowledge to target audiences, with the purpose it may be used to lead to change.
- 34. Knowledge capturing would happen through amongst others: (i) thematic conferences that will include youth, farmers, and community organizations, government and civil society organizations, and the private sector; (ii) the writing of short development (success) stories with input from staff members (PMU, GIDC, MOA, amongst others), SAEP beneficiaries, and other stakeholders; (iii) the use of photo documentation as evidence; (iv) participatory development of short videos and radio programmes (as an alternative to written communication).
- 35. The key implementing partners have different levels of experience with knowledge management. All have their own web site and Facebook site, MOA has experience with the preparation of videos from field experiences, whereas GIDC has more experience with the preparation of written materials. Each has access to different communication channels, the Ministry of Carriacou and Petite Martinique Affairs has its own PR&Communication unit, whereas the MOA has access to TV channels, and GIDC uses more seminars and events to share testimonials and experiences and is member of regional networks and platforms. SAEP would tap in into these resources to ensure that knowledge products will be ample disseminated.
- 36. In addition, the Programme would have a basic information technology platform to enable information management, communication and knowledge-sharing with stakeholders and the public in general (web page, Facebook page, link to GoG and IFAD virtual platforms, uploads to Youtube, twitter account, Pinterest, Instagram, amongst others).
- 37. SAEP would support Seminars for knowledge generation and sharing, as well as an Awards programme in coordination with the key implementing partners in order to recognize young innovators in business development or CSA initiatives, successful VST trainees/graduates, or to acknowledge a particular institution that has played a key role in providing support to the programme's target group

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(e.g. private sector). The Awards programme could also show case experiences of successful young males or single mothers as role models and inspiration for others.

B. Implementation Arrangements and Human Resources

38. The Project Management Unit would have one M&E and Knowledge Management Specialist and one M&EKM Officer both located at the PMU in Sauteurs. The M&E and Knowledge Management Specialist and Officer are responsible for the execution and functioning of the M&E system and the realization of the knowledge products. However, support from other PMU staff, GIDC, MOA and Ministry of Carriacou and Petite Martinique Affairs staff would be required. Effective team-work amongst the Programme implementers is key for an effective and efficient M&E system.

C. Budgetary Considerations and Allocation

39. The budget includes funds for one M&E and Knowledge Management Specialist and one M&EKM Officer during the 6 years of Programme implementation. To implement the Project M&E system, the following resources have been allocated in the budget: (i) Consultancy to update MIS to SAEP context and indicators; (ii) Training of PMU, GIDC, MOA and Ministry of Carriacou and Petite Martinique Affairs staff in MIS; (iii) Equipment (Tablets, Broadband to improve internet connection and VBM Router); (iv) 5 thematic conferences for CBOs (youth, producers, women) knowledge generation and sharing linked to policy engagement; (v) 4 systematizations/Knowledge management products; (vi) 5 Annual evaluation and planning consultation workshops; (vii) M&E training material; (viii) Startup and Closing workshop; (ix) Gender equality impact study (Y5) and overall Impact study (Y6); (x) Project Completion Report; and (xi) PR/Communication^{49.}

⁴⁹ References:

IFAD, 2017. Taking IFAD's Results and Impact Management System (RIMS) to the Next Level.

IFAD, 2015. Guidelines: Project Completion Review. Rome.

Independent Office of Evaluation of IFAD, 2015. Evaluation Manual. Second Edition. Rome.

IFAD, 2014. Results and Impact Management System RIMS. First and second level Handbook. Rome.

IFAD, 2007. Knowledge management strategy. Rome.

Appendix 7: Financial management and disbursement arrangements

Appendix 7: Financial management and disbursement Arrangements

- 1. In accordance with IFAD's Financial Management policies and Guidelines, a Financial Management Assessment (FMA) was carried out during the SAEP design mission at two levels: (i) the Country or Government Public Financial Management System assessment: and (ii) the Financial Management (FM) operations at the Programme level, as it is proposed that Key staff responsible for or involved in Financial Management of the current MAREP Programme Management Team (PMT) will be re-assigned for FM in the SAEP Programme Management Unit (PMU).
- 2. **Financial Management Assessment:** Grenada's inherent risk is low as measured by Transparency International's Corruption Perceptions Index (CPI). The country's 2016 score of 56, places it as 46th out of 176 countries assessed.
- 3. **Programme Specific Assessment**: Below is the overall summary of risk ratings at design, derived from the Lead Programme Agency (LPA) and PMU FMA levels mentioned in para 1 above, inclusive of recommended mitigation measures to be implemented from programme start-up.

Table 1. Risk Assessment and Mitigation Measures

Risk	Risk	Risk Mitigating Measures incorporated into Project Design	Residual FM Risk
Inherent Risk			
Country Level TI Rating placed Grenada at 46th out of 176 countries with a score of 56	L		L
Project Risk			
Entity and Project Level The ability of MOF and the PMU to effectively coordinate the implementation of activities in all the parishes.	М	With a small PMU in place for the SAEP, and to ensure that programme activities will be appropriately implemented in the field, the use of implementing partners and service providers is required, to deliver quality services for all activities with beneficiaries, complemented by the need for certain PMU staff to undertake regular trips to review activity progress through random checks, taking into account beneficiaries' perceptions in the regions.	L
Organization and Staffing The current MAREP finance staff levels include an Accountant and an Accounts Clerk with the Administrative officer. The Accountant handles Procurement as well as Accounting and Financial reporting. Although preparation of payments is also undertaken, actual approval and payment thereof is only effected after review by MOF.	M	To ensure adequate segregation of duties it is proposed that for the SAEP PMU, the former Accountant position be that of Finance Manager (FM), supported by the Accounts/Disbursement clerk for payment preparation and that the FM will focus on strategic planning and budget tasks, apart from accounting and preparation of financial reports, but not on Procurement activities. It is recommended that the current Accountant fill the Finance Manager position in view of knowledge of IFAD procedures, to avoid the need of re-training of a new incumbent to bring them up to speed in accounting/financial reporting requirements. It is recommended that the current Administrative officer undertake specialized procurement training in both IFAD procurement	L

Risk	Risk	Risk Mitigating Measures incorporated into Project Design	Residual FM Risk
		and national procurement procedures and guidelines so as to undertake all Procurement-related tasks.	
Budgeting Improvements are required in Annual Work Plan & Budget (AWPB) monitoring and preparation, with strategic upfront planning so to facilitate procurement planning and careful monitoring of actual versus planned activities and to stimulate enhancement and delivery of programme implementation.	М	Apart from training capacity support in AWPB delivery, sessions with all stakeholders should take place more regularly, not only for the preparation of the AWPB but also at half yearly or quarterly intervals to ensure that programme activities are being delivered and appropriate steps taken when revisions or other arrangements are required. Increased frequency of communication with the Programme Steering committee (PSC) and stakeholders is expected.	L
Funds Flow & Disbursement Few disbursement delays arose in the past for the MAREP, either due to the absence of staff reviewing these or late accounting entries, and there were some small delays in making counterpart funds availability	M/L	Current MAREP PMT FM staff and MOF have experience in IFAD and World Bank (WB) disbursement procedures. MOF has agreed that requests for payments are to be processed within 48 hours as is normally done in the case of WB Project payments. As government budget constraints are no longer in place, MOF recommended that advance follow-up requests be made by PMU Finance staff for counterpart funds inflows, to ensure that these are processed and made available in a timely manner.	L
Internal Controls Risk of non-compliance with internal control processes in view of non-appropriate segregation of duties.	M	Apart from the re-assignment of responsibilities mentioned above, the Financial Section of the Programme Operations Manual (POM) will be updated to ensure proper internal control procedures in all Programme operational areas, including payment procedures under Memoranda of Understanding (MOUs) with Implementing Partners. As approval and authorisation from MOF is also required, some ring-fencing is currently present for processing of all financial transactions. With respect to grants, the POM area for grantee selection by the Grant Selection Committees (defining the criteria/methodology selection procedures as well as the payment/procurement procedures for supplies to be purchased on behalf of Grantees, in accordance with the Selection Committees' deliberations) are to be drafted and finalised prior to programme implementation. Participation by Financial Management Specialists in the IFAD supervision missions will help ascertain the level of compliance for internal controls and financial transactions.	L

Appendix 7: Financial management and disbursement arrangements

Risk	Risk	Risk Mitigating Measures incorporated into Project Design	Residual FM Risk
Financial Reporting and Monitoring In accordance with the Grenada Public Finance Management Act (No 17 of 2015) and PFM regulations (S.R.O no 33 of 2015) the Standard Integrated Government Financial Information System (SIGFIS, Smart Stream system) captures all information relating to all Ministries and Development Projects/Programmes. The system was deemed not user-friendly for the preparation of Financial Statements in accordance with International Financing Institution (IFI) requirements and MAREP uses QuickBooks to prepare these reports. MOF has advise that the system has been upgraded with reporting tools, which allow for configuration of reports and that training is available for SAEP FM Staff.	L	The Government system to be configured to take into account IFAD requirements and MOF training, to be undertaken by SAEP PMU FM staff for report-preparation using Integrated Financial Management Information System (IFMIS). It is planned that the current QuickBooks system available to MAREP be used as a tool for financial back up until this takes place.	L
Internal Audit The Internal Audit division within MOF mainly deals with inspections and verifications. It also has capacity constraints due to the low level of staff. For MAREP there have been few Internal Audit interventions.	н	MOF has agreed that SAEP be included in the Internal Audit's programme of work for review of any FM risk areas, and that the provision of any Internal Audit recommendations thereon (together with the status once implemented) will be communicated to the PSC as well as IFAD.	L
External Audit The Department of Audit (DoA) of the GOG was appointed to undertake the audit of the MAREP Financial Statements for the 2016 year end end (WB has been using DoA since 2015). IFAD will perform a review as to the quality and timeliness of the 2016 audit performed by the DoA, which is due by 30 June 2017. Prior to this, private external auditors were appointed for MAREP and audit requirements were performed satisfactorily.	M/L	IFAD's revised Audit Guidelines are to be applied for SAEP. The decision regarding selection of whether DoA or private external auditors are to be appointed will be taken dependent on the outcome of the IFAD 2016 Audit review.	L
Overall FM Risk	М		L

H- High, M-Moderate, L-Low

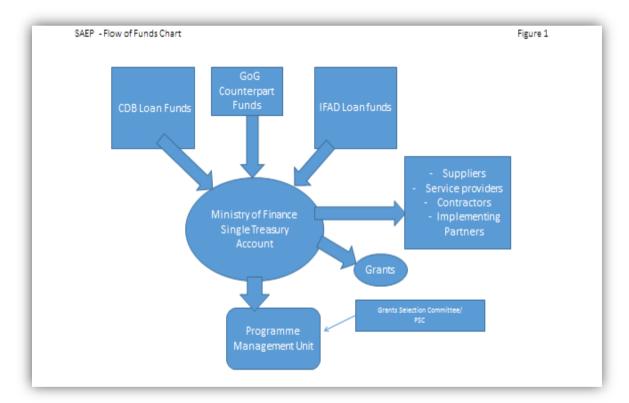
- 4. The assessment concluded that the proposed FM arrangements for SAEP will satisfy IFAD's minimum requirements for robust and sound financial programme management and that the risk level will be low after the inclusion of the Risk Mitigation measures incorporated in the Design.
- 5. **Proposed Financial Management organisation structure.** The Ministry of Finance (MoF) is assigned overall fiduciary responsibility as Lead Programme Agency. It will ensure proper financial management and implementation of SAEP, funded by both IFAD and the Caribbean Development Bank (CDB) and to be implemented at the country/parish levels, with the support of the SAEP PMU that reports to the Permanent Secretary, MOF. The majority of FM operations take place through the Ministry of Finance located in the capital St George's, whereas programme implementation is at the 7 parish levels, that are to be implemented through MOUs with Implementing partners. This therefore may require regular scheduled FM staff travel to the rural areas for the review of progress reports, as well as participation in the AWPB preparation period so as to avoid extra costs related to recruitment

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of specific local staff. The Programme Steering Committee (PSC) will provide an oversight role and ensure coordination with relevant implementing partners.

- 6. The SAEP PMU finance team is to be composed of a Financial Manager, who reports to the Programme Manager with the support of a Disbursement/ Accounts Clerk. The PMU finance team will be responsible for the accounting function of the Programme, including consolidation of Programme reporting inclusive of CDB parallel financing, preparation of annual financial statements, periodic financial reporting and overseeing the arrangements for external audits, in accordance with IFAD/CDB procedures and guidelines.
- 7. The Finance staff responsibilities will be spelt out in their Terms of Reference (TORs), as a basis for their evaluation. Draft TORs for Key staff are attached to Appendix 5. As MAREP Finance team's skills and past experience with IFAD FM procedures that are key to the effective implementation of SAEP (inclusive of the Financial administration of the Matching Grants Scheme, MGS), the MoF may assess competencies of existing MAREP Finance staff and appoint the latter, rather than resorting to a competitive selection process. Experience with MAREP indicated that there were significant delays in constituting the PMT mainly due to difficulties in recruiting key staff with the requisite qualifications and experience at the Specialist level. The IFAD mission, in consultation with CDB, have suitably assessed the existing MAREP staff in charge of financial management and accounting and recommend that the existing staff be retained for SAEP PMU, if MoF is in agreement. The staff will be engaged using performance based contracts.
- 8. **Annual Work Plan and Budget (AWPB).** The Programme will be implemented on the basis of approved Annual Work Plans and Budgets (AWPBs). In the GoG Annual Budget process, requests for budget submissions start in July of the preceding Budget year. Proposed allocation requests need to be submitted by early September to ensure that allocations are included for approval in Parliament's Annual budget in October each year. These timelines must be met to ensure that SAEP activities may take place in the first and subsequent year, within approved budget allocations.
- 9. The PMU will obtain budget submissions of the planned Programme of Work (POW) activities from all concerned stakeholders, well in advance of the annual budget process timelines above, review these for consistency and appropriateness, provide inclusion of costs thereon and consolidate all the budget requests, so as to present the overall programme budget for approval to the Programme Steering Committee (PSC), prior to its submission to the MoF for allocation and approval within the Government's Annual Budget. All AWPBs as well as any revisions thereon during implementation are subject to IFAD's non objection. To facilitate proper budget monitoring and control, the PMU will prepare appropriate budget templates to record information on planned activities in accordance with the chart of accounts and also to reflect component and category information together with the respective funding sources (IFAD, CDB, GoG and beneficiaries).
- 10. As MAREP levels of implementation against planned targets have been lower than expected in some cases, and in order to overcome implementation lags, participatory planning requires improvements during the planning and budget monitoring process. It is recommended that this area be reinforced within SAEP and strategic planning tools be developed by the Financial Manager. This will involve consultations by the PMU with beneficiaries and the implementing partners involved, as well as an assessment of previous activities undertaken and the related targets attained. At start-up, particular emphasis is to be provided to obtain activity details/related procurement needs downstream from all implementation partners/government agencies and stakeholders. Dialogue upstream with the PSC is also needed so that appropriate focus on scaling down requests for over-optimistic plans is performed. Monitoring should be addressed continuously throughout programme implementation to ensure timely decisions/revisions are made for improved procurement planning and implementation.
- 11. **Funds Flow and Disbursement Arrangements.** IFAD and CDB funds will be channelled into the Single Treasury Account, which is held in the Grenada Cooperative Bank. These funds are managed by the MoF through coded designated Ledger accounts that ensure traceability of each Programme's available funds, in accordance with GoG Public Financial Management procedures for

- all Development Projects/Programmes funds. GoG counterpart funding around USD 2 million, including approx. USD 500 000 for financing of taxes and duties, will also be paid into this account in yearly tranches. PMU advance requests are recommended to ensure appropriate Programme liquidity levels are maintained.
- 12. Requests for disbursements of Programme Expenditure will be prepared by the PMU Finance staff using the Smart Stream payment system for subsequent review, approval and payment execution by MOF. CDB co-financing will be managed on a parallel basis with IFAD funds. It is also proposed to introduce the rollout of the IFAD Client Portal (ICP) platform for submission by MoF of electronic Withdrawal Applications to IFAD for disbursements.
- 13. The initial advance disbursement to be deposited into the MOF Single Treasury Account is projected to be a maximum of USD 600 000 based on the first AWPB for IFAD funded expenditure through the Single Treasury account. Subsequent disbursements shall be based upon submission of Statements of Expenditure (SOEs) for at least 30% of the previous withdrawn advance amounts, together with the provision of expenditure details against approved categories of expenditure. Further disbursement details and procedures are to be included in the Letter to the Borrower (LTB).
- 14. The funds flow chart is provided in **Figure 1** below:



The maximum IFAD authorised allocation is estimated at approx. USD 1,5 million dependent upon the disbursement method used for Implementing partners, i.e. either through MOF single Treasury account or direct payments from the Fund. During implementation, should this be deemed insufficient, the amount will be revised, as required. The threshold of direct payments from IFAD will be limited only to large payments over the equivalent of USD 100,000.

15. **Accounting Systems.** The current MAREP PIU is using both the MoF IFMIS as well as Quick Books accounting software for the preparation of financial reports; so far there was little reporting flexibility to capture data for reporting by financier, programme components, expenditure category and activity using IFMIS. The MOF is advocating its use for the government's accounting system across all development projects, and training and reporting tools have become available so that IFI reporting

requirements can be appropriately configured. It is recommended that the SAEP PMU uses IFMIS on a stand-alone basis once this exercise has been completed and rolled out successfully. QuickBooks may be used until this is implemented. The current MAREP chart of accounts may require updating to facilitate the recording and reporting of the grants for start-up businesses under the matching grant scheme (MGS) and the Climate Smart Agriculture initiatives. Separate accounting entries are to be made for the in-kind or other contributions made by beneficiaries.

- 16. Internal Controls, Policies and Procedures: At the Programme level, internal controls are implemented to ensure that resources are properly utilised for the Programme objectives with funds reaching the intended beneficiaries. GoG Public Financial Management regulations and systems will be applied during the implementation of SAEP .The accounting systems, policies, procedures and internal controls to be used by the PMU for accounting and managing programme funds will be documented in the Financial Procedures Manual. The manual will describe the internal control procedures, basis of accounting, standards to be followed, authorization procedures, financial reporting processes, budgeting procedures, matching grant administration procedures, in-kind and other beneficiary contribution recording procedures and financial forecasting procedures, as well as Financial data back-up procedures and contract management. In addition, the Programme Operations Manual should document procedures to be undertaken for the selection of grantees. It is foreseen that the SAEP manual will be an update of MAREP's existing Financial Procedures Manual, which will require IFAD's non objection at start-up, as well as later during implementation, should any revisions be introduced.
- 17. Adherence to the internal control framework will be verified during the internal and external audit exercises, with reporting to IFAD through submission of an internal audit report and Management letter, in line with IFAD's External audit guidelines. Furthermore, compliance with internal controls will be part of the fiduciary checks performed during supervision missions.
- 18. In order to complement the GoG internal control mechanisms, specific internal controls will be set up at the Programme level, as follows:
 - Monthly bank and reporting reconciliations prepared by the Finance Manager and sent to the MoF for review and approval. As budget control is supported through the Government System, this will also be reflected in the financial reports to PSC;
 - The PMU will identify the central filing place for all SAEP documents to facilitate traceability and quick access to documents during supervision and implementation support missions and audits;
 - The Programme will maintain an updated fixed asset register, identifying assets codes/numbers for ease of identification. Physical verification is to take place on a quarterly basis.
- 19. **Financial Reporting Arrangements**: The SAEP PMU will be required to prepare and submit to IFAD separate semestral interim financial reports to account for Programme activity expenditure, no later than 60 days after the end of each semester. The PMU will maintain an adequate filing system of all relevant supporting documentation, with copies of Programme accounting entries in respect of the source and utilisation of funds, by category of expenditure, component and by co-financier. In line with IFAD's requirements, documentation will be reviewed by supervision missions and external/internal audits. The Programme will also prepare monthly and quarterly financial management reports designed to provide relevant information to PSC for management decision making and control, financiers and other stakeholders to monitor the programme's performance. Implementing partners will be required to submit simplified quarterly financial reports to FM of the PMU, for validation with their replenishment requests and for inclusion in the Programme reports.
- 20. The annual financial statements for MAREP are currently carried out in accordance with International Public Sector Accounting Standards (IPSAS) cash basis. These include a statement of sources and uses of funds receipts and payments that recognizes all receipts, payments, as well as balances controlled by MoF for the programme. The MoF is planning to introduce and implement the

inclusion of accruals for all financial statements relating to line Ministries and Development Projects/ programmes. It is expected that this basis will be used for the preparation of SAEP financial statements in the next 2/3 years.

- 21. **Internal Audit of the Programme:** The Internal Audit department of MoF is to include SAEP in its internal audit work plans with the submission of SAEP's reports to MOF and the PSC. IFAD will require submission of management action plans and progress of implementation of the internal audit recommendations. Internal audit reports are expected to provide assurances that SAEP is being implemented in accordance with the approved POM and in compliance with GoG regulations and the IFAD/CDB financing agreements. A key risk is the low staff level capacity to cover the internal audit requirements of the programme. It is recommended that at start up, internal audit staff be present and attend to familiarise themselves to IFAD procedures.
- 22. **External audits:** The external audit of the Programme will be conducted in accordance International Standards on Auditing, under specific TORs generated in line with IFAD approved Audit Guidelines. The latter are expected to be updated next year. For MAREP the statutory audit institution the Department of Audit (DoA) has recently been engaged to undertake the external audit of the 2016 financial statements. During the design mission a light assessment of the DoA was undertaken, whereby it was advised that its reporting independence structure is still being evaluated. The World Bank Unit in Grenada advised that the DoA has conducted the external audit of its Projects since 2015, on a timely basis and in a satisfactory manner. In the case of MAREP, for 2015 and earlier years, private external auditors were engaged to conduct the audit.
- 23. In compliance with IFAD's General Conditions, the SAEP financial statements, prepared by the PMU and submitted through the MoF, will be audited on an annual basis and the audit report together with the related management letter are to be submitted to IFAD no later than six months after the end of each fiscal year. Costs incurred for the External audit will be borne by the Programme. Any internal control issues that are identified during the course of the audit will be documented and an action plan submitted to IFAD together with the audit report. IFAD will check the status of implementation of the action plan during supervision missions. Sample Draft Terms of Reference for External audit are attached at the end of this Appendix, which may need to be adjusted once the revised IFAD Audit Guidelines are approved by the Fund.
- 24. **Start up and retroactive financing:** As an exception to section 4.08(a)(ii) of the General Conditions, specific eligible expenditures during the preparatory period from the start of negotiations (expected to be in November 2017) to the entry into force (expected to be in March 2018), up to the equivalent of USD 400 000, pre-financed by the GoG, will be reimbursed from the IFAD loan, after the Financing Agreement has entered into force and any conditions precedent to withdrawal have been met. The following categories and types of expenditure shall be covered by the retroactive financing: (i) vehicles, equipment and materials; (ii) consultancies, training and technical assistance; (iii) salaries and allowances; (iv) operating Costs. In addition to this retroactive financing, an advance can be requested to cover start-up costs up to the maximum amount of USD 250,000,for eligible expenditures incurred between the date of entry into force of the Financing Agreement and the satisfaction of the conditions precedent to withdrawal.
- 25. **Supervision Plan (FM)** It has been agreed that the Programme will be supervised together with CDB participation, when possible. Due to the expected FM low risk rating, it is foreseen that in the first year of implementation, the supervision plan will include site visits, also to the implementing partners, as well as the review of latest progress and interim financial reports against POW allocations. For subsequent years, the FM supervision will be risk-based and conducted by FMD or a FM specialist, including inter alia the following:
 - FM field visits to confirm the successful achievement of value for money activities and to conduct an assessment of FM, including adherence to internal control and POM;
 - Review the programme's quarterly Financial reports, progress against planned budget activities and recommending remedial actions, where necessary;

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Climate Smart Agriculture and Rural Enterprise Programme (SAEP) Final project design report

Appendix 7: Financial management and disbursement arrangements

- Disbursement management and review of financial flows, ensuring adequacy of financial flows, including counterpart funds;
- Review the audited financial statement reports and management letters from the external auditors and follow up on material accountability issues by engaging with the Team leader, GoG and external auditors.

Appendix 7: Financial management and disbursement arrangements

Annex 1: Auditor's Draft TORs

1. The following are draft terms of reference (TORs) on the basis of which the Lead Programme Agency (LPA) agrees to engage the audit firm ("the auditor") to perform an audit of SAEP, and to report in connection with the Financing Agreements to the International Fund for Agricultural Development (IFAD) and the Caribbean Development Bank (CDB) concerning the loan financing for the Climate Smart Agriculture and Rural Enterprise Programme.

A. Responsibilities of the parties to the engagement

- 2. The LPA refers to the entity that executes the Programme on behalf of the borrower/recipient and that has signed the agreement with IFAD and CDB.
 - The LPA is responsible for providing financial statements for the activities financed by the financing agreements and for ensuring that these financial statements can be properly reconciled to the LPA records and accounts in respect of these services.
 - The LPA accepts that the ability of the auditor to perform the procedures required by this
 engagement effectively depends on the LPA's provision of full and free access to its staff
 and records and accounts.
 - The LPA shall provide the auditor with all necessary documentation to perform the assignment properly; in particular, the following information shall be provided to the auditor before the beginning of the assignment:
 - Financing agreements;
 - Annual progress reports;
 - Programme Operations Manual (POM), inclusive of the Financial management manual:
 - Organizational charts along with names and titles of senior managers;
 - Names and qualifications of officers responsible for financial management, accounting and internal audit;
 - Description of information technology facilities and computer systems in use; and
 - Copies of the minutes of negotiations, the programme design document, the annual work programme and budget (AWPBs), and the Letters to the Borrower (LTBs), if available.
- 3. **"The auditor"** refers to the auditor who is responsible for performing the agreed procedures as specified in these TORs, and for submitting a report of factual findings to the LPA.
- 4. The auditor shall provide:
 - A separate opinion on the programme financial statements (PFSs). Minimum content of the PFSs to be provided by the programme:
 - Yearly and cumulative statements of sources and application of funds, which should disclose separately IFAD funds, CDB funds, Government funds and beneficiaries' funds;
 - Yearly and cumulative SOEs by withdrawal application and category of expenditures;
 - Reconciliation between the amounts shown as received by the programme and those shown as being disbursed by IFAD/CDB should be attached as an annex to the PFSs. As part of that reconciliation, the auditor will indicate the procedure used for disbursement (SA funds, letters of credit, special commitments, reimbursement or direct payment) and indicate whether the expenditure is fully documented or uses the summary of expenditures format;
 - Cumulative status of funds by category;
 - A statement of comparison between actual expenditures and budget estimates;

Appendix 7: Financial management and disbursement arrangements

- Notes accompanying the PFSs; fixed assets;
- Full disclosure of cash balances; and
- Other statements or disclosures relevant to the programme, e.g. financial monitoring reports, grants approved by Selection Committees, etc.
- A separate opinion on withdrawal applications/statements of expenditure / summary of expenditures (SOEs). The audit will include a review of SOEs used as the basis for submitting withdrawal applications. The auditor will carry out tests and reviews as necessary and relevant to the circumstances. SOE expenditures will be carefully compared as to eligibility with relevant financial agreements and the disbursement letters, and with reference to the Programme design report for guidance when necessary. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed, auditors will note these separately. A schedule listing individual SOEs withdrawal applications by reference number and amount should be attached to the PFSs. The total withdrawals under the SOE procedure should be part of the overall reconciliation of IFAD disbursements described above. The auditor's opinion should deal with the adequacy of the procedures used by the Programme for preparing SOEs and should include a statement that amounts withdrawn from the Programme account on the basis of such SOEs were used for the purposes intended under the agreements.
- A separate management letter addressing the adequacy of the accounting and internal control systems of the Programme, including compliance with the IFAD Procurement Guidelines and such other matters as IFAD may notify the LPA to include in the audit.
- 5. The auditor is requested to comment on:
 - Economy, efficiency and effectiveness in the use of programme resources; Achievement of planned programme results;
 - Legal and financial obligations and commitments of the programme and the extent of compliance or non-compliance thereof;
 - Systems and procedures such as improvements in accounting, information technology or computer systems, and operations that may be under development, on which the auditor's comments are necessary to ensure effective controls; and
 - Other activities on which the auditor may consider it appropriate to report.

Auditors shall certify:

- Whether the PFSs are drawn up in conformity with internationally accepted accounting standards:
- Whether the PFSs are accurate and are drawn up from the books of accounts maintained by the programme:
- Whether the provisions of the financing agreement are adhered to;
- Whether procurement has been undertaken by the programme in accordance with applicable procurement procedures and the IFAD Procurement Guidelines;
- The existence of any significant assets purchased and confirm their existence and use for programme purposes;
- Whether the programme has an effective system of internal audit at all levels; and
- Whether the expenditures claimed through SOEs are properly approved, classified and supported by adequate documentation.
- 6. In the case of supreme audit institutions, these should be members of the International Organization of Supreme Audit Institutions (INTOSAI).

Appendix 7: Financial management and disbursement arrangements

B. Subject of the engagement

7. The subject of this engagement would be for the financial statements for the period ending 31 December 20xx in connection with the agreement for the period covering the [1st/2nd/3rd, as the case may be] implementation year to 31 December 20xx. The information, both financial and non-financial, that is subject to verification by the auditor is all information that makes it possible to verify that the expenditures claimed by the LPA in the financial statements have occurred, and are accurate and eligible. Annex 1.1 (to be completed) to these TORs contains an overview of key information about the agreement and the services concerned.

C. Reason for the engagement

8. The LPA is required to submit to IFAD an audit report produced by an external auditor under Article IX of the General Conditions for Agricultural Development Financing.

D. Engagement type and objective

- 9. This constitutes an engagement to perform specific agreed procedures following the IFAD Guidelines on Project Audits provided to the auditors by the LPA and are available at www.ifad.org/pub/basic/audit/borrower e.pdf . The objective of this audit is for the auditor:
 - To verify that the expenditures claimed by the LPA in the financial statements for the activities covered by the agreement have occurred ("reality"), are accurate("exact") and are eligible (i.e. that expenditure has been incurred in accordance with the terms and conditions of the agreement); and
 - To submit a report of factual findings with regard to the agreed procedures performed.

E. Scope of work

- 10. The auditor shall undertake this engagement in accordance with these TORs and with:
- 11. International Standards on Auditing (ISAs) including ISA 701 and subsequent changes introduced and to perform agreed procedures regarding financial information as promulgated by IFAD; the audit will be carried out based on the professional judgement of the auditor on the extension of tests and controls to apply.
 - The Code of Ethics for Professional Accountants issued by IFAD. IFAD requires that the auditor also complies with the independence requirements of the Code of Ethics for Professional Accountants.
 - IFAD Guidelines on Project Audits.
- 12. The Audit report together with the related management letter are to be submitted to IFAD and CDB no later than six months after the end of each fiscal year.

Specific coverage of audit

- 13. The auditor will have to:
 - check whether the funds received from IFAD have been used in accordance with the
 conditions stipulated in the IFAD Financing Agreement and CDB Financing Agreement with
 due attention to economy and efficiency and solely for the purpose for which the financing
 was provided.
 - verify whether the share of the Government of Grenada (counterpart funds) have been released and utilized in accordance with the rules and regulations with due attention to economy and efficiency and solely for the purpose for which they were provided.
 - confirm whether the goods, consultancy and other services, and civil works financed out of programme funds have been procured in accordance with stipulations in the IFAD and CDB financing agreements.

- ensure whether all necessary supporting documents, records and accounts have been kept in respect of all programme expenditures.
- form an opinion as to the preparation of the Programme accounts in accordance with consistently applied standard accounting practices and whether these provide give a true and fair view of the financial status of the programme at the end of the financial year and the resources and expenditure for the year.
- verify the fixed asset registry and accuracy of the assets maintained by the Programme, including any changes to the fixed assets register, such as deletions or additions and also verify frequency of physical verification of assets.
- verify and provide clearances as applicable on the status of prior years (where applicable) audit observation and the actions taken by the Programme and report on the outstanding observations and actions to be taken.

To enable the auditors to express a professional opinion on the financial position and final accounts of the Programme for the financial year F.Y. ending 31 December 20xx and of the funds received and expenditure incurred till 31 December 20xx. GUIDEL.

Planning, procedures, documentation and evidence

14. The auditor should plan the work so that an effective audit can be performed. For this purpose, the auditor performs the procedures specified in the IFAD Guidelines on Programme Audits and uses the evidence obtained from these procedures as the basis for the report of factual findings. The auditor should document matters that are important in providing evidence to support the report of factual findings, and evidence that the work was carried out in accordance with ISAs and these TORs.

F. Reporting

15. The report on this audit should describe the purpose and the agreed procedures of the engagement in sufficient detail to enable the LPA and IFAD and the CDB to understand the nature and extent of the procedures performed by the auditor. Use of financial and audit reporting is governed by IFAD rules.

G. Other terms

16. The audit firm / company shall not share the data / information and analysis relating to audit service, obtained during the course of their audit and verification, with any other person or entity. Any information, pertaining to the Government and any other agencies involved in the programme, which comes to the knowledge of the audit frim in connection with this assignment will be deemed to be confidential and the Audit firm will be fully responsible for the same to be kept confidential and held in trust, as also for all consequences of is concerned personnel failing to do so. The Audit firm shall ensure secrecy of information and data as same is not intended for public distribution.

Annex 1.1: Information about the subject of the audit for IFAD

(to be completed upon signature of Financing Agreement)

Information about the subject of the audit	
Reference number and date of the agreements	
Country	
Legal Basis of the Agreements	
Start date of the IFAD agreement	
End date of the IFAD agreement	

Appendix 8: Procurement

A. Introduction

- 1. Public procurement in Grenada is subject to the Public Procurement and Disposal of Public Property Act No. 39 of 2014 Arrangement of Clauses, as well as The Public Procurement and Disposal of Public Property Regulations S.R. &O.32 of 2015; the Public Procurement and Disposal of Public Property (Disposal Committee) Regulations S.R. &O.30 of 2015; and the Public Procurement and Disposal of Public Property Act (Public Procurement Review Commission) Regulations S.R.&O.31 of 2015. This procurement framework ensures adherence to the principles of good governance namely accountability, transparency, integrity and value for money in public procurement.
- 2. The Procurement Act of 2014 sets out procedures for the control of the public procurement to ensure that public funds are used in the most cost-effective manner. "Public funds" has the meaning assigned to it in the Public Finance Management Act and also includes monetary resources appropriated to procuring entities through the budgetary process, as well as extra budgetary funds including aid grants and credits, put at the disposal of procuring entities by foreign donors, and revenues of procuring entities and funds that are: (a) received or receivable by the Government, a statutory body, an executive agency or a state controlled enterprise; (b) raised by an instrument from which it can be reasonably inferred that the Government accepts ultimate liability in the case of default; (c) spend or committed for future expenditure, by the Government, a statutory body or a Government controlled enterprise; (d) distributed by the Government, a statutory body or a Government controlled enterprise to a person; or (e) raised by a private body in accordance with a statutory instrument, for a public purpose. The before mentioned means that the procurement procedures apply to Procurement funded by Multilateral Development Banks and similar external agencies such as the IDA, IADB, CDB, EU, IFAD, etc.
- 3. The Procurement Act, also states that the procurement processes shall be carried out by a procurement unit established in each public entity identified with capabilities to procure. Otherwise, the Central Procurement Unit (established within the MoF) shall perform the procuring on behalf that entity.
- 4. Finally, this Act establishes in its article 5 (Part I), that (1) If there is a conflict between this Act or the Regulations and any other law of Grenada, in matters relating to public procurement and disposal, this Act and the Regulations shall prevail; and (2) The requirements and obligations arising from a treaty or other international agreement to which Grenada is a party are to be applied where the provisions of this Act and the Regulations are inconsistent with it; but in all other respects, procurement shall be governed by this Act and the Regulations.
- 5. In order to comply with IFAD General Conditions procurement approach in respect of the use of existing national procurement systems to procure goods, works and services in projects financed by IFAD, an assessment was carried out to verify if the Borrower regulations are consistent with IFAD's. In this sense, the IFAD Procurement Guidelines were compared with the Grenada Procurement framework (Procurement Act 2014). The review confirms that the Grenada procurement procedures generally conform to the IFAD procurement principles. The national procedures could be used on IFAD projects, without risk. Though, IFAD's procedures shall supersede the Borrower's procedures where there are inconsistencies between the two procedures.
- 6. From the entry into force of the Procurement Act and its regulations (less than two years ago, August 2014 and September 2015, respectively), both the Public Procurement Board Committee and the Procurement Unit in the MoF have turned to start-up activities (i.e. drafting mandatory forms, providing advice and assistance, assessing government entities to procure, promoting training, etc.). Due to the above, it was agreed with the Procurement Unit of the MoF that IFAD's Procurement Guidelines shall govern the proposed programme. In the programme mid-term evaluation, it will be assessed whether the procurement act could be used or not at that time.

Appendix 8: Procurement

7. Procurement shall be undertaken only during the Programme implementation period, i.e. from the date of effectiveness to Programme Completion date and in accordance with the procurement plans approved by IFAD. Procurement will be directly implemented by the PMU and will be subject to the provisions of IFAD "Procurement Guidelines" and the procedures set out and or referred to in schedule in the IFAD financing agreement.

- 8. Before the commencement of procurement and annually thereafter, the PMU shall furnish IFAD for approval an 18-month procurement Plan as described in Appendix 1, paragraph 1 of the IFAD Procurement Guidelines. The Procurement Plan shall specify, among others, the method of procurement for each contract to be financed, including thresholds, ceilings and preferences to be utilised in the implementation of procurement under the Programme. The Procurement Plan shall also specify any additional requirements as may be set out in the IFAD Procurement Guidelines with respect to certain methods of procurement. An Indicative Procurement Plan for the first eighteen (18) months of Programme implementation should be prepared in consultation with the PMU at the start of the Programme and submitted to IFAD for 'no objection'.
- 9. In the preparation of this assessment valuable lesson learned under MAREP should be taken into consideration. The main issues identified were: 1) Procurement Plans prepared surpassed the real capabilities of execution; 2) Contract awards were not publicly advertised; 3) the opening of bids takes more than 48 hours; 4) Contract administration is manual, since MAREP only has one person in charge of all fiduciary matters and the volume of her tasks surpasses her capabilities (i.e. amendments of contracts present some delays) 5) Procurement and FM functions are not separated, 6) Documents are recorded in different places and with no procurement approach, 7) Procurement activities are not periodically reported, and 8) Staffing is not enough to undertake all procurement project matters.
- 10. In order to reduce the procurement implementation risks the following action plan which has been agreed with the PMU is proposed:
 - Segregate the FM and procurement functions. Recruit a dedicated programme procurement specialist (officer), who will be focusing on procurement management (ToRs and CV approved by IFAD) and assign budget for this action on the Annual Work Plan and Budget (AWBP). Before SAEP effectiveness.
 - Establish in the POM the following:
 - (a) mechanisms to assure the principal aspects for the procurement process are promptly and adequate advertised; and to reduce the time's opening of bids.
 - (b) The inclusion of a specific chapter on procurement, detailing all the procedures and Channels of responsibilities and flow of documentations and examples of standing bidding documents.
 - (c) Reporting every six months to IFAD about how the PP implementation is carried out.

B. Arrangement for Procurement under the Programme

- 11. **Procurement decisions** –The thresholds for various procurement methods and procedures and prior review (mentioned below exclude duties and taxes) are indicative and subject to changes as may be acceptable to IFAD. In general, contracts estimated to cost USD 50 000 or more for whatever category of procurement will be subject to prior review by IFAD.
- 12. **Procurement of goods, works and non-consulting services** will follow ICB or NCB procedures whichever is applicable. Materials, supplies and training and operating costs will be small and fall under LCB or Local Shopping procedures. In principle, a contract for supply of goods estimated to cost USD 200 000 equivalent or more will be awarded under ICB. Contracts which are equal to or less than USD 200 000 equivalent but more than USD 50 000 will be through NCB acceptable to IFAD, and those more than USD 5 000 but equal to or less than USD 50 000 equivalent through local shopping with at least three quotations.

- 13. **Contracts for consultants' services and studies** will also be in accordance with IFAD procurement guidelines. Terms of reference, conditions and terms of contracts, and the qualifications and experience of consultants will be subject to prior review and approval of IFAD, where applicable. Each contract for the supply of technical assistance, studies and training, and other services provided by consultants and other service providers shall be in principle awarded as indicated in Module H3. Before agreeing to any material modification or waiver of the terms and conditions of any contract, or granting an extension of the stipulated time for performance of such contract, or issuing any change order (except in cases of extreme urgency) that would increase the cost of the contract by more than 10% of the original price, the Borrower shall inform IFAD on the proposed modification.
- 14. **Business initiatives.** Procurement under Business Initiatives will be carried out by the SAEP PMU/MoF and by beneficiaries. Eligible expenditures under BI will include small works, construction materials, vehicles, equipment, engines, fuel, tools, technical assistance, non-consultants services and operational costs, as detailed in the POM. Procurement associated with the Business Initiatives will be documented in the BI document and therefore will not be listed nor updated in the PP.
- 15. **Review of Documents by IFAD-** The award of any contract for goods or work through direct Contracting or estimated to cost fifty thousand (USD 50,000) equivalent or more, shall be subject to prior review by IFAD. Also, the award of any contract for consulting services through Single Source selection or estimated to cost thirty thousand US dollars (USD 30,000) equivalent or more shall be subject to prior review by IFAD.
- 16. **Review of procurement decisions-** Procurement is fundamentally the responsibility of the Government, but the IFAD supervision involves three main tasks in relation to procurement: (i) Review of the procurement plan; (ii) prior or ex-post review of procurement, and (iii) Review of prequalification of bidders.
 - (i) Review of Procurement Plan. The PMU will have a duly approved annual work plan and budget, which includes a procurement plan for all major procurements of goods, works and consulting services to be carried out within a period of at least 18 month. The first procurement plan will be updated after loan effectiveness and is to cover the initial 18 months of the Programme implementation period and is to be submitted to IFAD for approval. The procurement plan is to be updated annually (or as needed) to cover every subsequent 12-month period of Programme duration as part of the AWP&B.
 - (ii) Prior and Ex-post Review of Procurement. Irrespective of the method of procurement to be employed, the Finance Agreement specifies the threshold for prior review (i.e. for contracts valued at more than the threshold amount). The IFAD financing agreement specifies the extent to which the review procedures will apply in respect of the various categories of goods, works and services, in whole or in part, from the IFAD loan. Where prior review is not required, IFAD conducts post-award reviews on a sample basis of documentation and contracts submitted as supporting documents for withdrawal applications.
 - (iii) Review of Pre-qualification of Bidders. Pre-qualification involves review by IFAD in two instances: (a) prior to the government issuance of invitations to prequalify, IFAD reviews the draft documents to be issued, including the text of the invitation to prequalify, the qualification questionnaire and the evaluation methodology, together with a description of the advertising procedures to be followed; and (b) following the government's evaluation of submissions, IFAD reviews the draft evaluation report together with the list of prequalified bidders and a statement of their qualification, and of the reasons for excluding any applicant from prequalification.
- 17. **Procurement Monitoring and Reporting-** The PMU will keep a complete and up- to- date record of all procurement documentation and relevant correspondence in its files, which will be reviewed during supervision missions. It should be proposed that Monitoring reports on procurement progress will be submitted as part of progress reports on program implementation. The report shall include all information related with the completed, on –going and planned contracts.

Appendix 9: Programme cost and financing

A. Introduction

- 1. The current appendix aims to summarize the main assumptions, hypothesis and results of the Programme cost estimates, as well as the financing plan for the six year implementation period. It has been calculated using the COSTAB software.
- 2. All unit costs have been checked with several consultations on the field and especially with MAREP and implementation agencies costs.

B. Main assumptions and hypothesis

- 3. **Programme life**. The Programme will be executed during a 6 year period and is expected to begin between the middle and the end of the first semester of 2018.
- 4. **Co-financing.** IFAD is supposed to finance more than 53,3% of total costs, but only the current PBAS 2016/18 is granted for a total amount of USD 3,99 million (33,2%). Other USD 2,41 million (20,1%) are considered as a "financing gap" that could be allocated under next PBAS cycle. The CDB will contribute with USD 3 million for rural roads and drainage (25%), GIDC will contribute with USD 0,33 million (2,7%) and Governments contribution (16,7%) will be mainly in taxes but also as direct contribution in salaries and operating costs. Finally, Beneficiaries contribution (in kind, labour and/or cash) represents 2,2% of total costs.
- 5. **Exchange rate**. The island is a member of the ECCU and has a pegged EC dollar to US dollar at a rate of EC \$2,7169 to USD \$1 since 1976. As such, the exchange rate has been fixed for over 41 years and after consultations with the Macroeconomic Unit of the Ministry of Finance no changes are considered.
- 6. **Price contingencies.** During the next six years, inflation is expected to average 2,6 percent. It has been estimated from an average between IMF's, World Bank's and Ministry of Finance's forecast (2,6%, 2,9% and 2,5% respectively). Inflation is hence expected to be below the Central American and Caribbean average (2,8% and 4,3% respectively).
- 7. **Physical contingencies and foreign exchange.** Physical contingencies and foreign exchange parameters have been defined for each expenditure category. They are expressed in the table below.

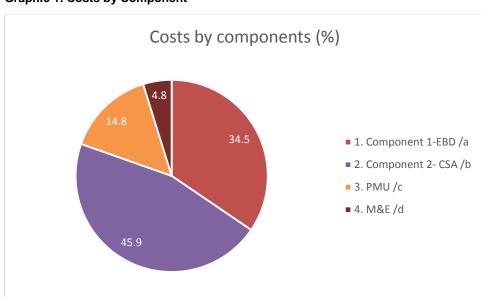
Table 1. Parameters and financing rule

Expenditure Acct	% Foreign Exchange	Physical cont.	Financing rule
A. Vehicles, Equipment and Materials	50%	10%	100% IFAD (excluding taxes)
B. Grants	0%	0%	90% IFAD, 10% Beneficiaries
C. Consultancies, trainings and TA	10%	5%	100% IFAD (excluding taxes)
D. Works	80%	10%	100% CDB
E. Conventions			82,5% IFAD, 17,5% GIDC
F. Salaries and operating costs	0%	0%	12,5% IFAD 10, 87,5% GoG 19,3% IFAD 11; 80,7% GoG
Others	•		
VST	0%	15%	

- 8. **Unit Costs**. Unit costs have been calculated in domestic currency unit (Eastern-Caribbean Dollars ECD) and are based on field visits and consultations, including taxes. The execution partners budget estimates and current MAREP's unit costs have been taken into account. In certain instances lump sum allocations have been computed in order to give flexibility in procurement or for the implementation of such activity/task, referring also to conventions with implementation partners. However, detailed tables have been prepared with more precise estimates behind the lump sums. It is noted that all unit costs are indicative and are used for the purposes of estimating the overall project costs. These are, therefore, subject to changes and revision during project implementation, every year at the time of preparing Annual Work Plans and Budgets.
- 9. **Taxes and duties**. Taxes and duties have taken into account the current VAT level (15%) that applies for almost all goods and services.
- 10. **Expenditure Accounts**. Expenditure accounts have been established taking into account IFAD's official list of 2013⁵⁰ for loans.

C. Summary of Programme's main cost tables

- 11. **Total Costs.** Total Programme costs over the six-year period are estimated at around USD 12 million (around ECD 32,4 million), including contingencies and taxes. Base costs are estimated at USD 11,29 million (around ECD 30,48 million, 94% of total costs) and both physical and price contingencies represent USD 0,71 million (around ECD 1,9 million, 6% of total costs). Investment costs are USD 9,9 million (83% of total costs) and recurrent costs are estimated at USD 2,1 million (17% of total costs).
- 12. **Costs by component.** Component 1: Entrepreneurship and Business Development, comprises 34,5% of costs; Component 2: Climate Smart Agriculture, comprises 45,9%; Programme Management comprises 14,8%; and Monitoring and Evaluation covers 4,8%.



Graphic 1. Costs by Component

⁵⁰ IC/FOD/02/2013.

Table 2. Project Costs by Component (local '000 and USD '000)

		Com	ponents I	Grenada SAEP Project C	ost Sumn	narv						
		,										
	(Local '000) (US\$ '000)											
	Local	Foreign	Total	Local	Foreign	Total						
1. Component 1-EBD /a	10,821	-	10,821	4,008	-	4,008						
2. Component 2- CSA /b	7,836	5,617	13,453	2,902	2,080	4,982						
3. PMU/c	4,584	169	4,753	1,698	63	1,760						
4. M&E/d	1,347	110	1,457	499	41	540						
Total BASELINE COSTS	24,587	5,896	30,483	9,106	2,184	11,290						
Physical Contingencies	480	568	1,048	178	210	388						
Price Contingencies	375	492	867	139	182	321						
Total PROJECT COSTS	25,442	6,956	32,399	9,423	2,576	12,000						
\a Entrepreneurship and Business	 Development											
\b Climate Smart Agriculture												
\c Project Management Unit												
\d Monitoring and Evaluation												

13. **Costs by financer.** IFAD is expected to finance up to 53,3% of the total Program cost. There is at present a financing gap of USD 2,41 million (20,1%) which is expected to be covered by the allocation of IFAD's next 2019-2021 PBAS (Performance Based Allocation System). IFAD's current PBAS financing is a concessional loan of USD 3,99 million (33,2%) and the CDB will finance USD 3 million more (25% of total costs). The Government will finance USD 2 million (16,7% of the total cost), mainly through taxes, operative costs and staff salaries (including some existing positions). GIDC will contribute for USD 0,33 million and Beneficiaries will contribute for around USD 0,5 million (2,2% of total costs), in kind, labour or cash.

Table 3. Program Costs by financer (000 USD)

000 USD	GOG	IFAD PBAS 2016- 18	IFAD PBAS 2019- 21a/	Beneficiaries	CDB	GIDC	Total
Component 1	113	1,702	1,844	153	-	330	4,142
Component 2	266	1,932	195	117	3,000	-	5,510
PMU	1,340	258	177	=	-	-	1,775
M&E	281	98	194	-	-	-	573
Total	2,000	3,990	2,410	270	3,000	330	12,000

a/ To be confirmed

Costs by financier (%)

2.7

16.7

The Government

FIDA 10

Financing Gap

Beneficiaries

CDB

GIDC

Graphic 2. Costs by financer

14. **Costs by year.** The execution curve by year is presented in the graphics and tables below.

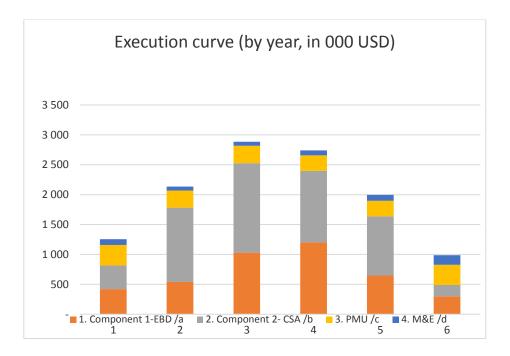


Table 4. Programme's Costs by year (including contingencies, in '000 USD)

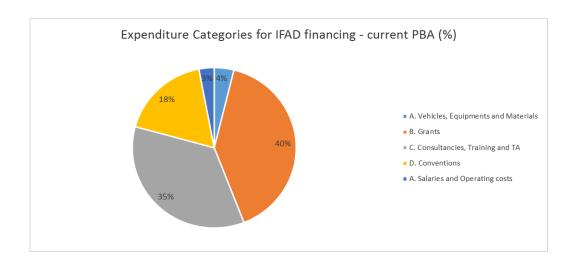
		Totals Including Contingencies (US\$ '000)												
	1	2	3	4	5	6	Total							
1. Component 1-EBD/a	421	541	1,032	1,200	649	300	4,142							
2. Component 2- CSA /b	396	1,241	1,495	1,197	990	190	5,509							
3. PMU/c	343	286	292	259	259	337	1,775							
4. M&E/d	96	67	66	85	98	161	573							
Total PROJECT COSTS	1,256	2,135	2,884	2,741	1,995	989	12,000							

[\]a Entrepreneurship and Business Development

Table 5. Programme's Costs by expenditure category by financer (000 USD)

The	Governme	nt	FIDA 10	Fii	nancing Gap) В	eneficiaries		CDB		GIDC		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs														
A. Vehicles, Equipments and Materials	28	15.0	155	82.2	5	2.8	-	-	-	-	-	-	188	1.6
B. Grants	-	-	1,605	59.5	821	30.5	270	10.0	-	-	-	-	2,695	22.5
C. Consultancies, Training and TA	246	11.2	1,403	63.9	548	24.9	-	-	-	-	-	-	2,196	18.3
D. Conventions	0	-	707	38.0	826	44.3	-	-	-	-	330	17.7	1,863	15.5
E. Works	0	-	-	-	-	-	-	-	3,000	100.0	-	-	3,000	25.0
Total Investment Costs	274	2.8	3,870	38.9	2,199	22.1	270	2.7	3,000	30.2	330	3.3	9,942	82.8
II. Recurrent Costs														
A. Salaries and Operating costs	1,727	83.9	120	5.8	211	10.3	-	-	-	-	-	-	2,058	17.2
Total Recurrent Costs	1,727	83.9	120	5.8	211	10.3	-	-	-	-	-	-	2,058	17.2
Total PROJECT COSTS	2,001	16.7	3,990	33.2	2,411	20.1	270	2.2	3,000	25.0	330	2.7	12,000	100.0

Graphic 3. Costs by Expenditure Category for IFAD financing (current PBAS)



[\]b Climate Smart Agriculture

[\]c Project Management Unit

Annex 1: Main summary tables

Table 1. Programme's costs by Expenditure Category by year (including contingencies (in 000 USD)

		Grenada SAEP			_		
Expenditure Ac	•	rs Tota JS\$ '000)	ils includi	ng Contin	gencies		
	Totals Includ	. ,	ingencies	5			
Year	1	2	3	4	5	6	7
I. Investment Costs							
A. Vehicles, Equipments and Materials	145	18	19	3	3	-	188
B. Grants	150	355	944	853	393	-	2,695
C. Consultancies, Training and TA	340	483	432	427	242	271	2,196
D. Conventions	275	280	305	399	304	300	1,863
E. Works	61	660	846	720	714	-	3,000
Total Investment Costs	972	1,796	2,545	2,402	1,656	571	9,942
II. Recurrent Costs							
A. Salaries and Operating costs	284	339	339	339	339	417	2,058
Total Recurrent Costs	284	339	339	339	339	417	2,058
Total PROJECT COSTS	1,256	2,135	2,885	2,741	1,995	989	12,000

Table 2. Programme's costs by Expenditure Category by Component including contingencies (in 000 USD)

Forman diagram American II	Grenada SAEP		4!	!	
Expenditure Accounts b	(US\$ '000)	otals including C	ontinge	ncies	
	Component 1-EBD	Component 2- CSA	PMU	M&E	Total
I. Investment Costs					
A. Vehicles, Equipments and Materials	-	34	111	43	188
B. Grants	1,525	1,170	-	-	2,695
C. Consultancies, Training and TA	755	1,091	105	246	2,196
D. Conventions	1,863	-	-	-	1,863
E. Works		3,000	-	-	3,000
Total Investment Costs II. Recurrent Costs	4,142	5,295	216	289	9,942
A. Salaries and Operating costs	-	215	1,559	284	2,058
Total Recurrent Costs		215	1,559	284	2,058
Total PROJECT COSTS	4,142	5,510	1,775	573	12,000
Taxes	113	76	43	43	276
Foreign Exchange	-	2,464	66	46	2,577

Table 3. Programme's costs by Expenditure Category (in 000 ECD and 000 USD)

	(1	Local '000))		(US\$ '000)	
	Local	Foreign	Total	Local	Foreign	Total
I. Investment Costs						
A. Vehicles, Equipments and Materials	235	235	470	87	87	174
B. Grants	7,277	-	7,277	2,695	-	2,695
C. Consultancies, Training and TA	5,126	198	5,324	1,898	73	1,972
D. Conventions	5,029	-	5,029	1,863	-	1,863
E. Works	1,366	5,463	6,828	506	2,023	2,529
Total Investment Costs	19,032	5,896	24,928	7,049	2,184	9,233
II. Recurrent Costs						
A. Salaries and Operating costs	5,557	-	5,557	2,058	-	2,058
Total Recurrent Costs	5,557	-	5,557	2,058	-	2,058
Total BASELINE COSTS	24,589	5,896	30,485	9,107	2,184	11,291
Physical Contingencies	480	568	1,048	178	210	388
Price Contingencies	375	493	868	139	182	321
Total PROJECT COSTS	25,445	6,957	32,401	9,424	2,577	12,000

Table 4. Programme's disbursements by semester by financer ('000 USD)

		Disburser	nents by Seme	sters and (US\$ '000)		ment Cas	h Flow		
			nancing Availab	ole			Costs to be		
	FIDA 10	Financing Gap	Beneficiaries	CDB	GIDC	-	Financed Project	e Governme	ent um ulative
	Amount	Amount	Amount		Amount	Total	Costs	Cash Flow	
4	408		8	31	24	471	628	-157	
2	408	_	8	31	24	471	628	-157	_
3	517	_	18	330	25	889	1,067	-178	
4	517	_	18	330	25	889	1.067	-178	
5	771	_	47	423	27	1,268	1,442	-175	
6	771	-	47	423	27	1,268	1,442	-175	-1,021
7	164	607	43	360	35	1,209	1,371	-162	-1,183
8	164	607	43	360	35	1,209	1,371	-162	-1,345
9	87	360	20	357	27	850	998	-147	-1,492
10	87	360	20	357	27	850	998	-147	-1,639
11	49	239	-	-	27	314	494	-181	-1,820
12	49	239	-	_	27	314	494	-181	-2,001
Total	3,990	2,411	270	3,000	330	10,000	12,000	-2,001	-2,001

Appendix 9: Programme cost and financing

Annex 2: Detailed cost tables

Component 1- EBD

								•	Unit								Other Accounts
				Qu	antit	ties			Cost		Totals In	cluding (Contingen	cies (US	\$ '000)	_	
	Unit	1	2	3	4	5	6	Total	(US\$)	1	2	3	4	5	6	Total	Fin. Rule
I. Investment Costs																	
A. VST																	
Vocational Skills Training (VST) 10 /a	Beneficiary	80	100	100			-	280	1,000	93	120	123	-	-	-	335	FIDA (100%)
Vocational Skills Training (VST) 11 /b	Beneficiary	-	-	-	100	0 20	-	120	1,000	-	-	-	126	26	-	152	FIDA_11 (100%)
Affirmative action for social inclusion 10 /c	lump sum									47	60	61	-	-	-	168	FIDA (100%)
Affirmative action for social inclusion 11 /d	lump sum									-	-	-	63	13	-	76	FIDA_11 (100%)
Additional motivational activities to engage youth at risk 10	lump sum									6	6	6	-	-	-	18	FIDA (100%)
Additional motivational activities to engage youth at risk 11	lump sum									-	-	-	6	-	-	6	FIDA_11 (100%)
Subtotal									_	146	185	190	195	39	-	755	
B. Start Up Support Package for Youth /e																	
GIDC MoU 10	Contract									275	280	305	-	-	-	860	FIDA (82.3%), GIDC (17.7%)
GIDC MoU 11	Contract									-	-	-	399	304	300	1,003	FIDA_11 (82.3%), GIDC (17.7%)
Subtotal									_	275	280	305	399	304	300	1,863	
C. Start Up Financing Facility																	
1. Business Grant Fund 10 /f	Amount									-	76	537	-	-	-	613	FIDA (90%), BENEF (10%)
2. Business Grant Fund 11	Amount									-	-	-	606	306	-	912	BENEF (10%), FIDA_11 (90%)
Subtotal										-	76	537	606	306	-	1,525	
Total									_	421	541	1,032	1,200	649	300	4,142	

[\]a Tuition, overhead service provider, materials, registration for CVQ with NTA, assessments, internal verification, external verification

[\]b Tuition, overhead service provider, materials, registration for CVQ with NTA, assessments, internal verification, external verification

[\]c Stipend, e.g. travel allow ance, childcare

[\]d Stipend, e.g. travel allow ance, childcare

[\]e BDO, Assesment of proposals, Specialized TA, Communication, Vehicles, Informatic equipment, Office Expenses and Transportation

[\]f At least 2 people each

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Appendix 9: Programme cost and financing

Component 2- CSA

																	Other Accounts
	Unit	1	2	Qua 3	antitie 4	5	6	Total	Unit Cost (US\$)	1	Totals Inc	cluding C	ontingen 4	cies (US\$ 5		Total	Fin. Rule
Investment Costs		•						·otai	(554)	•						Total	· ···· · · ·
A. Capacity Building																	
Trainings to trainers on CC and CSA	Unit	1	1	1	_	_	_	3	10,000	11	11	11	_	_	_	33	FIDA (100%)
Trainings to extension services on Business & Marketing 10 /a	Unit	1	1	1	_	-	_	3	5.000	5	5	6	-	_	_	16	FIDA (100%)
Trainings to extension services on Business & Marketing 11	Unit	_	-	_	1	1	1	3	5,000	-	-	-	6	6	6	18	FIDA_11 (100%)
Training to extension services on Backyard gardening	Contract	1	1	1	-	-	-	3	8,260	9	9	9	-	-	-	27	FIDA (100%)
Demonstration farms	Unit	1	4	1	_	_	_	6	8.000	9	35	9	-	_	_	52	FIDA (100%)
CSA aw areness raising through 4H clubs/MOA /b	Amount	1	1	1	1	1	1	6	30,000	32	33	34	34	35	36	204	FIDA (100%)
Trainings of Gender focal points and gender department staff 10	Amount								,	11	27	-	-	-	-	38	FIDA (100%)
Trainings of Gender focal points and gender department staff 11	Amount									_	_	_	29	_	_	29	FIDA_11 (100%)
btotal									_	76	120	69	69	41	42	417	= (,
Market opportunities																	
Market promotion activities /c	Unit	2	6	6	6	6	6	32	600	1	4	4	4	4	5	23	FIDA (100%)
Extension services on CSA practices /d																	,
1. Extension services																	
Extension services MCPM	Month	6	12	12	-	-	-	30	573	3	7	7	-	-	-	17	FIDA (100%)
Extension services compensation	Month	36	120	120	120	120	120	636	270	10	32	32	32	32	32	172	FIDA (100%)
MOA supervisor on extensionists	Month			12	12	12	12	69	2,496	22	30	30	30	30	30	172	FIDA (100%)
Consultant on retain contract 10	Month	9	18	18	-	-	-	45	2,496	22	45	45	-	-	-	112	FIDA (100%)
Consultant on retain contract 11	Month	-	-	-	18	18	18	54	2,496	-	-	-	45	45	45	135	FIDA_11 (100%)
Subtotal									_	58	114	114	107	107	107	608	_ ` ′
2. Extenisonist equipment /e	Kit	5	5	2	-	-	-	12	2,500	14	14	6	-	-	-	34	FIDA (100%)
3. Consultancies for CSA proposals assessments	Amount									-	11	11	11	-	-	34	FIDA (100%)
btotal										72	139	131	119	107	107	676	
CSA Grant Fund																	
CSA Grant Fund	Amount									150	279	407	247	87	-	1,170	FIDA (90%), BENEF (109
Rural roads and drainage /f																	
Roads and drainage /g	Amount									61	660	846	720	714	-	3,000	CDB (100%)
2. Engeneer at the ministry	Month	12	12	12	12	-	-	48	180	2	2	2	2	-	-	9	GOVT
btotal										63	662	848	722	714	-	3,009	
Investment Costs										363	1,205	1,459	1,161	954	154	5,295	
current Costs																	
Salaries and Allowances- Marketing Officer																	
Marketing Technical Officer 10	Month	12	12	12	-	-	-	36	1,357	16	16	16	-	-	-	49	FIDA (12.469%)
Marketing Technical Officer 11	Month	-	-	-	12	12	12	36	1,357	-	-	-	16	16	16	49	FIDA_11 (19.3%)
btotal										16	16	16	16	16	16	98	
Operating Costs																	
DSA 10	Days	160	160	160	-	-	-	480	94	15	15	15	-	-	-	45	FIDA (12.469%)
DSA 11	month	-	-	-	160	160	160	480	94	-	-	-	15	15	15	45	FIDA_11 (19.3%)
Fuel 10	Per vehicle	1	2	2	-	-	-	5	2,490	2	5	5	-	-	-	12	FIDA (12.469%)
Fuel 11	month	-	-	-	2	2	2	6	2,490	-	-	-	5	5	5	15	FIDA_11 (19.3%)
ototal									_	18	20	20	20	20	20	118	
Recurrent Costs									_	34	36	36	36	36	36	215	
										396	1,241	1,495	1,197	990	190	5,510	
IDC contracted hange of image of agriculture, CSA, nutrition, and social issues pertaining y	outh (workshops came	ne mater	iolo	_41													

d For ex: Participation in fairs and exhibitions
\text{\tin}}}}}}}}}} \endownintimes \text{\tinit}}}}}}}}} \end{\text{\t

Vg Laptop, cellphone, credit, soil analysis material
Vh Including recruitment of an engeneer advocated to the implementation
Vi Including salaries up to 72.000 (Engeneer)

Component 3 - PMU

															-	Other Accounts
	Unit	1			ntitie 4		Total	Jnit Cost _ (US\$)	1	Totals Inc	cluding C	ontinger 4	cies (US 5	\$ '000) 6	Total	Fin. Rule
I. Investment Costs								(,								
A. Capacity building																
PMU trainings	Unit	1	1	1	_		3	10,000	11	11	11	_	_	_	33	FIDA (100%)
Social Inclusion and Gender	Unit	2		2	_		7	5,000	11	16	11	_	_	_	38	FIDA (100%)
Consultancies and TA 10	Amount	_	•	_			•	0,000	5	5	6	_	_	_	16	FIDA (100%)
Consultancies and TA 11	Amount								-	-	-	6	6	6	18	FIDA_11 (100%
Subtotal								_	27	33	28	6	6	6	105	
B. Equipment and transportation																
Vehicles	Unit	2	_	_	_		2	38,500	78	_	_	_	_	_	78	FIDA (100%)
Informatic equipment /a	Kit	5	_	5	_		10	1,800	10	_	11	_	-	_	21	FIDA (100%)
Informatic System	Unit	1	_	_	_		1	10,000	11	_	_	_	_	_	11	FIDA (100%)
Broadband - Improve internet connection and VBM Router	Unit	1	_	_	_		- 1	1,000	1	_	_	_	-	_	1	FIDA (100%)
Subtotal								-	100	_	11	-	-	_	111	,
otal Investment Costs								_	127	33	39	6	6	6	216	
. Recurrent Costs																
A. Salaries																
1. PMU salaries																
Programme Manager 10	Month	6	12 1	12	_		30	3,144	19	38	38	_	_	_	94	FIDA (12.469%
Programme Manager 11	Month				12	12 12		3.144	-		-	38	38	38	113	FIDA_11 (19.3%
Programme Accountant 10	Month		12 1					2,496	15	30	30	-	-	-	75	FIDA (12.469%
Programme Accountant 11	Month					12 12		2.496	-		-	30	30	30	90	FIDA_11 (19.3%
Administrative Officer 10	Month	6	12 1	12			30	1,242	7	15	15		-		37	FIDA (12.469%
Administrative Officer 11	Month	-		_		12 12		1,242				15	15	15	45	FIDA_11 (19.3%
Compensation during MAREP closing /b	lump sum							.,	8	_	_	-		-	8	FIDA (12.469%
Procurement officer 10	Month	9	12 1	12	_		33	1,481	13	18	18	_	_	_	49	FIDA (12.469%
Procurement Officer 11	Month	_		-		12 12		1.481				18	18	18	53	FIDA_11 (19.3%
IT officer 10	Month	9		6				2,496	22	15	15	-			52	FIDA (12.469%
IT Officer 11	Month	-		-	6	6 6		2,496				15	15	15	45	FIDA_11 (19.3%
Accounts Clerk 10	Month	12		12	-		36	721	9	9	9		-		26	FIDA (12,469%
Accounts Clerk 11	Month		-		12	12 12		721	-	-	-	9	9	9	26	FIDA_11 (19.3%
Driver/Office Assistant 10	Month	12						778	9	9	9	-	_	-	28	FIDA (12.469%
Driver/Office Assistant 11	Month		-			12 12		778	-	-	-	9	9	9	28	FIDA_11 (19.3%
Cleaner/Office Attendant 10	Month	12					36	320	4	4	4	-	-	-	12	FIDA (12.469%
Cleaner/ Office Attendant 11	Month					12 12		320				4	4	4	12	FIDA_11 (19.3%
Technical Coordinator 10	Month		12 1					2,496	22	30	30				82	FIDA (12.469%
Technical Coordinator 11	Month		-			12 12		2,496		50	30	30	30	30	90	FIDA_11 (19.3%
Technical assistant 10	Month	12						1,357	16	16	16	-	-	-	49	FIDA (12.469%
Technical Assistant 11	Month			-		12 12		1,357	-			16	16	16	49	FIDA_11 (19.3%
Salaries 6 month- reduced team // Closing /c	Amount							1,007	_	_	_			78	78	FIDA_11 (19.3%
Subtotal	Amount							_	146	183	183	183	183	261	1,141	TIBA_TT (19.97
B. Operating Costs										.00	.00	.00	.00	20.	.,	
DSA 10	Days	45	45 4	15	_		135	94	4	4	4	_	_	_	13	FIDA (12.469%
DSA 11	Days		-	-		45 45		94				4	4	4	13	FIDA_11 (19.3%
Fuel 10	Per vehicle	4	4	4			12	2,490	10	10	10				30	FIDA (12.469%
Fuel 11	Per vehicle		-	-	4	4 4	12	2,490	-	-		10	10	10	30	FIDA_11 (19.3%
Vehicle maintenance 10	Per vehicle	4	4	4		7 7	12	3,500	14	14	14		-		42	FIDA (12.469%
Vehicle maintenance 10	Per vehicle	-	-	-	4	4 4		3,500	14	14	14	14	14	14	42	FIDA_11 (19.3%
Stationary Expenses 10	Amount	1		1	-		3 -	10,000	10	10	10	+			30	FIDA (12.469%
Stationary Expenses 10	Amount				1	1 1	3 -	10,000	.5	.5	.5	10	10	10	30	FIDA_11 (19.3%
Utility Services 10 /d	Amount	1	1	1			3 -	30,000	30	30	30	.5	-	.0	90	FIDA_11 (19.37
Utility Services 11	Amount		•	'	1	1 1	3 -	30,000	30	30	30	30	30	30	90	FIDA (12.469%)
Building maintenance 10	Amount	1	1	1		1 1	3	1,500	2	2	2	30	30	30	90 5	FIDA_11 (19.39 FIDA (12.469%
Building maintenance 10 Building maintenance 11	Amount				1	1 1		1,500	2	-	-	2	2	2	5	FIDA (12.469%)
Subtotal	Ambunt	-	-	-	'		3	1,500	70	70	70	70	70	70	418	1 DA_11 (19.37
otal Recurrent Costs								_	216	253	253	253	253	331	1,559	
Total								_	343	286	292	259	259	337	1,775	
Including UPS supplies for existing desktops, server and internet router									343	200	232	259	209	337	1,775	
15% - also for the M&E specialist																
Reduced team of 7																
Reduced team of 7 Rent, Electricity, Internet, Telephone, Water, etc.																

GRENADA Climate Smart Agriculture and Rural Enterprise Programme (SAEP) Final project design report Appendix 9: Programme cost and financing

M&E System

																	Other Accounts
		_	2	Qua 3	anti 4	ties	_	l	Jnit Cost _ (US\$)		otals Inc	cluding C	ontingen 4	cies (US:	\$ '000) 6	Total	Eliza Barta
	Unit	_ 1	2	3	4	5	6	Iotal	(US\$)	1	2	3	4	5	6	I otal	Fin. Rule
. Investment Costs																	
A. Consultancies and Studies								_									
Consultancy to update MIS to SAEP LF indicators	Unit	1	-	-		-	-	1	15,000	15	-	-	-	-	-	15	FIDA (100%)
Impact Studies	Unit	-	-	-		-	1	1 7	35,000	-	-	-	-	-	40	40	FIDA_11 (100%)
PCR reports	Unit	-	-	-		-	1	1 💆	15,000	-	-	-	-	-	15	15	FIDA_11 (100%)
External Audits 10	Unit	1	1	1		-	-	3	3,000	3	3	3	-	-	-	9	FIDA (100%)
External Audits 11	Unit	-	-	-	1	1	1	3	6,000	-	-	-	7	7	7	20	FIDA_11 (100%)
Social inclusion and gender equality impact study	Unit	-	-	-		- 1	-	1 💆	10,000	-	-	-	-	12	-	12	FIDA_11 (100%)
Know ledge managment products	Unit	-	-	-	1	1	2	4	12,000	-	-	-	14	15	30	60	FIDA_11 (100%)
Subtotal										18	3	3	21	33	93	172	
B. Workshops and trainings																	
Start-up Workshop	Unit	1	-	-		-	_	1 -	6,000	6	-	-	-	-	-	6	FIDA (100%)
Closing Workshop	Unit	-	-	-		-	1	1 💆	6,000	-	-	-	-	-	7	7	FIDA_11 (100%)
Training GIDC and MOA in use of MIS	Unit	1	-	-		-	_	1 -	4,000	4	-	-	-	-	-	4	FIDA (100%)
Forums for CBO engagement in policy dialogue 10 /a	Unit	-	1	1		-	_	2	4,000	_	4	4	_	_	_	8	FIDA (100%)
Forums for CBO engagement in policy dialogue 11 /b	Unit	-	_	_	1	1	1	3	4,000	_	_	_	4	4	5	13	FIDA_11 (100%)
Annual evaluation and planning consultation workshops 10	Unit	-	1	1		-	_	2	4,000	_	4	4	_	_	_	8	FIDA (100%)
Annual evaluation and planning consultation workshops 11	Unit	-	_	_	1	1	1	з 🗖	4,000	_	_	_	4	4	5	13	FIDA_11 (100%)
Subtotal									-	10	8	9	9	9	16	61	_ ` `
C. Equipments and materials																	
M&E training material 10	Amount									4	3	2	_	_	_	10	FIDA (100%)
M&E training material 11	Amount									_	_	_	3	3	_	6	FIDA_11 (100%)
M&E Equipment /c	Kit	1	_	_			_	1 -	24,000	27	_	_	-	-	_	27	FIDA (100%)
Subtotal									,	31	3	2	3	3	_	43	,
D. Communication and policy engagement																	
Years 1-3	Amount									2	2	2	_	_	_	7	FIDA (100%)
Years 4-6	Amount										_	_	2	2	2	7	FIDA_11 (100%)
Subtotal	711100111								_	2	2	2	2	2	2	14	1.27(_11(10070)
otal Investment Costs									_	62	17	16	35	48	111	289	
. Recurrent Costs										02	• • •		00			200	
A. Salaries																	
M&E Specialist 10	Month	6	12	12		_	_	30	2.496	15	30	30	_	_	_	75	FIDA (12.469%)
M&E Specialist 11	2496	-	-				12	36	2,496	-	-	-	30	30	30	90	FIDA_11 (19.3%)
M&E Officer 10	Month	12	12		'-			36	1.300	16	16	16	50	50	-	47	FIDA (12.469%)
M&E Officer 11	Month	-	-				12	36	1,300	10	10	-	16	16	16	47	FIDA_11 (19.3%
Subtotal	WOITH	_	_	-	12	. 12	12	30	1,300_	31	46	46	46	46	46	258	FIDA_11 (19.376)
										31	40	40	40	40	40	238	
B. Operating Costs DSA 10	Davis	45	45	45				135	94	4	4	4	_	_	_	10	FIDA (12.469%)
DSA 10 DSA 11	Days	45					4-		9 4 94	4	4					13	
	Days	-	-	-	45	45	45	135	94_		4	- 4	4	<u>4</u> 4	4	13	FIDA_11 (19.3%
Subtotal									_	4						25	
otal Recurrent Costs									_	35	50	50	50	50	50	284	
Total										96	67	66	85	98	161	573	
(youth, producers, women) know ledge generation and sharing li																	
(youth, producers, women) know ledge generation and sharing li	nked to poli	cy er	gag	jeme	ent												

Appendix 10: Economic and financial analysis

A. Summary Tables

					Grenada- SAEP					
A)					Busi	ness initiatives				
F I N						et incremental benefit O of local currency)	S			
N C I		CSA Small ruminants	CSA Shadehouse	CSA Part time typical farmer	Fishermen	Eco-tourism 1- Ecological Health care services	Agroprocessing Jam & Jellys	Shadehouse- Lettuce	Eco-tourism 2- Birdwatching- Part- time occupation	Landscaping
A	PY1	-19,853	-15,103	-12,100	-42,778	-15,945	-11,856	-20,033	-3,440	-4,936
	PY2	1,109	8,491	2,934	19,773	9,350	6,290	4,736	124	-1,259
Α	PY3	1,852	9,978	4,468	43,441	8,970	13,429	5,685	1,420	273
N	PY4	3,734	19,955	-3,645	48,707	10,870	13,429	10,232	5,740	993
L	PY5	2,604	11,159	4,844	49,327	10,870	13,429	4,772	5,740	993
Υ	PY6	3,604	11,297	4,947	46,627	10,870	13,429	6,359	5,740	993
S	PY7	2,604	11,159	2,947	48,707	10,870	13,429	6,272	5,740	993
S	PY8	3,604	21,408	11,550	49,327	10,870	13,429	10,885	5,740	993
,	PY9	2,604	12,413	5,194	49,327	10,870	13,429	6,463	5,740	993
	PY10	4,445	3,051	-6,800	48,707	10,870	13,429	-5,200	5,740	993
NPV (L	ocal curr.)	3,152	79,038	15,211	279,790	60,187	79,039	26,783	29,784	113
	/ (USD)	1,168	29,273	5,634	103,626	22,292	29,274	9,919	11,031	42
FIRR	(@9%)	11.6%	73.7%	25.5%	80.5%	61.6%	85.5%	30.3%	69.5%	9.3%

	(030)	1,100	23,273	3,034	103,020	22,232	23,214	3,313	11,031				
FIRR	(@9%)	11.6%	73.7%	25.5%	80.5%	61.6%	85.5%	30.3%	69.5%				
В)													
			PRO	DJECT COSTS AN	ND INDICATORS FOR LOG	FRAME		,					
		TOTA	L PROJECT COSTS	(in million USD)	\$ 12,000,000	Base costs	\$ 11,290,049	PMU	1				
	Benefici	aries		people	7,500	Households		•					
	Cost per bei	neficiary	1,600	USD x person				Adoption rates	60%				
	Components a	nd Cost (USD) // Base Cos	sts		Outcomes and Indicators								
					120								
					Grants first push			280					
1. Compon	ent 1-EBD /a	\$	4,007,700.0		Job creation			400					
2. Compon	mponent 2- CSA /b \$ 4,982,412			CSA	Grants-including backyard	gardens		180					
PMU a	PMU and M&E \$ 2,299,93				Management unit place	d	PMU		3				
c)				MAIN A	SSUMPTIONS & SHADO	W PRICES ¹							
		Output			Price per p	ound	Input pric	es	Price (ECB)				
~	Resilier	ice improvement	50%	/ ₆	Roots and tub	ers: EC 3	Urea		130				
FINANCIAL	kesitience improvement												
FINIT	Loss reduction			V ₆	Beet: EC	4,5	Liquid fertiliser	20/20/20	10.5				
	Increase in productivity lettuce 3			%	ement 2								
				Lettuce : EC 3,5			Bags and pack	kaging	1				
	Average increase in productivity others 28						Crate		5				
	, , , , , , , , , , , , , , , , , , ,			25%			NPK bag 100 p	. 7 69					
ی.	Official Exchange rate (OER)			2.7		scount rate							
ONIT	Shadow Exchange rate (SER)			2.93		Financial Disco							
ECONOMIC	:	Standard Conversion Facto		1.09 Output conversion factor					0.				
€		Labour Conversion factor	r	0.7	0.7 Input Conversion factor								

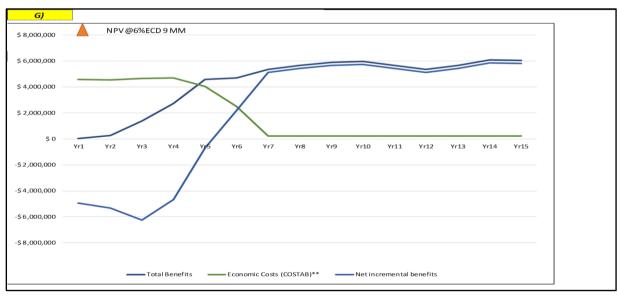
D)	•							
		BENEF	ICIARIES, AVER	AGE ADOPTION	RATES AND PHA	SING		_
Beneficiaries receiving supports	PY1	PY2	PY3	PY4	PY5	PY6	Total	60%
Fishery	0	2	14	8	6	0	30	
Eco-tourism 1- Healthcare- Full time	0	2	11	11	6	0	30	30%
Shadehouse- Lettuce	О	2	11	11	6	О	30	
Agroprocessing- Jam & Jellys	0	2	11	11	6	0	30	1
Proposals							400	1
Eco-tourism 2- Birdwatching- Part time	0	7	49	56	28	0	140	50%
Landscaping	0	7	49	56	28	0	140	50%
CSA Shadehouse diversified- Full time	3	8	13	8	3	0	35	
CSA Small ruminants	3	8	13	8	2	0	34	100%
CSA farmer- Part time	12	25	41	25	9	0	111	1

Appendix 10: Economic and Financial Analysis

Total Cosis* 4,575,625 4,588,354 4,680,166 4,711,288 4,032,216 2,515,669 229,277 229,2	ECD		Yr1		Yr2	Yr3		Yr4	Yr5		Yr6	Yr7		Yr8	Y	ir)	Yr10		Yr11	Yrl	2	Yr13			Yr15
Exo-tourism 1-Healthoure-Full time \$ 5 2.664 5 115,253 \$ 32,225 \$ 271,827 \$ 477,424 \$ 515,175 \$ 527,02	Modelos de Beneficios				- 1									- 1		.	-		-		-				
Exo tourism 2- Birdwardning Part time \$ - \$ 2,2604 \$ 154,873 \$ 143,262 \$ 84,987 \$ 26,710 \$ 427,433 \$ 490,051 \$ 490,0	Fishery	S	-	-\$	24,861 -5	145,50	5 \$	152,561	\$ 463,607	\$	756,871 \$	851,167	S	853,586	S	859,476	863,7	80 S	871,425	S	867,121 \$	853,58	6 \$	861,231	\$ 862
Landscaping \$ - 5 10,156 5 53,310 \$ 73,708 \$ 356,374 \$ 307,321 \$ 356,376 \$ 367,148 \$ 3	Eco-tourism 1- Healthcare- Full time	S	-	-\$	25,654 -5	115,25	3 \$	32,225	\$ 271,827	\$	477,424 \$	515,175	S	527,025	S	527,025	527,0	5 \$	527,025	\$	527,025 \$	527,02	5 \$	527,025	\$ 526
CSA Stadebosse diversified. Full time \$ 34.437 \$ 65.026 \$ 46.225 \$ 169.347 \$ 371.324 \$ 412.357 \$ 547.516 \$ 550.490 \$ 655.034 \$ 621.357 \$ 550.948 \$ 501.740 \$ 650.202 \$ 660.057 \$ CSA Small ruminants \$ 192.841 \$ 385.367 \$ 599.003 \$ 247.531 \$ 108.484 \$ 339.084 \$ 362.317 \$ 377.604 \$ 366.613 \$ 386.741 \$ 397.001 \$ 499.905 \$ 448.411 \$ 464.397 \$ CSA fammer-Part time \$ 118.700 \$ 209.905 \$ 271.973 \$ 46.948 \$ 151.810 \$ 187.668 \$ 325.740 \$ 522.805 \$ 655.999 \$ 669.881 \$ 466.844 \$ 224.386 \$ 462.000 \$ 706.910 \$ 109.0000 \$ 109.00000 \$ 109.00000 \$ 109.00000 \$ 109.00000 \$ 109.000000 \$ 109.00000000000000000000000000000000000	Eco-tourism 2- Birdwatching- Part time	S		-\$	22,604 -5	154,87	3 -\$	143,262	\$ 84,987	\$	262,710 \$	427,433	S	499,051	S	499,051 5	499,0	51 \$	499,051	\$	199,051 \$	499,05	1 \$	499,051	\$ 499
CSA Small runniants	Landscaping	\$	-	-\$	10,136 -5	53,31	0 \$	73,708	\$ 356,374	\$	307,321 \$	356,306	S	367,148	S	367,148	367,14	18 \$	367,148	\$	367,148 \$	367,14	8 \$	367,148	\$ 367
CSA famore Part time	CSA Shadehouse diversified- Full time	-\$	34,437	-\$	65,026 -5	46,22	5 \$	169,347	\$ 371,324	\$	412,357 \$	547,516	S	550,490	S	655,304	621,3	57 S	550,948	\$	501,740 \$	650,22	0 \$	690,067	\$ 630
Rend Roads Benefits (Externalities) \$.	CSA Small ruminants	-\$	192,841	-\$	385,367 -5	598,00	3 -\$	247,531	\$ 108,484	\$	339,084 \$	362,317	S	377,604	S	366,613	386,74	11 \$	397,001	\$	139,905 \$	448,41	1 \$	464,397	\$ 453
Job placement Benefits S	CSA farmer- Part time	-\$	118,700	-\$	209,905 -	271,97	3 -\$	46,948	\$ 151,810	\$	187,638 \$	325,740	S	521,575	S	655,799	669,5	81 \$	466,844	\$	294,386	462,10	0 \$	706,910	\$ 664
Total Costs* 4,575,625 4,538,354 4,680,166 4,711,288 4,032,216 2,515,669 229,277 229,2	Rural Roads Benefits (Externalities)	\$		\$	- 9	-	\$	-	\$ 562,800	\$	562,800 \$	562,800	S	562,800	S	562,800	562,8	0 \$	562,800	S :	562,800 \$	562,80	0 \$	562,800	\$ 562
Total Cosis* 4,575,625 4,588,354 4,680,166 4,711,288 4,032,216 2,515,669 229,277 229,2	Job placement Benefits (Externalities)	\$	-	\$	- 5	-	\$		\$ 460,680	\$	460,680 \$	460,680	S	460,680	\$	460,680	460,6	80 S	460,680	\$	460,680 \$	460,68	0 \$	460,680	\$ 460
Net incremental benefits 4.521.603 5.331.274 4.261.321 4.680,766 4.687.797 2.175.908 5.132.208 5.426.632 5.660,224 5.727.518 5.449.461 5.127.304 5.421.554 5.645.014 RR 11.47% NPV (@6%, 15yr, EC) 9,010,355	Total Benefits	-\$	345,978	-\$	792,920 -	1,611,15	5 \$	30,493	\$ 3,344,420	\$	4,691,576	5,361,785	\$	5,655,910	\$ 5	5,889,552	5,956,7	5 \$	5,678,738	\$ 5,	356,581 \$	5,650,83	2 \$	6,074,291	\$ 6,053
Net incremental benefits 4.521.603 5.331.274 4.261.321 4.680,766 4.687.797 2.175.908 5.132.208 5.426.632 5.660,224 5.727.518 5.449.461 5.127.304 5.421.554 5.645.014 RR 11.47% NPV (@6%, 15yr, EC) 9,010,355																									
IRR 11.47% NPV (@6%, 15yr, EC) 9,010,355	Total Costs*	_	4,575,625		4,538,354	4,650,1	66	4,711,258	4,032,216	;	2,515,669	229,27	1	229,277		229,277	229,2	77	229,277		229,277	229,2	11	229,277	22
IRR 11.47% NPV (€6%, 15yr, EC) 9,010,355	Net incremental benefits		-4,921,603		-5,331,274	-6,261,3	21	-4,680,766	-687,797		2,175,908	5.132.50	3	5,426,632		5.660,274	5,727,5	18	5,449,461	5	127,304	5,421,5	54	5.845.014	5,82
	IRR		11.47%		.,,.			,,,			,	.,.,.		., .,		.,,			., ., .,			-, , , , ,		.,,	
NW/O(A/ 4 TED)	NPV (@6%, 15vr, EC)		9,010,355																						
NPV (@b%, INV, (NI)) 3.53/, IBN	NPV (@6%, 15vr, USD)		3,337,168																						

F)

	·		Sensitivity	Analysis				
	Δ	%		Risk			IRR	NPV (EC)
Base Scenario	0%	0					11.5%	9,010,355
Benefits	-10	0%	Combined ri	sks: Prices, yields,	adoption drap	outs	9.3%	5,231,909
Benefits	-20	0%	Combined in	sks. Prices, yreius,	, adoption, drop-	outs	6.9%	1,453,464
Costs	10	1%	Increase in it	nputs and invest	tment unit cost	s and	9.5%	6,132,945
Costs	20	1%		expenditu	res		7.7%	3,255,535
Delays 1Yr	09	%	land and	and an adolescent release			8.5%	4,488,555
Delays 2Yr	09	%	Impleme	nting delays, phas	ing and adoption	1	6.1%	214,641
Drought every 4yr	0% Bénéf	0%	Extreme clima	te change event	s affecting pro	duction	10.5%	7,205,119
Drought every 3yr	0% Bénéf	0%		Áleas climath	iques		10.0%	6,459,034
				10%		-10%	7.4%	2,354,500
				10%		-20%	5.1%	(1,423,946)
Mixed Scenarios			Costs	20%	Benefits	-20%	3.6%	(4,301,355)
				20%		-30%	-2.9%	(12,759,281)
				20%		-10%	5.7%	(522,910)



B. Introduction

- 1. The current appendix summarizes the main assumptions, hypothesis and results of the Programme's economic and financial analysis. The profitability indicators are calculated taking into account the outcomes, phasing and expected beneficiaries for each type of activity for a 15 year period. The estimates were made through field visits, consultations as well as reviewing MAREP's business plans. The whole exercise was checked with the Planning Division of the Ministry of Agriculture.
- 2. The economic and financial analysis consists of comparing the resources required for the programme's implementation (represented by the Programme's costs) with the expected impacts calculated as the benefits of the promoted activities. It is conducted from the point of view of each beneficiary (financial analysis), but also aggregating beneficiaries of the various models and calculating the benefits for the Grenadian economy as a whole. It should be noted that the present appendix represents only one point of view of the global evaluation of the proposed new Programme (that should also take into account social, environmental and institutional aspects).
- 3. Financial analysis allows to understand, based on behavioral hypothesis and parameters, if potential beneficiaries will be motivated to take the risks and make the investments required by the project. It implies to simulate the incentives and benefits at the individual level (even in groups), but also to make sure that the beneficiaries will have the means to take on the programme's proposal, making assumptions on the delays in adopting technologies and on drop-out rates for entrepreneurship initiatives.
- 4. Economic analysis takes into account all the costs and benefits of the Programme. It allows to evaluate the global efficiency in management resources for the government and society as a whole. The analysis is made aggregating the farm models using economic prices and adding externalities (that will be represented in this case by the economic benefits of rural roads).
- 5. Both in the financial and economic analysis, each initiative will be considered profitable if the additional benefits of the project's cash flows (over a 15 year period) surpass investment and recurrent costs at a cut-off rate. As a result, profitability indicators will be the Net Present Value (NPV, economic and financial), the Internal Rate of Return (IRR, economic and financial) and the Benefit-Costs ratio (B/C, both economic and financial). The sensitivity analysis will test the vulnerability and robustness of the obtained results for changes in the key economic variables.
- 6. The first part of the document summarizes the sources of programme's benefits (both measurable and not measurable) as well as the main assumptions and hypothesis made. Thereafter, the financial analysis is presented, which analyzes the proposed models and the corresponding expected benefits. In the end, aggregated benefits (with externalities included) will determine the overall economic profitability and the sensibility of the results in face of negative shocks and climatic events.

C. Summary of benefits, main assumptions and hypothesis

7. The expected benefits arise from the different types of activities for each targeted group in the two components. Concerning Component 1, both quantitative and qualitative benefits are expected from the Programme's intervention, relying on two axes: (a) linking skilled and trained youths with employment opportunities; and (b) expanding start-ups (under a trial and error approach) and promoting innovation, as well as a wide variety of new productive activities. In terms of the quantitative benefits, both interventions aim at increasing family income generation, improving employment and salaries or new business incomes, in order to decrease unemployment rates (mainly in youths).

- 8. The following quantitative benefits can be pointed out:
 - At least a 20% increase in expected wages⁵¹ on future employments for 60% of youths participating in VST programme (assuming full-time jobs in different sectors for unskilled and skilled activities).
 - At least a 23% increase in full-time participant's income for success cases of business startups (for example, in agro processing initiatives).
 - At least a 17% increase in part-time participant's income for activities receiving a first push that don't reach the second round of financing of the business plan (e.g. landscaping initiatives).
- Qualitative benefits rely on (i) social-capital enhancement and improved cohesion to increase empowerment in targeted groups, (ii) a reduction in youth's propensity and vulnerability to be involved in violent activities, and (iii) an improved environment to promote innovation.
- For Component 2, benefits are based on promoting CSA practices and technologies in order to increase resilience, productivity and competitiveness (improving income generation), as well as producing healthier products in a more sustainable environment. All measurable and non-measurable benefits arise from addressing in parallel several problems such as: (i) productivity, income generation, access to markets and competitiveness and, (ii) improved nutrition with innovative approaches (promoting backyard gardens and shade-houses).; (iii) climate change resilience and adaptation.
- 11. Quantitative benefits are expected from a more efficient use of crop inputs, including organic and environmentally friendly fertilizers, intercropping and planning, water harvesting, mulching, microirrigation, and other CSA initiatives that improve resilience and adaptation to climate change. Direct outcomes are expected to come from an increase in productivity, and a reduction in post-harvest losses and wastages. Benefits will also be derived from the support in business development (marketing, labeling, packaging, storage and business linkages), in order to better perform in highly competitive markets (considering the high volume of low cost food imports).
- The following quantitative benefits can be pointed out (see table 4). Not all the models reflect a full time occupation activity.
 - A 17% increase in participant's part time income for a typical farmer (1 acre plot, diversified) that improves resilience (reducing losses by 50% in case of climatic events) and yields (by 25%) with water harvesting technologies.
 - At least a 26% increase in participant's income for innovative CSA shade-houses.
 - A 52% increase in participant's income for small ruminants CSA initiatives.

Table 1. Income impact Indicators per Model per year

			Inc	omes per perso	n per yr
	Model*	WOP		WithP	%
1	Fishery	\$ 14,777	\$	28,860	95%
2	Eco-tourism 1- Healthcare- Full time	\$ 16,200	\$	26,804	65%
**3	Shadehouse- Lettuce	\$ 7,716	\$	12,131	57%
4	Agroprocessing- Jam and Jellys	\$27,719	\$	34,179	23%
*5	Eco-tourism 2- Birdwatching- Part time	\$ 2,700	\$	5,030	86%
*6	Landscaping	\$ 6,000	\$	6,993	17%
**7	CSA Shadehouse diversified- Full time	\$ 17,150	\$	21,540	26%
**8	CSA farmer- Part time	\$27,869	\$	32,713	17%
**9	CSA Small ruminants	\$ 4,605	\$	6,994	52%

^{*} New activities result in higher increases

^{**}Family income (farm)

⁵¹ Source: 2011- Minimum Wages Order-SRO. 30.

- 13. In addition to this, both for VST activities in Component 1 and Rural Roads rehabilitation in Component 2, additional economic benefits were considered. Concerning VST activities, there is evidence that skilled youth after training have access to better jobs (at least 60% of them) and better average salaries (from 10% to 40% depending on the sector), compared to the without-project (WOP) situation, in which a low-wage job is assumed (which is actually unemployment). Information about salaries and jobs has been taken from 2011-Minimum Wages Order- SRO.30. For the Rural Roads rehabilitation, the economic benefits rely on time and cost savings per person per road (taking into account both private and public transport).
- 14. Even if the models assume certain types of activities and try to recognize some possible effects and impacts, the Programme will keep a "demand driven approach", so none of these activities should be considered to be mandatory for the analysis of proposals during implementation.
- 15. The same applies for the marketing development strategy. Efforts have been made to illustrate a wide variety of models, risks and realistic assumptions. The models have to be considered as a possibility, based on visits and consultations made on the field. Overall the marketing development strategy will depend on the expected benefits, scope and rationale of each initiative to be promoted.
- 16. Models, sectors and products have been selected taking into account: a. market opportunities / dynamism and potential in sectors and products (both locally and for export), b. representativeness, c. pro-poor, pro-gender and pro-youth approach, d. access to land issues, e. diversity of both agricultural and non-agricultural, f. Public and private experts consultations.
- 17. Market options can be found both all the local community level, local fairs and intermediaries or at the national or international level, when niches are developed or a bigger scale and quality standards are obtained in order to supply new channels and new market opportunities and linkages (e.g. supermarkets, hotels or exporters). In this sense, the rehabilitation of rural roads will lead to better market opportunities by improving access to inputs and to new markets as well as reducing transport costs.

D. Financial analysis

- 18. The financial analysis takes into account the costs and benefits for adopting the programme's proposal from the individual perspective over the period of 15 years (including the program duration of 6 years).
- 19. **Prices.** Prices in Grenada are freely determined by the market. References have been taken from Foodfair Carenage, MNIB, Foodland Lagoon Rd., local suppliers at St George's and consultations in the field with the support of the Planning Division at the Ministry of Agriculture.
- 20. **Parameters.** The average local Interest rate for domestic credit in the past 5 years is shown in the table below. The financial discount rate is considered at 9%.

Table 2. Annual average (%)

Year	2012	2013	2014	2015	2016
Annual Weighted Average	9.2	9.1	9.1	8.8	8.5

21. **Models**. Nine models were developed to simulate impacts for each type of intervention on each targeted group of beneficiaries. For Component 1, there are six models to illustrate the range of activities that could be developed by the targeted beneficiaries. For Component 2, three CSA models are proposed.

Table 3. Models developed

		Models			
Component	Activity	Model	USD	ECD	Quantity
		Shadehouse lettuce	\$ 9,300	\$ 25,110	30
C1	Grants Business	Agroprocessing- Jam and Jellys	\$ 9,300	\$ 25,110	30
"	initiative	Fishery	\$ 18,600	\$ 50,220	15
		Eco-tourism 1- Healthcare	\$ 9,300	\$ 25,110	30
C1	Grants first push	Eco-tourism 2- Birdwatching- Part time	\$ 1,000	\$ 2,700	140
١ ١	Giants inst push	Landscaping- Part time	\$ 1,000	\$ 2,700	140
		Shadehouse CSA diversified- Full time	\$ 8,000	\$ 21,600	20
C2	CSA Grants	Small ruminants- Part time	\$ 8,000	\$ 21,600	40
		CSA farmer- Part time	\$ 5,000	\$ 13,500	40

- 22. **Component 1.** This group of activities is based on the Programme's entrepreneurship approach. After providing training and capacity building for youths in order to develop business initiatives, the component is supposed to support every start-up idea with a first round of funding. This is meant to be an element to enhance motivation, and to support a trial and error and a learning by doing approach. All youths should be able to benefit from a minimum package (including a basic amount of money to dry-run the ideas). Two models of this type of support are simulated: i) a classic model for a micro-enterprise related to landscaping activities (that provides a complementary income) and ii) an innovative idea, which could be offering eco-tourism services, such as a bird-watching or turtle watching experience in the island. It means that youth will be benefiting from tourism and the wide range of possibilities related to it. These two models do not require a large investment to get started into business and there is no need of land tenure neither. Even if the drop-out rates (50%) could be higher than for other initiatives, this activity reports benefits to be considered.
- 23. Between all the start-up ideas, the programme is supposed to provide a larger support to the more promising business initiatives. In this case, models should be sustainable and profitable. They will benefit also from technical assistance and hand-holding in the initial phases and this is expected to make them successful. For this type of business initiatives, four models have been proposed: a) one related to the eco-touristic sector and services; b) other one in agro-processing; c) fishery and preparation (group of 2); and d) shade-houses for a commercial purpose (mostly specialized in lettuce). Activities have been selected due to their representativeness and the overall importance they have for Grenada's economy in terms of spin-offs and spill-overs.
- 24. It should be considered that some of the start-up models require only a part-time occupation for the youth (from 4 to 6 months depending on the activity). It means that the annual income per year represents only a small part of total family incomes (and sometimes even personal incomes). Also, drop-out rates are very difficult to estimate but an intensive hand-holding, a rigorous selection and the family approach demonstrate that there is a possibility to keep up all the well-sustained business initiatives.
- 25. **Component 2.** Three models intend to simulate the impact of Climate-smart agricultural grants (CSA Grants). Two of them consider agricultural activities (a typical 1 acre plot diversified farmer who is partially occupied in agriculture and a diversified shade-house) and the third one describes sustainable management and water harvesting for small ruminants.
- 26. **Vulnerabilities**. Most of the SIDS (Small Island Developing States) are considered to be at the top of the at-risk countries concerning climate change and Grenada is not an exception. Problems can be found with:
 - Sea level rising: Disasters and major injuries could happen with just a one meter sea level rise (with less impact on agriculture due to the mountainous topography). However, saline intrusions into coastal aquifers may increasingly affect agricultural production.

- Hurricanes: Even if Grenada is located to the south of the hurricane belt, the country was heavily affected by two major hurricanes (2004 and 2005) incurring in USD 900 million losses⁵².
- Erratic temporal rainfall patterns: The overall trends towards higher temperatures, higher evapotranspiration, and longer and more severe dry seasons, will affect water availability for agriculture.
- 27. **CSA** as an answer. Adoption of CSA technologies and practices is an opportunity for farmers to address climate change challenges. The three models proposed try to aim at the CSA main objectives. A World Bank study (2014) offers a detailed assessment for the top ongoing and potentially applicable CSA practices per production system in Grenada. This assessment, visits on the field and the special assessment of the CSA specialist have been taken into account to select technologies and practices for the models.
- 28. **CSA technologies and impacts.** Table 4 below illustrates each model's in-farm dynamic when adopting CSA technologies and practices.
- 29. **Resilience.** The trends mentioned above affect small producers and agricultural activities in a different way depending on various circumstances. For the purpose of this exercise the last CC trends have been simulated both at the in-farm level and for the sensitivity analysis. The sea level rising was not taken into account, as it is predicted that this event would only affect up to 3% of agricultural land. On the other hand, vulnerability and resilience are illustrated for the other two aspects (hurricanjes and erratic rainfall patterns) by making hypothesis and measuring the productive decrease during the shock, taking into consideration their capacity to recover and learn, and even to get a higher level of productivity after the problem is solved, always taking into account eventual future climate events that could happen.
- 30. Other assumptions/marketing strategy. There is a major issue in the island with food imports and competitiveness. After visiting the field and local markets, imported agricultural products (as carrots, tomatoes and poultry products for example) in some cases were found to be up to 30% cheaper than local ones and they are well-presented and labelled in terms of customers' requirements. This is not always the case with local products, representing a major challenge for agriculture and livestock in Grenada. It should be taken into account that even if local products could be considered "healthier" or more natural than imported ones, this is not noticeable as long as there is no labeling or packages to identify those attributes (that could justify differences with imported products). Every marketing strategy should consider the level of competition and its requirements.

⁵² "Grenada is expected to be increasingly vulnerable to hurricanes as a consequence of the increased intensity and changed distribution of tropical cyclones associated with rising sea temperatures" (CSA in Grenada; 2015)

Table 4. Main assumptions on Component 1 Business initiatives models

Aspects/First push- Models	Eco-tourism: Bird-watching	Landscaping and gardening
Occupation/Participants	Part-time/1	Part-time/2
Main objective/impact proposition	Provide an innovative eco-touristic service. No access to land is needed and youth will be linked to high-income generation sectors.	Provide a frequently required service both in rural and urban areas. No access to land is needed and youth will be linked to high income generation activities
Quantities	From 1 to 4 trips per month (3 hours each)	1,5 yards per service // 4 services a week during 6 months
Labour per Yr	96 days	From 6 to 12 months
Price	USD 10 per hour per person	75 ECD per service +10 ECD (gardening)
Key challenges for the start-ups	-Marketing and social net-working	- Promotion and constancy
	-Specialized trainings on bird-watching / turtle watching and hospitality	- Transport
Financing	First-push and own savi	ngs
Success rates	50% after year 5 -	
Phasing	From 25% to 100% in 4 y	rears
Main Investments	Lower: Web-site, personal cards and IT innovations, trainings, souvenirs.	Lower: Weed eater, other tools and equipment, (pruning tools, cutlass, glasses, boots)
WOP situation	Even if the real alternative is unemployment, additional benefits are compared to a WOP situation where the youth is having some incomes sporadically (1 trip per month).	Even if the real alternative is unemployment, additional benefits are compared to a WOP situation where the youth receives a 6 month salary.
Potentialities	Dynamic sector, niche market. No land tenure requirements. No fixed costs.	High income market. High demand. No land tenure requirements. No fixed costs.

Aspects/Business initiative models	Shade-house (lettuce) 100 x 30 feet	Agro-processing Jam & Jellys	Eco-tourism: Health-care and SPA services	Fishery (mainly spearfishing)
Occupation/Participants		Ful	l time	
Main objective/impact proposition	Start up an agricultural sustainable business supplying fresh products to the demanding local market. This business involves a quick pay back and cash flow and does not require land tenure more than a little plot. Improved resilience.	Provide a variety of agro- processed products to the local and international market. A lot of value-added activities can be done as drying, blending, processing, etc.	Provide a wide range of services to local and international tourists related to natural health-care and wellness with local essential oils.	Get youths involved in high-income generation activities that don't need access to land in a sustainable way. It involves new market channels and processing.
Quantities	Losses reduction: 10% (short-term) and 14-20% (mid-term). Losses after a CC event reduced to 15% of the total harvest. 30% increase in productivity (from 0.3 to 0.4 pounds per plant)	30% increase in productivity and reduction of losses from 12% to 5% in 5 years. Products: ginger, cloves, mace, nutmeg, garlic.	10 customers per week (regular season/ 10 months) and from 15 to 60 customers per week (Easter, summertime, etc. / 2 months)	88 pounds per day, 10 months, 20 days per month, 5% losses. Extended market channel (50% export, 40% local consumption and 10% dried and salted)
Labour per Yr	1 full time family labor // 149y working days Self-consumption: 1% (55 pounds per year)	3 full time family labor generated 1 manager and 2 employees.	2 full time jobs during regular season and 5 full time jobs during peak season. From 3 to 5 jobs.	1100 days (5 people involved). 2 family labor and 3 hired labor positions.
Price	ECD 3.5 per pound	ECD 107,5 per package	ECD 100 per hour	Salted dried fish: 12 ECD/pound, Export: 6 EC/pound, Local market: 8 EC/pound.
Key challenges for the start-ups	Maintain 6 cycles // 2.400 plants. No-burn agriculture (mulching, composting, shredding), protecting soils. Covered lettuce production. Infrastructure to protect crops and water sources. Easy pay-back activity to motivate youths in CSA practices.	- Variety of spices - Localization - Marketing plan and Environmental plan	-High-quality service -Natural and ecological products (oils, creams, etc.) -Marketing and high standard facilities	-Commitment and engagement -Fishing skills -Commercial skills
Financing	Own savings / 30% working capital subsidies	Own savings / 50% working capital subsidies	Own savings / 30% working capital subsidies	Own savings / 30% working capital subsidies
Realization of Benefits	From 80% to 100% of benefits in 10 years	From 80% to 100% of benefits in 4 years	From 40% to 100% of benefits in 5 years	From 60% to 100% of benefits in 5 years.
Main Investments	Shade-house infrastructure, irrigation system // replacements proposed for little tools and equipments	-Mill & Blender, Grinder & other equipment -Dy-hidrater	Higher: Bath facilities, website, cards and labeling, marketing plan, small tools and equipment	- Boat and engine -Equipment and tools (ice boxes, etc.)
WOP situation	Dynamic. Increasing losses up to 5% every 4 years after each climate change event. From 70% to 80% losses every 4y.	Low processing capacity Low quality and variety of products	-Low quality service randomly provided (hardly reaching international tourists) -High-season is not exploited	10 days per month fishing and 15% of losses. Sales: only for export (lower prices)

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Table 5. Main assumptions on Component 2 CSA models.

Aspects / Models	Small ruminants management	Shade-house (diversified) 80x20 feet	Typical 1 acre plot farmer			
Occupation/ Participant	Part time- 1 farm // 2 persons	Full time- 1 farm // 2 persons	Part time- 1 farm // 2 persons			
Main objective / Impact proposition	Water harvesting. Improved resilience, sustainability, productivity with fences and medicine packages for livestock. It can also improve family nutrition. Mainly aimed to model Carriacou's dynamics.	Improved resilience, diversification and nutrition	Improved resilience, diversification and nutrition			
Indicators and parameters	From 17 animals sold per year (WOP situation) to 21 animals in year 2, 28 animals in year 4, 31 in year 10 and 34 in year 15.	Losses reduction: 10% (short-term) and 15% (mid-term). Losses after a CC event reduced to 30% of the total harvest. Increased productivity (pounds per plant, cycles)	Losses after a CC event reduced to			
Labour	Family labor // 5 month job	Between 192 and 211 working days.	83 working days			
Self-consumption	Improved, 6 or 7 animals a year (special occasions)	1%**.	Watermelon,beet,dasheen,tannia - 10%			
Price	ECD 330 per unit	4,5 ECD per pound (Broccoli, Cauliflower) 4 ECD for Pepper, 3,5 ECD/pound (lettuce), 3,2 ECD/pound (tomatoes)	1 ECD Watermelon, 3 ECD dasheen and 3,8 ECD tannia, 4,5 ECD beet (per lbs)			
Key challenges	- Record-keeping, Time savings, Productivity	Skilled labour- CSA technology adoption	Water-capture / HQ production of roots.			
Main investments	Fencing, plastic tanks, Construction of the roof, shelter, other materials.	Shade-house infrastructure, irrigation system // replacements proposed for little tools and equipments	Pump, Tanks (water capture), roof.			
CSA recommendation Water capture, fences to avoid overgrazing. Idopted / justification		Intercropping, affecting positively adoption, mitigation and productivity in case of climatic events. Infrastructure to protect crops and water sources.				
WOP situation	Overgrazing, 17 animals sold per year. No commercial perspective.	Dynamic. Increasing losses up to 5% every 4 years after each climate change event.	Not resilient – No lessons learned after CC event			

**

Selfconsumption	(pounds)	Add. Production						
Tomatoe	34	683	25%					
Lettuce Mi	7	72	11%					
Pepper	28	796	39%					
Brocoli	10	244	33%					
Cauliflower	20	488	33%					

Intercropping and	WOP	WthP	WOP	WthP	WOP	WthP		WOP	WthP	
rotation	Pounds per	plant	Cycles		Harv	ests	Plants needed	Production obtained		
Tomatoe	ž.	4 6	1,5	1,25	7	12	455	2730	3413	
Lettuce Mineto	0,3	3 0,4	1,5	1,25	12	12	1.440	648	720	
Pepper	3	3 5	1,5	1,25	8	12	455	2048	2844	
Brocoli	0,5	5 0,5	2	2	4	4	975	731	975	
Cauliflower	1,0	0 1,0	2	2	4	4	975	1463	1950	

31. Overall, all models are considered profitable, with FIRR rates ranging from 9,3% to 85,5% depending on the activity, and net present values (NPV) at the 9% discount rate varying from ECD 113 to ECD 279.790. The following list summarizes profitability indicators for all the financial models.

Table 6. Profitability indicators per model (A)

	Models													
			Busine	ess Initiatives		Entrepre	neurs	CSA	A grants					
Detail	Unit	Fishery	Eco-tourism 1- Healthcare- Full time	Shadehouse- Lettuce	Agroprocessing- Jam and Jellys	Eco-tourism 2- Birdwatching- Part time	Landscaping	CSA Shadehouse diversified- Full time	CSA farmer- Part time	CSA Small ruminants				
Without Project														
Expenditures	ECD	39,375	35,800	9,831	72,944			14,208	8,517	4,505				
Revenues	ECD	40,128	52,000	12,852	111,583	2,700	6,000	24,706	32,556	5,610				
Margin	ECD	753	16,200	3,021	38,639	2,700	6,000	10,498	24,038	1,105				
With Project														
Expenditures	ECD	73,648	60,930	10,743	91,365	5,960	7,791	17,815	10,665	6,670				
Revenues	ECD	123,728	88,000	19,354	143,433	14,400	14,784	36,458	39,548	10,379				
Margin	ECD	50,080	27,070	8,611	52,067	8,440	6,993	18,644	28,882	3,709				
IRR	%	80.5%	61.6%	30.3%	85.5%	69.5%	9.3%	74%	25%	12%				
NPV	ECD	279,790	60,187	26,783	79,039	29,784	113	79,038	15,211	3,152				

Table 7. Profitability indicators per model (B)

Model	IRR (%)	NPV (ECD)	B/C
Fishery	80.5%	279,790	1.54
Eco-tourism 1- Healthcare- Full time	61.6%	60,187	1.45
Shadehouse- Lettuce	30%	26,783	1.76
Agroprocessing- Jam and Jellys	85.5%	79,039	1.66
Eco-tourism 2- Birdwatching- Part time	69.5%	29,784	2.40
Landscaping	9.3%	113	1.87
CSA Shadehouse diversified- Full time	74%	79,038	2.17
CSA farmer- Part time	25%	15,211	3.41
CSA Small ruminants	11.6%	3,152	1.61

E. Economic analysis and sensitivity

- 32. **Economic analysis.** The economic analysis (with economic prices to calculate total economic costs) uses aggregated economic model's benefits (by beneficiaries) over the period of 15 years and at a shadow discount rate of 6%⁵³. To incorporate the results in the economic analysis all prices have been calculated applying conversion factors for imported tradable goods and labour. No market distortions are supposed to affect outputs or non-tradable goods.
- 33. **Externalities/additional economic benefits.** Two different types of additional economic benefits were included: a) the Rural Road's time savings; and b) improved projections on beneficiaries salaries due to job placement and VST activities.
- 34. In the first case, it is considered that 30 rural roads will be rehabilitated with approximately 100 beneficiaries per road. The number of vehicles (14 per road), the number of private and public trips (two way trips), and the time wasted due to several causes generated by bad conditions in rural roads (less speed, roadblock after rainfalls, damage in vehicles) have been taken into account. This allowed to calculate an estimate of cost savings per passenger, which was incorporated to the economic analysis.
- 35. For the job placement activities, the additional benefits of better jobs for trained and skilled employees after VST activities were included. Six typical jobs were selected and the information was taken from the Minimum wages order SRO 30 (2011) at stated salaries for each economic sector.

⁵³ Taking into account mid-term bonds yields for the country and other SIDS in the region.

36. **Results.** The EIRR is estimated at 11,47% while the NPV reaches USD 3,33 million.

Table 8. Economic Results

IRR	11.47%
NPV (@6%, 15yr, EC)	9,010,355
NPV (@6%, 15yr, USD)	3,337,168
Ratio B/C	1.73

37. **Sensitivity Analysis:** The sensitivity analysis was carried out assuming different risk scenarios. These include an increase in programme costs (10%, 20% and 50%), a reduction in programme benefits (10%, 20% and 50%), delay in programme benefits (1 and 2 years) and the occurrence of climate change extreme events (every 2, 3 and 4 years). The Programme is assumed to be profitable and resilient as it supports a 2 year delay in benefits (EIRR: 6,12%), a mixed increment in costs up to 10% and reduction in benefits up to 10% (EIRR: 7,38%) and a cost increase up to 20% (7,74%) or a benefit reduction up to 20% (6,94%). In these cases, the NPV remains in positive range. Besides, eleven sources of benefits equally contributing to total project's benefits have been identified. This serves to demonstrate that the project is well diversified and not highly exposed to price or sectorial risks. Detailed assumptions and calculations are attached in the annexes to this appendix.

F. Prices

		Financial		
	Price (farm		Economic	
Outputs	Unit	gate)	Price (*SCF)	Source
Tomatoes	pound	\$3.20	\$3.20	Foodfair Carenage
Lettuce	pound	\$3.50	\$3.50	Foodfair Carenage
Carrot	pound	\$3.60	\$3.60	Foodfair Carenage
Pepper	pound	\$4.00	\$4.00	Foodfair Carenage
Cabbage (Green)	pound	\$2.75	\$2.75	Foodfair Carenage
Cauliflower	pound	\$4.50	\$4.50	Foodfair Carenage
Broccoli	pound	\$4.50	\$4.50	Foodfair Carenage
Beet	pound	\$4.50	\$4.50	Foodfair Carenage
Cucumber	pound	\$1.75	\$1.75	Foodfair Carenage
Butternut Squash	pound	\$2.50	\$2.50	Foodfair Carenage
Green Banana	pound	\$1.00	\$1.00	Foodfair Carenage
Ripe Plantain	pound	\$1.25	\$1.25	Foodfair Carenage
Pumpkin	pound	\$2.00	\$2.00	Foodfair Carenage
Dasheen	pound	\$3.00	\$3.00	Foodfair Carenage
Tannia	pound	\$3.80	\$3.80	Foodfair Carenage
Com	pound	\$1.00	\$1.00	MNIB
Calaloo	pound	\$1.25	\$1.25	MNIB
Rockfig	pound	\$1.00	\$1.00	Foodfair Carenage
Hot Peppers	pound	\$5.00	\$5.00	Foodfair Carenage
Seasoning Peppers	pound	\$6.00	\$6.00	Foodfair Carenage
Salad Peppers	pound	\$5.00	\$5.00	Foodfair Carenage
Water Melon	pound	\$1.00	\$1.00	Foodfair Carenage
Cantelope	pound	\$3.00	\$3.00	Foodfair Carenage
Honey Dew	pound	\$3.00	\$3.00	Foodland Lagoon Rd.
Egg Plant	pound	\$2.00	\$2.00	Foodfair Carenage
Sweet Potato	pound	\$2.50	\$2.50	MNIB
Patchoi	pound	\$1.50	\$1.50	MNIB
Cabbage (Purple)	pound	\$2.75	\$2.75	MNIB
Egg Plant	pound	\$1.00	\$1.00	MNIB
Ochroes	pound	\$4.00	\$4.00	Foodfair Carenage
Bodi Beans	pound	\$3.00	\$3.00	Foodland Lagoon Rd.
Green Plantain	pound	\$1.50	\$1.50	Foodland Lagoon Rd.
Ripe Banana	pound	\$2.00	\$2.00	Foodland Lagoon Rd.
Spinach	pound	\$0.75	\$0.75	Foodland Lagoon Rd.
BroccoFlower	pound	\$5.00	\$5.00	Foodland Lagoon Rd.
Local Chicken	unit	\$7.95	\$7.95	Field
Soursop	pound	\$3.00	\$3.00	Field
Egg	unit	\$1.00	\$1.00	Field
Local meat beef	pound	\$15.00	\$15.00	Field
Local meat goat	pound	\$15.00	\$15.00	Field
Sheeps	unit	\$330.00	\$330.00	
Fresh Fish	pound	\$8.00	\$8.00	
Fish for export	pound	\$6.00	\$6.00	Field
Dried Fish	pound	\$12.00	\$12.00	Field

		Financial		Duties,	Economic	
Inputs and others		price	VAT (15%)	subsidies	Price (*SCF)	
Lettuce seedlings	trays	\$20	\$ 17.39	25%		Local supplier- St Georges
Shade house infrastructure	unit	\$13,500	\$ 11,739.13	0%		Local supplier- St Georges
Irrigation system	unit	\$8,100	\$ 7,043.48	0%		Local supplier- St Georges
TSP	bag	\$251	\$ 218.26	0%		Local supplier- St Georges
Urea	bag	\$130	\$ 113.04	0%	\$ 122.71	Local supplier- St Georges
Liquid fertiliser 20/20/20	package	\$11	\$ 9.13	0%		Local supplier- St Georges
Plastic replacement	kit	\$2,549	\$ 2,216.52	0%		Local supplier- St Georges
Bags and packaging	package	\$15	\$ 13.04	0%		Local supplier- St Georges
Crate	unit	\$55	\$ 47.83	0%	\$ 51.91	Local supplier- St Georges
NPK bag 100 pound	bag	\$75	\$ 65.22	0%	\$ 70.79	Local supplier- St Georges
Cauliflower seedlings	trays	\$30	\$ 26.09 \$ 39.13	25%		Local supplier- St Georges
Pepper seedlings Tomatoe seedlings	trays trays	\$45 \$45	\$ 39.13 \$ 39.13	25% 25%		Local supplier- St Georges Local supplier- St Georges
Brocoli seedlings	trays	\$30	\$ 26.09	15%		Local supplier- St Georges
Watermelon seeds	Package	\$25	\$ 21.74	15%		Local supplier- St Georges
Dasheen plants	Plants	\$0.05	\$ 0.04	15%		Local supplier- St Georges
Beet seeds	Package	\$20	\$ 17.39	15%	\$ 16.42	Local supplier- St Georges
Tannia plants	Plants	\$0.05	\$ 0.04	15%		Local supplier- St Georges
Ppoultry feeder adult	Unit	\$101.75	\$ 88.48	15%		Local supplier- St Georges
Slide Feeders 30"	Unit	\$19.95	\$ 17.35	15%	\$ 16.37	Local supplier- St Georges
Slide Feeder 12"	Unit	\$10.00	\$ 8.70	15%	\$ 8.21	Local supplier- St Georges
Hanging Feeder	Unit	\$92.75	\$ 80.65	15%		Local supplier- St Georges
Drinkers	Unit	\$17.95	\$ 15.61	15%		Local supplier- St Georges
1 gallon nesting jar	Unit	\$17.95	\$ 15.61	15%		Local supplier- St Georges
Automatic waterer	Unit	\$152.75	\$ 132.83	15%		Local supplier- St Georges
Baby chick feeder	Unit	\$4.95	\$ 4.30	15%		Local supplier- St Georges
Egg trays	Unit	\$1.25	\$ 1.09	15%		Local supplier- St Georges
Egg box Mineral licks 20 kg	Unit	\$1.00 \$60.25	\$ 0.87 \$ 52.39	15% 5%		Local supplier- St Georges
		\$30.50		5%		Local supplier- St Georges
Mineral lick 4.5 kg Mineral lick 2kg	Unit	\$12.50	\$ 26.52 \$ 10.87	5%		Local supplier- St Georges Local supplier- St Georges
Poultry Protector	Unit	\$62.20	\$ 54.09	15%		Local supplier- St Georges
Fluid Supplement	Unit	\$34.50	\$ 30.00	15%		Local supplier- St Georges
OTC water dalouble	Unit	\$10.95	\$ 9.52	15%		Local supplier- St Georges
Ancoban Amprolium 20%	Unit	\$14.85	\$ 12.91	15%	\$ 12.19	Local supplier- St Georges
Poly- Tonine a super booster	Unit	\$19.00	\$ 16.52	15%		Local supplier- St Georges
Garden Fork	Unit	\$64.50	\$ 56.09	0%	\$ 60.88	Local supplier- St Georges
Spade Cutlass	Unit	\$40.95	\$ 35.61	0%	\$ 38.65	Local supplier- St Georges
Cutlass	Unit	\$32.50	\$ 28.26	0%	\$ 30.68	Local supplier- St Georges
Ivermectin 2 fl oz	Unit	\$7.95	\$ 6.91	5%	\$ 7.15	Local supplier- St Georges
Panacur 2 fl oz	Unit	\$15.50	\$ 13.48	5%		Local supplier- St Georges
Napsack sprayer	Unit	\$723.95	\$ 629.52	5%		Local supplier- St Georges
Hoe	Unit	\$22.85	\$ 19.87	0%		Local supplier- St Georges
Round-up 1 litre	Unit	\$38.50	\$ 33.48	15%	\$ 31.60	Local supplier- St Georges
Malathion 57% ec	Unit	\$18.50	\$ 16.09	0%		Local supplier- St Georges
Touch down 1 ltr	Unit	\$75.50	\$ 65.65	15%		Local supplier- St Georges
Padan Insecticide	Unit	\$21.95	\$ 19.09	15%		Local supplier- St Georges
Poultry Disinfectant Water boot short	Unit	\$10.00 \$34.50	\$ 8.70 \$ 30.00	15% 0%	\$ 8.21 \$ 32.56	Local supplier- St Georges Local supplier- St Georges
Water boot short	Unit	\$39.95	\$ 34.74	0%	\$ 37.71	Local supplier- St Georges
Gas oil	gallon	\$14.40	\$ 12.52	20%		Local supplier- St Georges
Fins	unit	\$45.00	\$ 39.13	0%	\$ 42.48	
Wetsuit	unit	\$25.00	\$ 21.74	0%	\$ 23.60	Field
Spearguns, rods and lines	kit	\$540.00	\$ 469.57	0%	\$ 509.71	Field
Masks, protection and other equipments (glo	kit	\$54.00	\$ 46.96	0%	\$ 50.97	
Salt and spices	month	\$150.00	\$ 130.43	0%	\$ 141.59	
Towels and inputs	kit	\$810.00	\$ 704.35	0%	\$ 764.56	Field
Essential Oils	kit	\$10.00	\$ 8.70	20%	\$ 7.87	Field
Souvenirs Wheat meal	unit	\$20.00	\$ 17.39	0%	\$ 18.88	Field
Wheat meal	bag	\$45.00	\$ 39.13	0%	\$ 42.48	
						Local supplier- Petite
Boat and engine	unit	\$34,500.00	\$ 30,000.00	20%	\$ 27,137.16	Martinique / Imported engine
Labour						
Hour labour	Hour	\$ 8	\$ 8	\$ 8	\$ 5	
Unskilled daily labour	Day	\$ 45	\$ 45	\$ 45	\$ 30	
Skilled daily labour Technical labour	Day	\$ 85	\$ 85	\$ 85	\$ 57	
Technical labour	Day	\$ 85	\$ 85	\$ 85	\$ 57	
Fish Processor	Month	\$ 700.00	\$ 700.00	\$ 700	\$ 465.50	
Manager salary	Month	\$ 1,000.00	\$ 1,000.00	\$ 1,000	\$ 665.00	
Duties and Taxes information sour TARIFFS		nt COA4140A1	XTERNAL TARIF	E 20070 F T	E CADIDDEAN	COLAMA BUTY
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Models- Component 1- Start Ups

Birdwatching

New enterprise				Curr	ency: ECD																
Eco-tourism 2- Birdwatching- Par	t-time occupation						_														
1 person																					
. poloo					25%	359	6	50%	100%												
Detail	Unit	Unit Cost	WOP	With Project	2570	557		3070	10070												
		ECD		Yr 1		Yr 2	Yr 3	Yr 4	,	Yr 5	Yr 6	Yr	7 Y	'r 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
% growth	•											, , ,	•	,						,	
Output																					
Birdwatching trip	Trips/Month	300	12		12	1	7	24	48	48		48	48	48	48	48	48	48	48	48	4
Investments and Equipements		2,600	0				-	-	-	-		-	-	-	-	-	-	-	-	-	
Training in BW	Training	1,500	0		1			1		1			1								
Website and IT start up support	Service	1,100)		1			1		1			1		1		1		1		
Costs																					
Inputs																					
Personal cards	Lot	100			1		1	1	1	1		1	1	1	1	1	-	1	1	1	
Transport	Trip	10			12	1		24	48	48		48	48	48	48	48		48	48	48	4
Souvenirs	Trip	20			12	1	7	24	48	48		48	48	48	48	48	48	48	48	48	4
Marketing / Promotion	M onth	100	0		1		1	1	1	1		1	1	1	1	1	. 1	1	1	1	
Labour																					
Entrepreneur (family labour)	Days	45			24			48	96	96		96	96	96	96	96		96	96	96	9
Total Labour			12		24	3	4	48	96	96		96	96	96	96	96	96	96	96	96	9
Economic budget (EC)																					
		Unit Cost	WOP	With Project																	
				Yr1		Yr2	Yr3	Yr4		_	Yr6	Yr:		_		Yr10		Yr12			Yr15
Output			3,600	1	3,600	5,04		7,200	14,400	14,400		14,400	14,400	14,400	14,400	14,400		14,400	14,400	14,400	14,40
Birdwatching trip	EC		3,600		3,600	5,04	0	7,200	14,400	14,400		14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,40
Investments and Equipements	EC		2,600																		
Training in BW	EC		0	1	1,500		0	1,500	0	1,500		0	1,500	0	0	0		0	0	0	
Website and IT start up support	EC		0		1,100		0	1,100	0	1,100		0	1,100	0	1,100	0	1,100	0	1,100	0	1,10
Costs	EC						_														
Inputs	EC		360		560	70		920	1,640	1,640		1,640	1,640	1,640	1,640	1,640		1,640	1,640	1,640	1,64
Personal cards	EC		0	1	100	10		100	100	100		100	100	100	100	100		100	100	100	10
Transport	EC		120	1	120	16		240	480	480		480	480	480	480	480		480	480	480	48
Souvenirs	EC		240		240	33		480	960	960		960	960	960	960	960		960	960	960	96
Marketing / Promotion	EC		0		100	10	_	100	100	100	_	100	100	100	100	100		100	100	100	10
Labour	EC		540		1,080	1,51		2,160	4,320	4,320		4,320	4,320	4,320	4,320	4,320	,- ,-	4,320	4,320	4,320	4,32
Entrepreneur (family labour)	EC		540		1,080	1,51		2,160	4,320	4,320		4,320	4,320	4,320	4,320	4,320		4,320	4,320	4,320	4,32
Subtotale operating costs	EC		900		1,640	2,21		3,080	5,960	5,960		5,960	5,960	5,960	5,960	5,960	- ,	5,960	5,960	5,960	5,96
Benefits	EC		2,700		1,960	2,82	4	4,120	8,440	8,440		8,440	8,440	8,440	8,440	8,440	8,440	8,440	8,440	8,440	8,44
Benefits	EC				2			1 420	5.540			5.540	5 5 4C						·		
Add benefit	EC	1	A 2 700		-3,440	12		1,420	5,740	5,740		5,740	5,740	5,740	5,740	5,740		5,740	5,740	5,740	5,74
Per person	1%		\$ 2,700			\$ 124	\$	1,420 \$	5,740	\$ 5,740	\$	5,740 \$	5,740	\$ 5,740	\$ 5,740	\$ 5,740	\$ 5,740	\$ 5,740	\$ 5,740	\$ 5,740	\$ 5,740
NPV @9% (EC)	29,784																				
IRR @9% (EC)	69.5%																				
B/C	2.40																				

GRENADA

Climate Smart Agriculture and Rural Enterprise Programme (SAEP) Final project design report Appendix 10: Economic and Financial Analysis

																		_	
Landscaping																			
Landscaping				Currency: EC	D														
6 month occupation				•															
						75%	95%	100%											
Detail	Unit	Unit Cost	WOP	With Project															
		EC		Yr 1	Yr	· 2 Yr 3	Yr 4	Υ	r 5 Yr 6	5 Yr	7 Y	r 8 Y	r 9	Yr 10	Yr 11 Y	'r 12	/r 13 Yr	14 Y	/r 15
% growth		•		•	10%	•										•			
Output																			
Lanscapping service	1,5 yards	75.00			96	144	182	192	192	192	192	192	192	192	192	192	192	192	192
Gardening	Yard	10.0			19	29	36	38	38	38	38	38	38	38	38	38	38	38	38
Investments and Equipements		2,250		0		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weed eater	Unit	2,000		0	1			1			1			1			1		
Other tools and equipment (pruning																			
tools, cutlass, glasses, boots)		250			1			1			1			1			1		
Costs																			
Inputs																			
Gasoline	Gallon	15			23	46	46	46	46	46	46	46	46	46	46	46	46	46	46
Oil	Bottle	30			6	12	12	_	0_	0	0	0	0	0		0	0_	0	0
Transport	Service	1.5			192	288	365	384	384	384	384	384	384	384		384	384	384	384
Gut roll	Roll	50			2	4	5	6	6	6	6	6	6	6	6	6	6	6	6
Gas bottle	Bottles	60			1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Promotion activities	Amount	105			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Labour		45			192														
Entrepreneur (family labour)	Month	1,000			3	5	6	6	6	6	6	6	6	6		6	6	6	6
Total Labour				0	3	5	6	6	6	6	6	6	6	6	6	6	6	6	6
Economic budget (EC)																			
		Unit Cost	WOP	With Project															
				Yr1	Yr				r5 Yr6					Yr10					/r15
Output				0	7,392	11,088	14,045	14,784	14,784	14,784	14,784	14,784	14,784	14,784	14,784	14,784	14,784	14,784	14,784
Lanscapping service	EC			0	7,200	10,800	13,680	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Gardening	EC			0	192	288	365	384	384	384	384	384	384	384	384	384	384	384	384
Investments and Equipements	EC		2,25	0															
Weed eater	EC			0	2,000	0	0	2,000	0	0	2,000	0	0	2,000	0	0	2,000	0	0
Other tools and equipment (pruning				0	250	0	0	250	0	0	250	0	0	250	0	0	250	0	0
Costs	EC											-							
Inputs	EC			0	1,078	1,847	2,072	1,791	1,791	1,791	1,791	1,791	1,791	1,791	1,791	1,791	1,791	1,791	1,791
Gasoline	EC			0	345	690	690	690	690	690	690	690	690	690	690	690	690	690	690
Oil	EC			0	180	360	360	0	0	0	0	0	0	0	0	0	0	0	0
Transport	EC			0	288	432	547	576	576	576	576	576	576	576	576	576	576	576	576
Gut roll	EC			0	100	200	250	300	300	300	300	300	300	300	300	300	300	300	300
Gas bottle	EC			0	60	60	120	120	120	120	120	120	120	120	120	120	120	120	120
Promotion activities	EC			0	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
Labour	EC	-	 	0	3,000	4,500	5,700	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Entrepreneur (family labour)	EC	-		0	3,000	4,500	5,700	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Subtotale operating costs	EC	-		0	4,078	6,347	7,772	7,791	7,791	7,791	7,791	7,791	7,791	7,791	7,791	7,791	7,791	7,791	7,791
Benefits	EC	-	6,00	0	3,314	4,741	6,273	6,993	6,993	6,993	6,993	6,993	6,993	6,993	6,993	6,993	6,993	6,993	6,993
Benefits	EC				4.00.0	1.250	252	005	002	007	005	005	007	0.5	00-	00.7	000	005	
Add benefit	EC	 			-4,936	-1,259	273	993	993	993	993	993	993	993	993	993	993	993	993
Per person	1%		\$ 6,000		-\$,	273 \$	993	\$ 993 \$	993 \$	993	993	993	\$ 993	\$ 993	\$ 993	\$ 993 \$	993	\$ 993
NPV @9% (EC)	11			WOP situation: 6 month job	@1000 E	C/month													
IRR @9% (EC)	9.39																		
B/C	1.87	/																	

Shade-house lettuce 100x30 feet

					Heav	y CC event			Heav	y CC event			Heavy CC eve	nt					He	avy CC event			Heav	vy CC event			Heav	vy CC event		
Detail	Unit	Unit Cost	WOP													Wit	th Project													
		EC	Yr 1 Yr	2 Yr		4 Yr 5	Yr 6	Yr 7	Yr t	8 Yr 9	Yr 10	Yr 11	Yr 12		14 Yr 15	Yr 1		rr 2 Yr 3	3 Yr	4 Y	rs Yr	6 Yr	7 Yr	8 Yr	9 Yr:	10 Yr	11 Yr	r 12 Y	r 13 Yr 1	14 Yr 15
losses rain and desease			15%	15%	15%	70%	18%	18%	18%	75% 2	0% 209	% 20%	80%	25%	25% 25	5%	12%	10%	5%	15%	4%	4%	4%	15%	2%	2%	2%	15%	0%	0% (
Output ettuce	nounds	3.5	3,672	3,672	3,672	1.296	3.542	3.542	3,542	1,080	3,456	3,456 3	,456 864	3,240	3,240	3,240	5,069	5,184	5,472	4,896	5,530	5,530	5,530	4,896	5,645	5,645	5,645	4,896	5,760	5 760 5 7
nvestments and Equipements	ļ	24,010	3,072		3,072	-	3,342	-	-	-	-	-		5,240	3,240	-	5,007	5,104	2,412	4,0,70	3,3,00	2,220	5,550	4,0,0	2,042	5,045	2,042	4,070	5,700	5,700 5,7
equipments and tools	Kit	1,500	-	-	-	-											1		-	-	1	-	-	-	-	1	-	-	-	-
start up- labour	person.day	2,010	-	-	-	-	-	-	-	-	-	-			-	-	1		-	-	-	-	-	-	-	-	-	-	-	-
Shade house infrastructure rrigation system	100 x 30 Kit	13,500	-	-	-	-	-	-	-	-	-	-		-	-	-	1		-	-	-	-	-	-	-	0.5	-	-	-	-
Costs	Kit	7,000	-		_				_			-				_			_				_	_	_	0.3	_	_	_	
			ļ																											
Inputs	_																													
ettuce seedlings FSP	Trays bag	20 251	114	114	114	114	114	114	114	114	114	114	114 114	114	114	114	114 1.1	114	114	114 1.3	114	114	114	114	114	114	114	114	114	114 1
Jrea	bag	130	1	i	1	i	i	i	1	1	i	1	i i	i	i	i	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
iquid fertiliser (20:20:20)	package Kit	10.5 2,700	2	2	2	2	2	2	2	2	2	2	2 2	2	2	2	1	1.8	1.5	1.5 0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5 0.5	1.5	1.5
Plastic replacement Outlass	Unit	2,700	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	0.5	1	1	1	0.5	1	1	1	0.5	1	1
Garden Fork	Unit	65	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Hoe Others little tools	Unit Kit	23 100	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Round-up 1 litre	Litre	39	1	1	1	1	2	2	2	2	2	2	2 2	2	2	2	1.1	1.2	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Bags and packaging	package	15	12	12	12	12	12	12	12	12	12	12	12 12	12	12	12	13	14	15	15	15	15	15	15	15	15	15	15	15	15
Other inputs Irrigation system	Amount	500		0	0	0	0	0	0	0	0	0	0 0		0	0							-							
Lease	Per year	100	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	i	1	1	i	i	i	i	i	i	i	1	i	i
Transport	Service	50	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Labour (Family labour) Land Clearing	Day	44	10	18	18	18	19	18	19	18	19	18	19 10	10	18	18	10	12	10	10	10	10	10	10	10	10	10	10	10	10
Lining	Day	45	9	9	9	9	9	9	9	9	9	9	9 9	9	9	9	9	8	7	7	7	7	7	7	7	7	7	7	7	7
Land Preparation	Day	45	18	18	18	18	18	18	18	18	18	18	18 18	18	18	18	18	12	10	10	10	10	10	10	10	10	10	10	10	10
Transplanting Weed control	Day Day	45	5 7 5 13	13	13	7 13	7	13	13	7	7	7	7 7	7	7 13	13	7	7	13	7 13	7 13	7	13	7	13	7	13	7	13	7
Pest Control	Day	45	4	4	4	4	4	4	4	4	4	4	4 4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Disease Control	Day	45	5 4 5 13	4 13	4 13	4	4 13	4 13	4 13	4	4 13	4 13	4 4 13 13	4 13	4	4	4	4	4	4 13	4 13	4 13	4 13	4 13	4 13	4 13	4	4 13	4 13	4
Fertiliser Application Irrigation	Day Day	45	13	13 16	13	13 16	13	13	13 16	13	13	13	13 13		13 16	13	13 16	13 16	13 16	13 16	13	13 16	13 16	13 16	13	13	13 16	13 16	13 16	13 16
Transportation	Day	45	5 2	2	2	2	2	2	2	2	2	2	2 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Labour (Hired labour)			44	44			43	43	43	13	42	42	42 10							40	58	58	58	40	68	68	68	40	68	68
Harvesting Total Labour	Day	43	149	149	149	16	147	147	147	117	146		42 10 146 115		143	143	154	147	145	127	145	145	145	127	155	155	155	127	155	155 1
Economic budget (EC)																														
		Unit Cost	WOP													Wit	th Project													
Output																Yr1		rr2 Yr3	Yre	4 JY	rs Yr	6 Yr7	7 Yr	18 Yr	9 Yr1	.0 Yr1	11 Yr.	r12 Y	r13 Yr1	4 Yr15
Lettuce	FC																													
			12,852	12,852	12,852	4,536	12,398	12,398	12,398	3,780	12,096 1	2,096 12	,096 3,024	11,340	11,340	11,340		18,144	19,152	17,136	19,354	19,354	19,354	17,136	19,757	19,757	19,757	17,136	20,160	
Investments and Equipements	EC		12,852 0	12,852	12,852	4,536 0	12,398	12,398	12,398	3,780	12,096 1	2,096 12	0 0	11,340	11,340	11,340	24,010	18,144 0	19,152	17,136 0	1,500	19,354	19,354	17,136 0	19,757 0	11,750	19,757	17,136 0	20,160	20,160 20,1 0 1,5
Investments and Equipements Equipments and tools	EC EC		12,852 0 0	12,852 0 0	12,852 0 0	4,536 0 0	12,398 0 0	12,398 0 0	12,398 0 0	3,780 0 0	12,096 1 0 0	2,096 12 0 0	0 0 0 0 0 0	11,340 0 0	0 0 0	11,340 0 0	24,010 1,500	18,144 0 0	19,152 0 0	17,136 0 0	1,500 1,500	19,354 0 0	19,354 0 0	17,136 0 0	19,757 0 0	11,750 1,500	19,757 0 0	17,136 0 0	20,160 0 0	
Investments and Equipements Equipments and tools Start up-labour Shade house infrastructure	EC EC EC EC		0	12,852 0 0 0 0	12,852 0 0 0 0	0	12,398 0 0 0 0	12,398 0 0 0 0	12,398 0 0 0 0	3,780 0 0 0	12,096 1 0 0 0 0	2,096 12 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0	0	11,340 0 0 0	24,010 1,500 2,010 13,500	18,144 0 0 0 0	19,152 0 0 0 0	17,136 0 0 0 0	1,500	19,354 0 0 0 0	19,354 0 0 0	17,136 0 0 0 0	19,757 0 0 0 0	11,750 1,500 0 6,750	19,757 0 0 0 0	17,136 0 0 0 0	20,160 0 0 0	
Investments and Equipements Equipments and tools Start up- labour Shade bouse infrastructure Irrigation system	EC EC EC EC EC		0 0	0 0 0 0 0 0	0 0 0 0 0 0	0	12,398 0 0 0 0	0 0 0 0 0	12,398 0 0 0 0 0	3,780 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,096 12 0 0 0 0 0	0 0 0 0 0 0	0 0	0	0 0 0 0 0	24,010 1,500 2,010	0 0 0	19,152 0 0 0 0 0	17,136 0 0 0 0	1,500 1,500 0	0	0 0 0	0 0	0 0 0	11,750 1,500 0	0 0	0 0 0	20,160 0 0 0 0	
Investments and Equipements Equipments and tools Start up-labour Sthade house infrastructure Irrigation system Costs	EC EC EC EC		0 0	12,852 0 0 0 0 0	0 0 0 0 0 0	0	12,398 0 0 0 0 0	12,398 0 0 0 0 0	12,398 0 0 0 0 0	3,780 0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0 0	0 0 0 0	0 0 0 0	11,340 0 0 0 0 0	24,010 1,500 2,010 13,500 7,000	0 0 0 0	0 0 0 0	0 0 0 0	1,500 1,500 0 0	0 0 0 0	0 0 0	0 0	0 0 0	11,750 1,500 0 6,750 3,500	0 0	0 0 0 0	0 0 0 0	
Investments and Equipements Equipments and tools Start up-labour Shade house infrastructure	EC EC EC EC EC EC EC		0 0 0 0 0 3,020 2,280	0 0 0 0 0 0 3,020 2,280	0 0 0 0 0 0 3,020 2,280	0 0 0 0 0 0	0 0 0 0 0 0 3,034 2,280	0 0 0 0 0 0 3,034 2,280	0 0 0 0 0 0 3,034 2,280	0 0 0 0 0 0 3,034 2,280	0 0 0 0 0 0 3,034 2,280	0 0 0 0 0 0 3,034 3 2,280 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 3,034	0 0 0 0 0 0 3,034 2,280	0 0 0 0 0 0 3,034 2,280	24,010 1,500 2,010 13,500 7,000 3,147 2,280	0 0 0 0 0 3,125 2,280	0 0 0 0 0 3,274 2,280	0 0 0 0 0 4,548 2,280	1,500 1,500 0 0 0 3,286 2,280	0 0 0 0 0 3,198 2,280	0 0 0 0 0 3,286 2,280	0 0 0 0 0 4,548 2,280	0 0 0 0 0 3,286 2,280	11,750 1,500 0 6,750 3,500 3,198 2,280	0 0 0 0 0 3,286 2,280	0 0 0 0 0 0 4,548 2,280	0 0 0 0 0 0 3,286 2,280	0 1,5 0 1,5 0 0 0 0 3,198 3,2 2,280 2,2
Investments and Equipements Equipments and tools Start up-labour Shade house infrastructure Irrigation system Costs Inputs Lettuce seedlings TSP	BC BC BC BC BC BC BC BC		0 0 0 0 0 0 3,020 2,280 251	0 0 0 0 0 3,020 2,280 251	0 0 0 0 0 0 3,020 2,280 251	0 0 0 0 0 0 3,020 2,280 251	0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 0 3,034 3 2,280 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 .034 3,034 .280 2,280 251 251	0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 0 3,034 2,280 251	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264	0 0 0 0 0 3,125 2,280 289	0 0 0 0 0 0 3,274 2,280 314	0 0 0 0 0 0 4,548 2,280 314	1,500 1,500 0 0 0 3,286 2,280 314	0 0 0 0 0 0 3,198 2,280 314	0 0 0 0 0 3,286 2,280 314	0 0 0 0 0 0 4.548 2,280 314	0 0 0 0 0 3,286 2,280 314	11,750 1,500 0 6,750 3,500 3,198 2,280 314	0 0 0 0 0 3,286 2,280 314	0 0 0 0 0 0 4,548 2,280 314	0 0 0 0 0 3,286 2,280 314	0 1,5 0 1,5 0 0 0 0 3,198 3,2 2,280 2,2 314 3
Investments and Equipements Equipments and tools Sart up - labour Shade house infrastructure Irrigation system Costs Inputs Lettuce seedlings TSP Urea	EC		3,020 2,280 251 130	0 0 0 0 0 3,020 2,280 251 130	3,020 2,280 251	0 0 0 0 0 0 3,020 2,280 251 130	0 0 0 0 0 0 3.034 2,280 251 130	0 0 0 0 0 0 3,034 2,280 251 130	0 0 0 0 0 3,034 2,280 251 130	0 0 0 0 0 3,034 2,280 251 130	0 0 0 0 0 0 3,034 2,280 251 130	0 0 0 0 0 0 3,034 3 2,280 2 251 130	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3,034 2,280 251 130	0 0 0 0 0 0 3,034 2,280 251 130	0 0 0 0 0 0 3,034 2,280	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136	0 0 0 0 0 0 3,125 2,280 289 149	0 0 0 0 0 0 3,274 2,280 314 162	0 0 0 0 0 0 4,548 2,280 314 162	1,500 1,500 0 0 0 3,286 2,280 314 162	0 0 0 0 0 0 3,198 2,280 314 162	0 0 0 0 0 3,286 2,280 314 162	0 0 0 0 0 4,548 2,280 314 162	0 0 0 0 0 0 3,286 2,280 314 162	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162	0 0 0 0 0 3,286 2,280 314 162	0 0 0 0 0 0 4,548 2,280 314 162	0 0 0 0 0 0 3,286 2,280 314 162	0 1,5 0 1,5 0 0 0 0 3,198 3,2 2,280 2,2 314 3 162 1
Investments and Equipements Equipments and tools Start up - labour Shade house infrastructure Irrigation system Costs Inputs Lettuce seedlings TSP Urea Liquid fertiliser (20:20:20) Plastic replacement	EC E		3,020 2,280 251 130 21	3,020 2,280 251 130 21	3,020 2,280 251 130 21 0	0 0 0 0 0 0 2,280 2,51 130 21 0	0 0 0 0 0 0 3,034 2,280 251 130 16	3,034 2,280 251 130 0	0 0 0 0 0 0 3,034 2,280 251 130 16 0	0 0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 11	3,125 2,280 289 149 19	3,274 2,280 314 162 0	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350	1,500 1,500 0 0 0 3,286 2,280 314 162 16 0	3,198 2,280 314 162 16	3,286 2,280 314 162 0	0 0 0 0 0 4,548 2,280 314 162 16 1,350	3,286 2,280 314 162 16	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162 16 0	3,286 2,280 314 162 16	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350	3,286 2,280 314 162 16	0 1,5 0 1,5 0 0 0 0 3,198 3,2 2,280 2,2 314 3 162 1 16 0
Investments and Egatjærnents Egatjærnents and tools Sart up- labour Saade house infrastructure rirgation system Costs Imputs Lettuce scedlings ISP Urea Liquid fertiliser (20:20:20) Plastic replacement Cutlass	EC EC EC EC EC EC EC EC EC EC EC EC		3,020 2,280 251 130 21 0	0 0 0 0 0 2,280 251 130 21 0 33	3,020 2,280 251 130 21 0	0 0 0 0 0 2,280 251 130 21 0 33	3,034 2,280 251 130 16 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33	0 0 0 0 0 0 3,034 2,280 251 130 16 0 33	0 0 0 0 0 3,034 2,280 251 130 16 0 33	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3,034 2,280 251 130 16 0 33	0 0 0 0 0 0 3,034 2,280 251 130 16 0 33	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 11 0 33	0 0 0 0 0 3,125 2,280 289 149 19 0 33	0 0 0 0 0 0 3,274 2,280 314 162 16 0 33	0 0 0 0 0 0 4,548 2,280 314 162 16	1,500 1,500 0 0 0 3,286 2,280 314 162 16 0 33	0 0 0 0 0 0 3,198 2,280 314 162	3,286 2,280 314 162 16 0 33	0 0 0 0 0 0 4,548 2,280 314 162	3,286 2,280 314 162 16 0	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162	0 0 0 0 0 0 3,286 2,280 314 162 16 0 33	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350 33	3,286 2,280 314 162 16 0 33	0 1,5 0 1,5 0 0 0 0 3,198 3,2 2,280 2,2 314 31 162 1 16 0 33
Investments and Equipments Equipments and tools Start up Libour Shade house infrastructure Irrigation system Costs Inputs Lettuce seedlings TSP Urea Liquid fertiliser (20:20:20)	EC E		3,020 2,280 251 130 21 0 33 65	3,020 2,280 251 130 21	3,020 2,280 251 130 21 0	0 0 0 0 0 0 2,280 2,51 130 21 0	0 0 0 0 0 0 3,034 2,280 251 130 16	3,034 2,280 251 130 0	0 0 0 0 0 0 3,034 2,280 251 130 16 0	0 0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 130 160 0 0 33 365	0 0 0 0 0 3,034 2,280 251 130 16	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 11	3,125 2,280 289 149 19	3,274 2,280 314 162 0	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350	1,500 1,500 0 0 0 3,286 2,280 314 162 16 0	3,198 2,280 314 162 16	3,286 2,280 314 162 0	0 0 0 0 0 4,548 2,280 314 162 16 1,350	3,286 2,280 314 162 16	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162 16 0	3,286 2,280 314 162 16	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350	3,286 2,280 314 162 16	0 1,5 0 1,5 0 0 0 0 3,198 3,2 2,280 2,2 314 3 162 1 16 0
Investments and Equipments Equipments and Logityments Equipments and Look Start up-1 abour Shade house infrastructure tringuion system Context Logityments Logitym	EC E		3,020 2,280 251 130 21 0 33 65 23	3,020 2,280 251 130 21 0 33 65 23	3,020 2,280 21 130 21 0 33 65	0 0 0 0 0 0 2,280 251 130 21 0 33 65 23 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33 65 23 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 3,034 2,280 251 130 16 0 33 65 23 0	0 0 0 0 0 0 3,034 2,280 251 130 16 0 33 65 23 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33 65 23	3,034 2,280 251 130 16 0 33 65 23 0	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 11 0 33 65 23	0 0 0 0 0 0 3,125 2,280 289 149 19 0 33 0 0	0 0 0 0 0 2,274 2,280 314 162 16 0 33 65 23	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350	1,500 1,500 0 0 0 0 3,286 2,280 314 162 16 0 33 65 23 100	3,198 2,280 314 162 16	0 0 0 0 0 0 2,280 314 162 16 0 33 65 23 100	0 0 0 0 0 0 4.548 2.280 314 162 16 1.350 33 0 0 100	0 0 0 0 0 0 2,280 314 162 16 0 33 65 23 100	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162 16 0	0 0 0 0 0 0 2,280 314 162 16 0 33 65 23 100	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350 33 0 0	0 0 0 0 0 0 0 3,286 2,280 314 162 16 0 33 65 23 100	0 1.5 0 1.5 0 0 0 0 3,198 3,2 2,280 2,2 314 3 162 1 16 0 33 0 0 100 1
Investments and Epatjements Signipirents and Look Start up-1 abour Start u	EC E		3,020 2,280 251 130 21 0 33 65 23 0	3,020 2,280 251 130 21 0 33 65 23 0	3,020 2,280 251 130 21 0 33 65 23 0 39	3,020 2,280 251 130 21 0 33 65 23 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33 65	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3.034 2,280 251 130 16 0 33 65 23 0 58	0 0 0 0 0 0 3.034 2,280 251 130 16 0 33 65	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 130 160 0 0 33 365	3,034 2,280 251 130 16 0 33 65	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 111 0 33 65 23	0 0 0 0 0 3,125 2,280 289 149 19 0 33 0	0 0 0 0 0 0 2,280 314 162 16 0 33 65 23	4,548 2,280 314 162 16 1,350 33 0	1,500 1,500 0 0 0 3,286 2,280 314 162 16 0 33 65 23	0 0 0 0 0 3.198 2,280 314 162 16 0 33 0 0	3,286 2,280 314 162 16 0 33 65 23	0 0 0 0 0 0 4,548 2,280 314 162 1,350 33 0	0 0 0 0 0 0 2,280 314 162 16 0 33 65 23	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162 16 0 33 0 0 100 69	0 0 0 0 0 0 0 0 0 0 0 3.286 2,280 314 162 16 0 33 65 23 100 69	0 0 0 0 0 0 0 0 0 0 314 162 16 1,350 33 0 0	0 0 0 0 0 0 0 0 0 0 3.286 2,280 314 162 16 0 33 65 23 100 69	0 1.5 0 1.5 0 0 0 0 3.198 3.2 2.280 2.2 314 3 162 1 6 0 33 0
Investments and Equipments Equipments and Logityments Equipments and Look Start up-1 abour Shade house infrastructure tringuion system Context Logityments Logitym	EC E		3,020 2,280 251 130 21 0 33 65 23	3,020 2,280 251 130 21 0 33 65 23	3,020 2,280 21 130 21 0 33 65	0 0 0 0 0 0 2,280 251 130 21 0 33 65 23 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33 65 23 0 58	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 3,034 2,280 251 130 16 0 33 65 23 0	0 0 0 0 0 3.034 2,280 251 130 16 0 33 65 23 0 58	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 2,280 2,51 130 16 0 33 65 23 0 58	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3,034 2,280 251	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 11 0 33 65 23 100	0 0 0 0 0 0 3.125 2.280 289 149 19 0 33 0 0 100 46	0 0 0 0 0 0 0 2,280 314 162 16 0 33 65 23 100 58	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350 33 0 0 100 69	1,500 1,500 0 0 0 0 3,286 2,280 314 162 16 0 33 65 23 100 69	0 0 0 0 0 0 0 3,198 2,280 314 162 16 0 33 0	0 0 0 0 0 0 0 0 0 0 0 0 0 14 162 16 0 33 65 23 100 69	0 0 0 0 0 0 0 0 0 0 0 14.548 2,280 314 162 16 1,350 33 0 0 100 69	0 0 0 0 0 0 0 0 0 0 3,286 2,280 314 162 16 0 33 65 23 100 69	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162 16 0 33 0 0	0 0 0 0 0 0 2,280 314 162 16 0 33 65 23 100	0 0 0 0 0 0 4,548 2,280 314 162 16 1,350 33 0 0	0 0 0 0 0 0 0 3,286 2,280 314 162 16 0 33 65 23 100	0 1.5 0 1.5 0 0 0 0 3.198 3.2 2.280 2.2 314 3 162 1 16 0 33 0 0 100 1
Investments and Equipments [apipments and Equipments [apipments and Looks Start up-labour Shade house infrastructure ringuious system Conts Inputs Levies seedlings Looks Live Looks Live Looks Live Liquid fertiliser (20:20:20) Plastic replacement Cutlats Liquid fertiliser (20:20:20) Rooks Liquid Live Liquid Li	EC EC EC EC EC EC EC EC		0 0 0 0 0 0 2,280 251 130 21 0 33 65 23 0 39 180	3,020 2,280 2,281 130 21 1 0 33 65 23 0 9 180	3,020 0 2,280 2,281 130 21 0 33 65 23 0 9 180	0 0 0 0 0 0 2,280 251 130 21 0 33 65 23 0 39 180	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3.034 2,280 251 130 16 0 33 65 23 0 0 180 180	0 0 0 0 0 0 2,280 251 130 16 0 33 65 23 0 58 180	0 0 0 0 0 0 3,034 2,280 251 130 16 0 33 65 23 0 58 180	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 3.034 2,280 251 130 16 0 33 65 23 0 58 180	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33 65 23 0 58 180	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 11 0 33 65 23 100 42 195 650 500	0 0 0 0 0 0 2,280 289 149 19 0 33 0 0 100 46 210 650	0 0 0 0 0 3.274 2.280 314 162 16 0 33 65 23 100 58 225 650	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,500 1,500 0 0 0 0 3,286 2,280 314 162 16 0 33 55 23 100 69 225 650 500	0 0 0 0 0 0 3,198 2,280 314 162 16 0 33 0 0 100 69 225 650	3,286 2,280 314 162 16 0 33 65 23 100 69 225 650	0 0 0 0 0 4,548 2,280 314 162 1,350 33 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3.286 2.280 314 162 16 0 33 35 55 23 100 69 225 650	11,750 1,500 0 6,750 3,500 3,198 2,280 314 162 16 0 0 0 0 0 0 0 0 0 0 0 0 0	3.286 2.280 314 162 16 0 33 65 23 100 69 225 650	0 0 0 0 0 0 4.548 2.280 314 162 16 1.350 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 3.286 2.280 2.314 162 16 0 33 55 23 100 69 225 650	0 1.5 0 1.5 0 0 0 0 3.198 3.2 2.280 2.2 314 3 162 1 16 0 33 0 0 100 1 69 225 2 650 6
Investments and Epatjements Signipments and Captjements Signipments and Cooks Start up-1 abour Shade house infrastricture ringulous system Inputs Lettuce seedlings SEP Urea Lettuce seedlings SEP Livea Lettuce seedlings Lettuce seedlings SEP Livea Liv	IFC		0 0 0 0 0 2,280 251 130 21 0 33 65 23 0 39 180	3,020 2,280 251 130 21 0 33 65 23 0 39 180	3,020 3,020 2,280 251 130 21 0 33 65 23 0 39 180 125	0 0 0 0 0 2,280 251 130 21 0 33 65 23 0 39 180	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,034 2,280 251 130 16 0 33 65 23 0 58	0 0 0 0 0 3.034 2.280 251 130 16 0 33 65 23 0 58	3,034 2,280 251 130 16 0 33 65 23 0 58	0 0 0 0 0 0 2 3,034 2,280 251 130 16 0 33 65 23 0 58 180	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 3.034 2,280 251 130 16 0 33 65 23 0 58 180	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 2,280 251 130 16 0 33 65 23 0 58	24,010 1,500 2,010 13,500 7,000 3,147 2,280 264 136 111 0 33 65 23 100 42 195	0 0 0 0 0 0 3,125 2,280 289 149 19 0 33 0 0 100 46 210	3,274 2,280 314 162 16 0 33 65 23 100 58 225 650	0 0 0 0 0 0 4.548 2,280 314 162 16 1,350 33 0 0 0 100 69 225 650	1,500 1,500 0 0 0 0 3,286 2,280 314 162 16 0 33 65 23 100 69 225 650	0 0 0 0 0 3,198 2,280 314 162 16 0 0 0 0 0 0 0 9 9 225 650	3,286 2,280 314 162 16 0 33 65 23 100 69 225 650	0 0 0 0 0 0 0 4,548 2,280 314 162 16 1,350 0 0 100 69 225 650	3,286 2,280 314 162 16 0 33 65 23 100 69 225 650	11,750 1,500 6,750 3,500 3,198 2,280 314 162 16 0 0 0 100 69 225 650	3,286 2,280 314 162 16 0 33 65 23 100 69 225 650	0 0 0 0 0 0 0 4,548 2,280 314 162 1,350 0 0 0 100 69 225 5650	0 0 0 0 0 0 2,286 2,280 314 162 16 0 33 65 23 100 69 225 650	0 1.5 0 1.5 0 0 0 0 3.198 3.2 2.280 2.2 314 3 162 1 16 0 0 33 0 0 100 1 69 225 2 650 6
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Agro-processing Jam and Jellys

						80%	95%	100%											
Detail	Unit	Unit Cost	WOP	With Project															
		EC		Yr 1	Yr 2	Yr 3		r 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
% growth						10%	5%												
% loss			12%	10%		8%	5%												
Output			111,583	117,648	13	32,289	143,433	143,433	143,433	143,433	143,433	143,433	143,433	143,433	143,433	143,433	143,433	143,433	143,433
Mixed spices net			1,038	1,094	4	1,231	1,334	1,334	1,334	1,33	1,334	1,334	1,334	1,334	1,334	1,334	1,334	1,334	1,33
Mixed spices	Package	107.50	1,180	1,216	5	1,338	1,404	1,404	1,404	1,40	1,404	1,404	1,404	1,404	1,404	1,404	1,404	1,404	1,40
Loss			142	122	,	107	70	70	70	7) 70	70	70	70	70	70	70	70	7
Investments and Equipements		20,190	142	20,190	_	107	70	70	70		, ,(70	70	16,500		/0	70	70	7
				20,190	,	-	-	-	-		-	-	-	10,500	-	-	-	-	
Mill & Blender		2,500		1	1									1					
Grinder and other equipments*		12,000		1	1									1					
Dy-hidrater		2,000		1	1									1					
Start up labour (construction and Bos	Days	45		82	2														
Costs																			
Spices			12,337	12,719	,	13,991	14,691	14,691	14,691	14,69	14,691	14,691	14,691	14,691	14,691	14,691	14,691	14,691	14,69
Seasonings	Oz / Amount		, , , ,	· · · · · · · · · · · · · · · · · · ·															
Whole ginger	Oz / Amount		2,536 1,014	2614 1046		2876 1,150	3020 1,208	3020 1,208	3020 1,208	302 1,208			3020 1,208	3020 1,208		3020 1,208	3020 1,208	3020 1,208	302 1,208
Whole nutmeg	Oz / Amount		1,864	1922		2114	2219	2219	2219							2219		2219	221
Whole mace	Oz / Amount		507	523		575	604	604	604					604		604		604	60-
Whole cloves	Oz / Amount		1,243	1,281	1	1409	1480	1480	1480	148	1480	1480	1480	1480	1480	1480	1480	1480	148
Grounded saffiron	Oz / Amount		761	784	4	863	906	906	906	90	5 906	906	906	906	906	906	906	906	90
Bayleaf	Oz / Amount		101	105		115	121	121	121	12			121	121		121	121	121	12
Cocoa	Oz / Amount		2,409	2,484		2,732	2869	2869	2869							2869		2869	286
Whole cinnamon	Oz / Amount		1,902 40,207	1961 41.45 0		2157 45.595	2265 47.875	2265 47.875	2265 47.875							2265		2265 47.875	226
Other direct costs	I / A			41,450												47,875	47,875		47,87
Plastic bags Seals	bags/ Amount unit / Amount		672 697	719		762 791	800 830	800 830	800 830							830		800 830	80
Labels	unit / Amount		11,703	12,065		13,272	13,936	13,936	13,936									13,936	13,93
750ml bottles	unit / Amount		1,750	1,804		1,984	2,084	2,084	2,084					2,084		2,084		2,084	2,08
300ml bottles	unit / Amount		16,852	17,373	3	19,110	20,065	20,065	20,065	20,06	20,065	20,065	20,065	20,065	20,065	20,065	20,065	20,065	20,06
Modified food starch per lb	Amount		1,395	1,438		1,582	1,661	1,661	1,661	1,66	1,661	1,661	1,661	1,661	1,661	1,661	1,661	1,661	1,66
Garlic per bag	Amount		1,755	1,809		1,990	2,090	2,090	2,090							2,090		2,090	2,09
Onion per bag	Amount		1,522	1,569		1,726	1,812	1,812	1,812							1,812		1,812	1,81
Electricity	Amount		1,170	1,207		1,327	1,394	1,394	1,394					1,394		1,394		1,394	1,39
Water Transportation	Amount Amount		936 1.755	965 1.809		1,061 1,990	1,114 2,090	1,114 2,090	1,114 2,090							1,114 2,090		1,114 2,090	1,11 2,09
Labour	Amount		20,400	,		28,800	28,800	28,800	28,800	, , , ,						28,800		28,800	28,80
Manager	Month	1.000	12			12	12	12	12									12	20,00
Employees	Month	700	12	12		24	24	24	24							24		24	2
Subtotale operating costs	EC		72,944	74,569	-	88,386	91,365	91,365	91,365	91,36	91,365	91,365	91,365	91,365	91,365	91,365	91,365	91,365	91,36
Benefits	EC		38,639	43,079		43,903	52,067	52,067	52,067	52,06	52,067	52,067	52,067	52,067	52,067	52,067	52,067	52,067	52,06
Financing (working capital)	EC		4,920	3,894		1,026	·						-	-	-	-			
Add benefit	EC			-11,856		6,290	13,429	13,429	13,429	13,42						13,429		13,429	13,42
Per person	1%		\$ 19,319		\$	3,145 \$	6,714	\$ 6,714	\$ 6,714	\$ 6,714	\$ 6,714	\$ 6,714	\$ 6,714	\$ 6,714	\$ 6,714	\$ 6714	\$ 6,714	\$ 6714	\$ 6.71

Fishery- 2 participants

Fishermen				Currency:	ECD													
Group of 2				•														
Red fish, butter fish, reef fish																		
Siene / Lines				60%	75%	95%	100%											
Detail	Unit	Unit Cost	WOP	With Project														
		EC	1	Yr 1 Yr	2 Yr	3 Yr 4	Yr 5	Yr 6	5 Yr 7	Y	r8 Yr9	Yr 10	Yr 11	L Yr	12 Yr	13 Yr	14 Yr	r 15
% growth			15%	5%		•	•		•	•	•		•	•	•	·		
Output				16,720														
Fish for export 50%	Pounds	6.00	6,688	5,016	6,270	7,942	8,360	8,360	8,360	8,360	8,360	8.360	8,360	8,360	8,360	8,360	8,360	8,3
Fish local market 40%	Pounds	8.0	0,000	4,013	5,016	6,354	6,688	6,688	6,688	6,688	6,688	6,688	6,688	6,688	6,688	6,688	6,688	6,6
Salted & dried fish 10%	Pounds	12	1 '															
	Pounds		لِـــــا	1,003	1,254	1,588	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	$1,\epsilon$
Investments and Equipements		41,750	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Equipments and tools (ice boxes, safe	Kit	3,200	0	1	-	-	1	-	-	1	-	-	1	-	-	1	-	
Start up - labour	person.day	45	0	90	-	-	-	-	-	-	-	-	-	-	-	-	-	
Boat and engine	15-25 feet	34,500	0	1	-	-	_	-	-	-	-	-	1	-	-	-		
Costs			!															
Inputs	_																	
Fins Wetsuit	5 5	45 25	11	5		0	5			5		0	5			5 5		
Nets, rods and lines	5	540		5		U	3		5	5		U	3	5		3		
Masks, protection and other equipme	Kit	54		5		0	5		2	5		0	5	,		5		
Fuel	Gallon	14	600	1,200	1250	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	13
Salt and spices	month	150	1 - '	6	8	10	12	12	12	12	12	12	12	12	12	12	12	
Bags and packaging	package	15	15	20	25	30	30	30	30	30	30	30	30	30	30	30	30	
Other inputs																		
Membership	Amount	100	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Communications	Per year	1,620	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Transport	Service	1,500	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Family labour		4.5	500	000	000	000	000	000	000	000	000	000	000	000	000	000	000	
Fishermen Transportation	Day Day	45 45	500 100		800 200	800 200	800 200	800 200	800 200	800 200	800 200	800 200	800 200	800 200	800 200	800 200	800 200	8 2
Drying and sales	Day	45	40	100	100	100	100	100	100	100	100	100	100	100	100	100	100	1
Total Labour	Duy	40	640		1,100	1,100	1,100	1.100	1.100	1,100	1.100	1,100	1.100	1,100	1,100	1.100	1.100	1,10
Economic budget (EC)					-,	-,	-,		-,						-,			
		Unit Cost	WOP	With Project														
				Yr1 Yr2	Yr:	Yr4	Yr5	Yr6	Yr7	Y	r8 Yr9	Yr10	Yr11	Yr	12 Yr1	L3 Yr:	14 Yr.	
Output			40,128	74,237	92,796	117,542	123,728	123,728	123,728	123,728	123,728	123,728	123,728	123,728	123,728	123,728	123,728	123,72
Fish for export 50%	EC		40,128	30,096	37,620	47,652	50,160	50,160	50,160	50,160	50,160	50,160	50,160	50,160	50,160	50,160	50,160	50,16
Fish local market 40%	EC EC		0	32,102	40,128	50,829	53,504	53,504	53,504	53,504	53,504	53,504	53,504	53,504	53,504	53,504	53,504	53,50
Salted & dried fish 10%			41.750	12,038	15,048	19,061	20,064	20,064	20,064	20,064	20,064	20,064	20,064	20,064	20,064	20,064	20,064	20,00
Investments and Equipments	EC EC		41,750				3,200											
Equipments and tools (ice boxes, safe Start up-labour								0		2 200	0		2 200	0		2 200		
			0	3,200	0	0	0,200	0	0	3,200	0	0	3,200	0	0	3,200	0	
	EC EC		0	4,050	0	0	0	o	o	0	0	0	0	0	0	0	0	
Boat and engine	EC		0				0											
Boat and engine Costs	EC EC		9 325	4,050 34,500	0	0	0	0	o	0	0	0	0 34,500	0	0	0	0	20.5
Boat and engine	EC EC EC		9,325 45	4,050 34,500 21,392	0	0	0 0 21,148	o	0	0 0 21,148	0	0	0 34,500 21,148	0	0	0 0 21,148	0	20,5
Boat and engine Costs Inputs	EC EC		7,00-0	4,050 34,500 21,392 225	0 0 19,150	0 0 20,228	0	0 0 20,528	0	0	0 0 20,528	0 0 20,528	0 34,500	0 0 23,228	0 0 20,528	0	0 0 20,528	20,5
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines	EC EC EC EC EC EC		45 25 540	4,050 34,500 21,392 225 125 2,700	19,150 0 0 0	0 0 20,228 0	21,148 225 125 0	0 0 20,528	23,228	21,148 225 125 0	0 0 20,528 0 0	0 0 20,528 0 0	0 34,500 21,148 225 125 0	0 0 23,228	20,528 0 0	21,148 225 125 0	20,528 0 0	20,5
Boat and engine Costs Inputs Fins Wetsuit Mets, rods and lines Masks, protection and other equipme	EC EC EC EC EC EC EC		45 25 540 54	4,050 34,500 21,392 225 125 2,700 270	0 0 19,150 0 0 0	0 0 20,228 0 0 0	21,148 225 125 0 270	20,528 0 0 0 0 0	23,228 0 0 2,700 0	21,148 225 125 0 270	0 0 20,528 0 0 0	0 0 20,528 0 0 0	0 34,500 21,148 225 125 0 270	23,228 0 0 2,700 0	0 0 20,528 0 0 0	21,148 225 125 0 270	0 0 20,528 0 0 0	
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipme Fuel	EC EC EC EC EC EC EC		45 25 540	4,050 34,500 21,392 225 125 2,700 270 16,872	0 0 19,150 0 0 0 0 17,575	20,228 0 0 0 0 18,278	21,148 225 125 0 270 18,278	20,528 0 0 0 0 0 18,278	23,228 0 0 2,700 0 18,278	21,148 225 125 0 270 18,278	0 0 20,528 0 0 0 0 18,278	0 0 20,528 0 0 0 0 18,278	0 34,500 21,148 225 125 0 270 18,278	0 0 23,228 0 0 2,700 0 18,278	0 0 20,528 0 0 0 0 18,278	0 0 21,148 225 125 0 270 18,278	0 0 20,528 0 0 0 0 18,278	18,2
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipms Fuel Salt and spices	EC		45 25 540 54 8,436	4,050 34,500 21,392 225 125 2,700 270 16,872 900	0 0 19,150 0 0 0 0 17,575 1,200	20,228 0 0 0 0 18,278 1,500	0 0 21,148 225 125 0 270 18,278 1,800	20,528 0 0 0 0 0 18,278 1,800	23,228 0 0 2,700 0 18,278 1,800	21,148 225 125 0 270 18,278 1,800	0 0 20,528 0 0 0 0 18,278 1,800	0 0 20,528 0 0 0 0 18,278 1,800	0 34,500 21,148 225 125 0 270 18,278 1,800	23,228 0 0 2,700 0 18,278 1,800	0 0 20,528 0 0 0 0 18,278 1,800	21,148 225 125 0 270 18,278 1,800	20,528 0 0 0 0 18,278 1,800	18,2 1,8
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipme Fuel Salt and spices Bags and packaging	EC		45 25 540 54 8,436 0 225	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300	0 0 19,150 0 0 0 0 17,575 1,200 375	0 0 20,228 0 0 0 0 18,278 1,500 450	0 0 21,148 225 125 0 270 18,278 1,800 450	20,528 0 0 0 0 0 18,278 1,800 450	23,228 0 0 2,700 0 18,278 1,800 450	21,148 225 125 0 270 18,278 1,800 450	0 0 20,528 0 0 0 0 18,278 1,800 450	0 0 20,528 0 0 0 0 18,278 1,800 450	0 34,500 21,148 225 125 0 270 18,278 1,800 450	0 0 23,228 0 0 2,700 0 18,278 1,800 450	20,528 0 0 0 0 18,278 1,800 450	21,148 225 125 0 270 18,278 1,800 450	20,528 0 0 0 0 18,278 1,800 450	18,2 1,8 4
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipms Fuel Salt and spices Bags and packaging Other inputs	EC		45 25 540 54 8,436 0 225 1,250	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300 3,620	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620	20,528 0 0 0 0 0 18,278 1,800 450 3,620	23,228 0 0 2,700 0 18,278 1,800 450 3,620	21,148 225 125 0 270 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620	0 0 23,228 0 0 0 2,700 0 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	21,148 225 125 0 270 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	18,2 1,8 4 3,6
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipms Fuel Salt and spices Bags and packaging Other inputs Membership	EC		45 25 540 54 8,436 0 225	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300 3,620 500	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 500	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620 500	0 0 21,148 225 125 0 270 270 18,278 1,800 450 3,620 500	0 0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500	0 0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 500	0 0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620 500	0 0 0 23,228 0 0 0 2,700 0 18,278 1,800 450 3,620 500	0 0 20.528 0 0 0 0 18.278 1.800 450 3.620 500	21,148 225 125 0 270 18,278 1,800 450 3,620 500	20,528 0 0 0 0 18,278 1,800 450 3,620 500	18,2 1,8 4 3,6
Boat and engine Costs Inputs Fins Wetsurid and lines Masks, protection and other equipme Fuel Salt and spices Bags and packaging Other inputs Membership Communications	EC		45 25 540 54 8,436 0 225 1,250	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300 3,620	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620	20,528 0 0 0 0 0 18,278 1,800 450 3,620	23,228 0 0 2,700 0 18,278 1,800 450 3,620	21,148 225 125 0 270 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620	0 0 23,228 0 0 0 2,700 0 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	21,148 225 125 0 270 18,278 1,800 450 3,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620	18,2 1,8 4 3,6 5 1,6
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipme Fuel Salt and spices Bags and packaging Other inputs Membership Communications Transport	EC EC EC EC EC EC EC		45 25 540 54 8,436 0 225 1,250 500	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300 3,620 500	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 500 1,620	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620 500	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620	20,528 0 0 0 0 0 0 18,278 1,800 450 3,620 500	23,228 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620	0 0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620	0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620	18,2 1,8 4 3,6
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipms Fuel Salt and spices Bags and packaging Other inputs Membership	EC E		45 25 540 54 8,436 0 225 1,250 500 0 750	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300 3,620 500 1,620	0 0 19,150 0 0 0 17,575 1,200 375 3,620 500 1,620	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620 500 1,620 1,550	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500	20,528 0 0 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500	23,228 0 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,520	0 0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500	23,228 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500	0 0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620	18,2 1,8 4 3,6 5 1,6 1,5
Boat and engine Costs Inputs Firs Wetsuit Musks, protection and other equipme Fuel Salt and spices Bags and packaging Other inputs Membership Communications Transport Family labour	EC E		45 25 540 54 8,436 0 225 1,250 500 0 750 28,800	4,050 34,500 21,392 225 125 2,700 270 16,872 900 300 3,620 1,620 1,620 49,500	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 500 1,620 49,500	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620 500 1,620 1,500 49,500	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500	20,528 0 0 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500	0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500	0 0 0 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,520 49,500	0 0 0 0 0 0 0 0 0 0 0 18.278 1,800 450 3,620 500 1,620 1,500	0 0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500	0 0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 49,500	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 1,620 1,500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 1,620 1,500	18,2 1,8 4 3,6 5 1,6 1,5 49,5
Boat and engine Costs Inputs Fins Wetsuit Nets, rods and lines Masks, protection and other equipme Fuel Salt and spices Bags and packaging Other inputs Membership Communications Transport Family Jabour Fishermen	EC E		45 25 540 8,436 0 225 1,250 500 0 750 28,800 22,500 4,500	4,050 34,500 21,302 225 125 270 270 16,872 900 3,620 500 1,620 1,500 49,500 36,000	0 0 19,150 0 0 0 17,575 1,200 375 3,620 500 1,620 1,500 49,500	0 0 20,228 0 0 0 0 18,278 1,500 450 3,620 500 1,620 1,500 49,500 36,000	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500 36,000	20,528 0 0 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500 36,000	23,228 0 0 2,700 18,278 1,800 4,500 1,620 1,500 49,500 36,000	0 0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500	0 0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000	0 34,500 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 36,000	0 0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500	0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500	0 0 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 36,000	0 0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500	18,2 1,8 4 3,6 5 1,6 1,5 49,5 36,0 9,0
Boat and engine Costs Inputs Fins Wetsuit Wetsuit Nots, rock and lines Masks, protection and other equipme Field Salt and spices Bags and packaging Other inputs Membership Communications Transport Framity labour Fishermen Transportation Drying and sales Subtotate operating costs	EC EC EC EC EC EC EC EC EC		45 25 540 54 8,436 0 225 1,250 500 0 750 28,800 22,500 4,500	4,050 34,500 21,392 225 125 2,700 270 16,872 900 3,620 1,620 1,500 49,500 36,000 9,000 4,500 74,512	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 1,620 1,500 49,500 9,000 4,500 72,270	0 0 0 20,228 0 0 0 0 18,278 1,500 450 500 1,620 1,620 1,500 49,500 36,000 9,000 4,500 73,348	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 1,620 1,620 1,500 49,500 9,000 4,500 74,268	20,528 0 0 0 0 0 18,278 1,800 450 3,620 1,500 1,500 49,500 36,000 9,000 4,500 73,648	0 0 23,228 0 0 2,770 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 76,348	0 0 0 21,148 225 125 0 0 270 18,278 1,800 450 500 1,620 1,620 49,500 49,500 49,500 4,500 4,500 4,500 4,500	0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648	0 0 0 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648	0 34,500 21,148 225 125 0 0 270 18,278 1,800 450 500 1,620 1,500 36,000 9,000 4,500 74,268	0 0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500 49,500 4,500 76,348	0 0 0 0 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 9,000 4,500 73,644	0 0 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 74,268	0 0 0 0 0 0 0 0 0 18.278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648	18,2 1,8 4,6 5,1,6 1,5,5 49,5 36,0 9,0 4,5,5
Boat and engine Costs Inputs Fits Wetsuit Nets, rook and lines Masks, protection and other equipme Full Salt and spices Bags and packaging Other inputs Membership Communications Transport Family labour Fishermen Transport	EC E		45 25 540 8,436 0 225 1,250 500 0 750 28,800 22,500 4,500	4,050 34,500 21,302 225 225 2,700 270 16,872 900 3,620 500 1,620 1,500 49,500 9,000 4,500	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 500 1,620 1,500 49,500 9,000 9,000	0 0 0 0 0 0 0 0 18,278 1,500 450 500 1,520 4,500 4,500 9,000 4,500	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500 9,000 4,500	0 0 0 20.528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 9,000 9,000	0 0 23,228 0 2,700 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500	0 0 0 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 9,000 9,000 4,500	0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 9,000 9,000	0 0 0 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500	0 34,500 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500	0 0 0 23,228 0 0 0 2,700 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500	0 0 0 20,528 0 0 0 18,278 1,800 450 3,620 1,620 1,620 49,500 9,000 9,000	0 0 21,148 225 125 0 270 450 450 3,620 500 1,500 49,500 36,000 9,000 4,500	0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 9,000 9,000	18,2 1,8 4,6 5,1,6 1,5,5 49,5 36,0 9,0 4,5,5
Boat and engine Costs Inputs Firis Wetsuit Nets, rook and lines Masks, protection and other equipme Fuel Salt and spices Bags and packaging Other inputs Membership Communications Transport Family Iabour Fishermen Transportation Drying and sales Subtotale operating costs Benefits Benefits	EC E		45 25 540 8,436 0 0 225 1,250 500 0 750 28,800 4,500 1,800 39,375	4,050 34,500 21,392 225 125 2,700 270 16,872 900 3,620 1,620 1,620 49,500 36,000 9,000 4,500 74,512 -275	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 1,620 1,500 49,500 36,000 9,000 4,500 72,270 20,526	0 0 20,228 0 0 0 0 18,278 1,500 450 500 1,620 1,500 49,500 49,500 49,500 49,500 43,500 44,194	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500 49,500 4,500 74,268 49,460	20,528 0 0 0 0 0 18,278 1,800 450 3,620 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 0 23,228 0 0 2,7700 0 18,278 1,800 450 500 1,620 1,500 49,500 49,500 49,500 47,548 47,380	0 0 21,148 225 125 0 270 18,278 1,800 500 4500 1,620 1,500 9,000 4,500 9,000 4,500 74,268 49,460	0 0 20,528 0 0 0 0 18,278 1,800 450 3,620 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 0 0 0 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500 36,000 9,000 4,500 49,460	0 0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 1,620 1,500 49,500 36,000 9,000 4,500 76,348 47,380	0 0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 0 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 49,460	0 0 0 20,528 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	18,2 1,8 4 3,6 5 1,6 1,5 36,0 9,0 4,5 73,6 50,0
Boat and engine Costs Inputs Versuit Wetsuit Wetsuit Nets, rods and lines Masks, protection and other equipms Fuel Salt and spices Bags and packaging Other inputs Membership Communications Transport Family labour Fishermen Transportation Drying and sales Subtotale operating costs Benefits Benefits Add benefit	EC E		45 25 540 544 8,436 0 0 225 1,250 500 0 7,50 28,800 22,500 1,800 39,375 753	4,050 34,500 21,302 225 2,700 270 16,872 900 300 3,620 500 1,620 49,500 9,000 4,500 74,512 -275 -42,778	0 0 19,150 0 0 0 17,575 1,200 375 3,620 500 1,620 1,500 49,500 9,000 9,000 4,500 72,270 20,526	0 0 0 0 0 0 0 0 18,278 1,500 450 3,620 1,500 49,500 49,500 9,000 4,500 73,348 44,194	0 0 21,148 225 125 0 270 18,278 1,800 4,500 1,620 1,620 49,500 36,000 9,000 4,500 74,268 49,460	0 0 0 20,528 0 0 0 0 18,278 1,800 4,500 1,620 1,500 49,500 9,000 4,500 73,648 50,080	0 0 0 23,228 0 2,700 18,278 1,800 450 3,620 1,520 4,500 4,500 9,000 4,500 76,348 47,380	0 0 21,148 225 125 0 0 270 18,278 1,800 450 3,620 1,620 1,620 49,500 4,5	0 0 20,528 0 0 0 0 18,278 1,800 4,500 1,620 1,500 49,500 9,000 4,500 73,648 50,080	0 0 0 0 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 34,500 21,148 225 225 25 270 18,278 1,800 450 1,620 1,500 49,500 36,000 9,000 4,500 74,268 49,460 48,707	23,228 0 0 0 0 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500 4,500 76,348 47,380	0 0 0 20,528 0 0 0 0 18,278 1,890 450 500 1,620 1,590 49,500 9,000 9,000 4,590 73,648 50,080	0 0 21,148 225 125 125 126 0 270 18,278 1,800 45,00 1,620 1,500 49,500 9,000 4,500 74,268 49,460 48,707	0 0 0 20,528 0 0 0 0 18,278 1,800 4500 1,620 1,500 49,500 9,000 9,000 4,500 73,648 50,080	18,23 1,8 4 3,6 5 5 1,6 1,5 36,0 9,0 4,5 73,6 50,0
Boat and engine Costs Inputs Fins Wetsuit Wetsuit Nets, rock and lines Masks, protection and other equipme Fuel Salt and spices Bags and packaging Other inputs Membership Communications Transport Fishermen Transport Fishermen Drying and sales Subtotale operating costs Benefits Bene	EC E		45 25 540 8,436 0 0 225 1,250 500 0 750 28,800 4,500 1,800 39,375	4,050 34,500 21,302 225 2,700 270 16,872 900 300 3,620 500 1,620 49,500 49,500 9,000 4,500 74,512 -275	0 0 19,150 0 0 0 0 17,575 1,200 375 3,620 1,620 1,500 49,500 36,000 9,000 4,500 72,270 20,526	0 0 20,228 0 0 0 0 18,278 1,500 450 500 1,620 1,500 49,500 49,500 49,500 49,500 43,500 44,194	0 0 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500 49,500 4,500 74,268 49,460	20,528 0 0 0 0 0 18,278 1,800 450 3,620 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 0 23,228 0 0 2,7700 0 18,278 1,800 450 500 1,620 1,500 49,500 49,500 49,500 47,548 47,380	0 0 21,148 225 125 0 270 18,278 1,800 500 4500 1,620 1,500 9,000 4,500 9,000 4,500 74,268 49,460	0 0 20,528 0 0 0 0 18,278 1,800 4,500 1,620 1,500 49,500 9,000 4,500 73,648 50,080	0 0 0 0 0 0 0 0 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 34,500 21,148 225 125 0 270 18,278 1,800 450 3,620 500 1,620 1,500 49,500 36,000 9,000 4,500 49,460	0 0 0 23,228 0 0 2,700 0 18,278 1,800 450 3,620 1,620 1,500 49,500 36,000 9,000 4,500 76,348 47,380	0 0 0 20,528 0 0 0 0 18,278 1,890 450 500 1,620 1,590 49,500 9,000 9,000 4,590 73,648 50,080	0 0 21,148 225 125 0 270 18,278 1,800 450 500 1,620 1,500 49,500 36,000 9,000 4,500 49,460	0 0 0 20,528 0 0 0 0 18,278 1,800 4500 1,620 1,500 49,500 9,000 9,000 4,500 73,648 50,080	18,23 1,84 4,3,6 5,5 1,6 1,5,5 36,0 9,0 4,5,5 73,6,6 50,0
Soat and engine Costs Inputs Inputs Vets, into Masks, protection and other equipms Vets with a spices Sags and packaging Materian substantial spices Sags and packaging Membership Communications Fransport Samily labour Tensportation Dry ing and sales Subtotale operating costs Senefits Senefits Med benefit	EC E		45 25 540 544 8,436 0 0 225 1,250 500 0 7,50 28,800 22,500 1,800 39,375 753	4,050 34,500 21,302 225 2,700 270 16,872 900 300 3,620 500 1,620 49,500 49,500 9,000 4,500 74,512 -275	0 0 19,150 0 0 0 17,575 1,200 375 3,620 500 1,620 1,500 49,500 9,000 9,000 4,500 72,270 20,526	0 0 0 0 0 0 0 0 18,278 1,500 450 3,620 1,500 49,500 49,500 9,000 4,500 73,348 44,194	0 0 21,148 225 125 0 270 18,278 1,800 4,500 1,620 1,620 49,500 36,000 9,000 4,500 74,268 49,460	0 0 0 20,528 0 0 0 0 18,278 1,800 4,500 1,620 1,500 49,500 9,000 4,500 73,648 50,080	0 0 0 23,228 0 2,700 18,278 1,800 450 3,620 1,520 4,500 4,500 9,000 4,500 76,348 47,380	0 0 21,148 225 125 0 0 270 18,278 1,800 450 3,620 1,620 1,620 49,500 4,5	0 0 20,528 0 0 0 0 18,278 1,800 4,500 1,620 1,500 49,500 9,000 4,500 73,648 50,080	0 0 0 0 0 0 0 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500 36,000 9,000 4,500 73,648 50,080	0 34,500 21,148 225 225 25 270 18,278 1,800 450 1,620 1,500 49,500 36,000 9,000 4,500 74,268 49,460 48,707	23,228 0 0 0 0 0 0 2,700 0 18,278 1,800 450 3,620 500 1,620 1,500 49,500 4,500 76,348 47,380	0 0 0 20,528 0 0 0 0 18,278 1,890 450 500 1,620 1,590 49,500 9,000 9,000 4,590 73,648 50,080	0 0 21,148 225 125 125 126 0 270 18,278 1,800 45,00 1,620 1,500 49,500 9,000 4,500 74,268 49,460 48,707	0 0 0 20,528 0 0 0 0 18,278 1,800 4500 1,620 1,500 49,500 9,000 9,000 4,500 73,648 50,080	18,1,3 3,6,3 1,4,1 1,2,3 36,6,9,9,9,9,9,9,9,9,9,9,9,9,9,9,9,9,9,9

Wellness services

Eco-tourism 1- Ecological Health	are services				Currenc	y: ECD												
1 entrepreneur // 5 people																		
				40%	75%	95%	100%											
Detail	Unit	Unit Cost	WOP	With Project														
		EC		Yr 1	Yr 2	Yr 3 Yr	4	Yr 5 Yr	6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
% growth																		
Output																		
Healthcare service off-season (10 mo	Hour	100	400	400	400	400	400	400	400	400		400						
Healthcare service during season (2 m	Hour	100	120	192	360	456	480	480	480	480	480	480			0 48) 48	0 48	30 48
Investments and Equipements		17,100 13,500	· ·	1	-	-	-	0.5	-	-	-			-	-	-	-	-
Bath facilities	Amount	2,500		1			,	0.5		1				1				
Website and IT start up support Marketing plan	Lot Unit	1,100		1			1			1				1			1	
Start-up labour	Days	1,100		44														
Costs	Days	43		44														
Inputs		1	1															
Towels, water and perfumes	Kit	810	2	2.5	3	3	3	3	3	3	3	3	,	3	3	2	3	3
Organic and Essential oils	Bottles	10	50	80	150	200	250	250	250	250		250						
Rent	EC/year	200	1	1	150	200	230	230	250	250	250	230			1 23	, 23 I		1 23
Promotion and marketing	EC/year EC/month	100	1	12	12	12	12	12	12	12	-			-	2 1:		-	13 1
Comfort equipments and bath accom		1.080	1	3	4	5	5	5	5	5					5			5
Labour		1,000		,	•								,					
Family labour	person.month	1.000	24	24	24	24	24	24	24	24	24	24	1 2	4 2	4 2	1 2	4 2	24 2
Hired labour	person.month	700	12	12	24	36	36		36	36					6 3			36 3
Total Labour	person.month	700	36		48	60	60		60	60					0 6			50 6
Economic budget (EC)				50	-10		00	- 00	00	00	- 00	0.	,		1	, ,		30 0
Leonomie Buuget (Le)		Unit Cost	WOP	With Project										+		1		
		Cinc cost			Yr2	Yr3 Yr4	ı	Yr5 Yr6		/r7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
Output			52,000	59,200	76,000	85,600	88,000	88,000	88,000	88,000	88,000	88,000		0 88,00	0 88,00	00,88		00,88 00
Healthcare service off-season (10 mo	EC		40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000		40,000						
Healthcare service during season (2 m			12,000	19,200	36,000	45,600	48,000	48,000	48,000	48,000	48,000	48,000						
Investments and Equipements	EC		19,080	19,080				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
Bath facilities	EC		0	13,500	0	0	0	6,750	0	0	0	()	0	0)	0	0
Website and IT start up support	EC		0	2,500	0	0	2,500	0	0	2,500			2.50			2.50		0
Marketing plan	EC		Ö	1,100	0	o o	0	ō	Ö	0	0		, , ,					0
Start-up labour	EC		0	1,980	0	0	0	0	0	0	0			0	0)	0	0
Costs	EC																	
Inputs	EC		3,400	7,465	9,650	11,230	11.730	11.730	11.730	11.730	11.730	11.730	11.73	0 11.73	0 11.73	11.73	0 11.83	30 11.93
Towels, water and perfumes	EC		1,620	2,025	2,430	2,430	2,430	2,430	2,430	2,430	2,430	2,430		, , , , , ,	,,,,			, , ,
Organic and Essential oils	EC		500	800	1,500	2,000	2,500	2,500	2,500	2,500		2,500						
Rent	EC		200	200	200	200	200	200	200	200	200	200						
Promotion and marketing	EC		O	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,20	0 1,20	0 1,20	1,20	0 1,30	00 1,40
Comfort equipments and bath accom	EC		1,080	3,240	4,320	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,40	0 5,40	0 5,40	5,40	0 5,40	00 5,40
Labour	EC		32,400	32,400	40,800	49,200	49,200	49,200	49,200	49,200	49,200	49,200	49,20	0 49,20	0 49,20	49,20	0 49,20	00 49,20
Family labour	EC		24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,00	0 24,00	0 24,00	24,00	0 24,00	00 24,00
Hired labour	EC	1	8,400	8,400	16,800	25,200	25,200	25,200	25,200	25,200	25,200	25,200						
Subtotale operating costs	EC		35,800	39,865	50,450	60,430	60,930	60,930	60,930	60,930	60,930	60,930						
Benefits	EC		16,200	19,335	25,550	25,170	27,070	27,070	27,070	27,070	27,070	27,070	27,07	0 27,07	0 27,07	27,07	0 26,97	70 26,87
Benefits	EC													, , , , ,		, , ,	,	, , , , ,
Add benefit	EC	1		-15,945	9,350	8,970	10,870	10,870	10,870	10,870	10,870	10,870	10,87	0 10,87	0 10,87	10,87	0 10,77	70 10,67
Per person	1%		\$ 16,200		\$ 9,350	\$ 8,970 \$	10,870	\$ 10,870 \$	10,870	\$ 10,870	######	\$ 10,870	\$ 10,870	\$ 10,870	\$ 10,870	\$ 10,870	\$10,770	0 \$ 10,670
				-		T	- /	-						,	. ,			,
NPV @9% (EC)	60,187	/																
NPV @9% (EC) IRR @9% (EC)	60,187																	

Appendix 10: Economic and Financial Analysis

Parameters		
	Unit	Qty
Total rural roads	Quantity	30
Beneficiaries per Road	Person	100
Vehicles quantity	Vehic/road	14
Vehicles trips (two way trip) Private	Vehic/week	7
Vehicles trips (two way trip) Public/Others	Vehic/week	10
Savings in time	%	50
Costs savings in time per person per trip	EC	4
People travelling in Private Transport	Person/Veh	1
People travelling in Public Transport 30% of c	Person/Veh	6
People in Private	Person	14
People in Public (40% of the rest)	Person	34
Transport cost savings per passenger Priv	ECD/passenger	58,800
Transport cost savings per passenger Pub	ECD/passenger	504,000
Total transport cost add savings	ECD/yr	562,800
Total transport cost add savings	USD/yr	208,444
*Minimum salary per hour EC 4		
Day in Agriculture> 5 hours		
Vehicles> 140 per 1000 person		

	Job Placement							
				20%			60% Succes	60%
	WOP		Wth				Total	
Ν°	WOP Jobs	Av-Salary	Wth Jobs	Av-Salary	Ad	d Benefit	Persons employed	%
1	Mason Class C*	975	Mason Class A	1275	\$	8,640	29	15%
2	Carpenters Class C**	1050	Carpenters Class A	1500	\$	13,050	29	15%
3	Seasonal labour in agriculture	650	Skilled labour in agriculture	780	\$	4,940	38	20%
4	Hospitality Sector- Helper	500	Hospitality Sector- Bartender	550	\$	1,900	38	20%
5	Industrial worker- cleaner***	700	Industrial worker- machin operator	900	\$	5,800	29	15%
6	Fish Processor	700	Skilled fish processor	840	\$	4,060	29	15%
Αv				Per month	\$	38,390	192	1
				Doringer	\$	460,680	ECD	
				Per year	\$	170,622	USD	

[&]quot;A Class" construction worker means a top grade construction worker with many years of experience and wide knowledge of technical skills relating to an area of work.

— "B Class" construction worker means a mediocre construction worker with some years of experience and some knowledge of technical skills relating to an area of work.

— "C Class" construction worker means an apprentice construction worker with basic training and skill

GRENADA

Climate Smart Agriculture and Rural Enterprise Programme (SAEP)

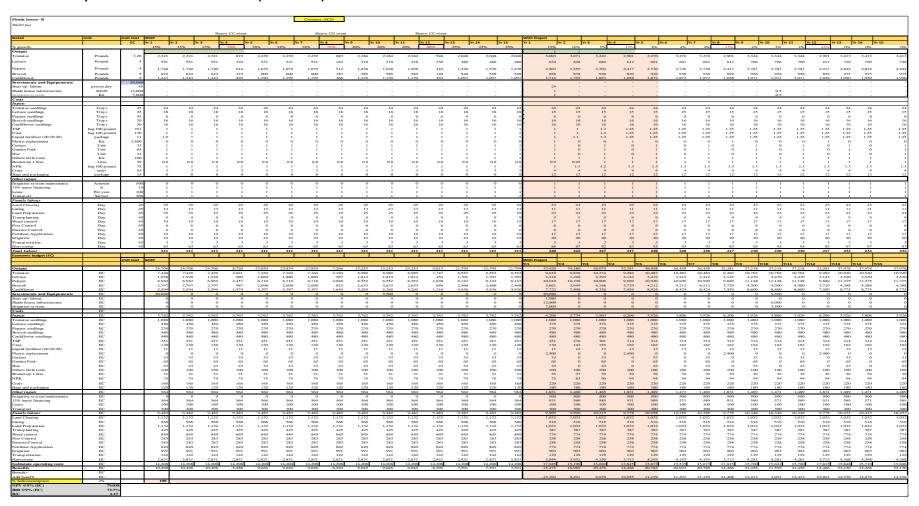
Final project design report

Appendix 10: Economic and Financial Analysis

Models- Component 2- CSA Small ruminants

CSA initiative- Small-ruminants				Curren	icy : ECl	D															
Part-time occupation-																					
					25%	35%	65%	6 8	85%							100%					
Detail	Unit	Unit Cost	WOP	With Project																	
		EC		Yr 1	Yı	r 2 Y	/r 3	Yr 4		Yr 5 Y	r 6	Yr 7	Yr 8	Yr 9	Yr 10	ĮY	r 11	Yr 12	Yr 13	Yr 14	Yr 15
% growth		r																			
Output	** .	220	4.7												31						
Animals	Unit	330	17		21	23	2	8	31	31	31	l	31	31		34	34	34	34	3	4 3
Investments and Equipements						-		-	-	-		-	-	-	-	-	-	-			-
Fencing	3800 sq feet	5,000			1																
Plastic tanks	2 units	3,000			1											1					
Construction of roof / shed	′8 x ′8	7,000			1											1					
Other materials and tools / installatio	Kit	1,400			1																
Start-up labour // fencing		45	0		72																
Costs																					
Inputs																					
Wheat meal	Bag	45	10)	18	20	2:	2	24	24	24		24	24	24	24	24			2	4 2
Medicine	Package	650	0		1	1		1	1	1.2	1.2	2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.	3 1.3
Materials and tools	Kit	150	0		1			1		2			2		2		2		2		2
Grass seeds	Package	1,400	0.2		0.5		0.:	5		0.5			0.5		0.5		0.5		0.5	5	0.5
Water management	Amount	150	0.5		1	1		1	1	1	1	1	1	1	1	1	1	1	1		1
Transportation	Amount	200	1		1	1	1		1	1	1		1	1	1	1	1	1	1	1	
Labour		\$ 700.00																			
Family labour	person.month	700	5		5	5		5	5	5	4	5	5	5	5	5	5	5	5		5 .
Total Labour	personmonen	700	5		5	5		5	5	5	-		5	5	5	5	5				5 :
			3					3				,	3	3	3		3			,	, ,
Economic budget (EC)			14400	metals Books	_	-		+	-			+								1	+
		Unit Cost	WOP	With Project					-							-					
				Yr1			/r3	Yr4			r6	Yr7	Yr8	Yr9	Yr10		r11	Yr12	Yr13	Yr14	Yr15
Output			5,610		7,013	7,574	9,25		,379	10,379	10,379		10,379	10,379	10,379	11,220	11,220	11,220	11,220		
Animals	EC		5,610	7	7,013	7,574	9,25	7 10,	,379	10,379	10,379	9	10,379	10,379	10,379	11,220	11,220	11,220	11,220	11,22	0 11,220
Investments and Equipements	EC		19,640																		
Fencing	EC		0	5	5,000	0		0	0	0	()	0	0	0	0	0	0	()	0 5,000
Plastic tanks	EC		0	3	3,000	0	(0	0	0	()	0	0	0	3,000	0	0	()	0 (
Construction of roof / shed	EC		0	7	7,000	0	(0	0	0	()	0	0	0	7,000	0	0	()	0 (
Other materials and tools / installatio	EC		0	1	1,400	0		0	0	0	()	0	0	0	0	0	0	()	0 (
Start-up labour // fencing	EC			3	3,240	0	(0	0	0	()	0	0	0	0	0	0	()	0 (
Costs	EC																				
Inputs	EC		1,005	2	2,620	1,860	2,80	0 2.	,040	3,170	2,170)	3,170	2,170	3,170	2,170	3,235	2,235	3,235	2,23	5 3,235
Wheat meal	EC		450		810	900	99		,080	1,080	1,080		1,080	1,080	1,080	1,080	1,080	1,080	1,080		
Medicine	EC		.50		650	650	650		650	780	780		780	780	780	780	845		845		
Materials and tools	EC		0		150	0	150		0	300	(300	0	300	0	300				0 300
Grass seeds	EC		280		700	0	70		0	700	(700	0	700	0	700	0			0 700
Water management	EC		75		150	150	150		150	150	150		150	150	150	150	150	150			
Transportation	EC		200		160	160	16		160	160	160		160	160	160	160	160	160	160		
		ł																			
Labour	EC		3,500		3,500	3,500	3,50		,500	3,500	3,500		3,500	3,500	3,500	3,500	3,500		3,500		
Family labour	EC	!	3,500		3,500	3,500	3,50		,500	3,500	3,500	_	3,500	3,500	3,500	3,500	3,500		3,500		
Subtotale operating costs	EC		4,505	(5,120	5,360	6,30		,540	6,670	5,670		6,670	5,670	6,670	5,670	6,735	5,735	6,735	5,73	
Benefits	EC		1,105		893	2,214	2,95	7 4,	,839	3,709	4,709	9	3,709	4,709	3,709	5,550	4,485	5,485	4,485	5,48	5 4,485
Benefits	EC																				
Add benefit	EC			-19	9,853	1,109	1,85	2 3,	,734	2,604	3,604	4	2,604	3,604	2,604	4,445	3,380	4,380	3,380	4,38	0 3,380
Per person	1%		\$ 553		\$	554	\$ 926	\$ 1,8	867	\$ 1,302	\$ 1,802	\$	1,302 \$	1,802 \$	1,302 \$	2,223	1,690	\$ 2,190	\$ 1,690	\$ 2,190	\$ 1,690
NPV @9% (EC)	3,152																				
IRR @9% (EC)	11.6%																				

Models- Component 2- CSA Shadehouse B (diversified)



Models- Component 2- CSA Typical farmer (1 acre plot)

CS A Part time typical farmer 1 acre plot diversified						Currency:	ECD																							
etail	Unit	Unit Cost EC	Yr 1 Y	r 2 Y	r 3 Yr	4 Yr	5 Yr	6 Yr	7 Yr 8	Yr	9 Yr 1	0 Yr 1	1 Yr 12	Yr 13	Yr 14	Yr 15	Yr 1	Yr 2	Yr 3 Yr	4 Y	r S Yr	6 Yı	r 7 Yr 1	8 Yr 1	9 Yr	10 Y	rr 11 Yr	r 12 Yr	13 Yr 14	Yr 15
& growth Output Watermelon Oasheen			< 440	< 140		50%	× 110	× 440		50%	< 440	< 440	£ 140	50%	× 440	× 140	10%	15%	20%	25%	25%	0.010	0.000	25%	0.000	0.040		25%	0.000	
Dasheen	Lbs Lbs Lbs	3	6,448 4,084 2,375	6,448 4,084 2,375	6,448 4,084 2,375	3,224 2,042 1,188	6,448 4,084 2,375	6,448 4,084 2,375	6,448 4,084 2,375	3,224 2,042 1,188	6,448 4,084 2,375	6,448 4,084 2,375	6,448 4,084 2,375	3,224 2,042 1,188	6,448 4,084 2,375	6,448 6,4 4,084 4,0 2,375 2,3	184 4	093 7,415 492 4,696 513 2,731	7,738 4,901 2,850	3,224 2,042 1,188	8,060 4,901 2,850	8,060 4,901 2,850	8,060 4,901 2,850	6,045 3,675 2,138	8,060 4,901 2,850	8,060 4,901 2,850	8,060 4,901 2,850	6,045 3,675 2,138	4,901 2,850	8,060 8,0 4,901 4,5 2,850 2,8
l'annia	Lbs	4	834	834	834	417	834	834	834	417	834	834	834	417	834	834 8	34	959	1,001	417	1,042	1,042	1,042	782	1,042	1,042	1,042	782	1,042	1,042 1,0
Investments and Equipements Pump	Kit	13,500 2,000	-	-		-	-	-	-	-	-	-	-	-	-	-	1	1 -	-		-	-	-	-		1	-	-	-	-
Weed eater	Kit	2,000																1		1			1			1			1	
Start up- labour Construction of roof / shed	person.day (8' X 8")	45 6,000			-	-	-		-	-	-	-			-	-	-	13 -			-		-	-		1	-		-	-
Naples / Guttering / PVC Tanks	Kit unit	1,415 1,500																1 -								1				
Costs																														
Vatermelon seeds Dasheen plants	Package Plants	0.05	2041	0	0	0	2041	0	0	0	2041	0	0	0	2041	0	0 :	1 1 041 0	0	0	2041	0	0	0	0	2041	0	0	0	0 20
Seet seeds Fannia plants FSP	Package Plants	20 0.05	1361	0	0	0	1361	0	0	0	1361	0	0	0-	1361	0	0 1	2 2 361 0	0	0	1361	0	0	0	0	1361	0	0	0	0 15
Lerbicides	bag 100 pound Litre	251 75 33	1	1	1	1	1	2.5 1.5	2.5 1.5	2.5 1.5	2.5 1.5	2.5 1.5	2	2	2	2	2	1 1	1	1	1	2.5 1.5	2.5 1.5	2.5 1.5	2.5 1.5	2.5 1.5	2	2	2	2
Outlass Sarden Fork	Litre Unit Unit	65	1	0	i	0	1	0		0	i	0	i	0	- 1	0	i	1 0		0	1	0	- 1	0		0	i	0	i	0
Hoe Others little tools	Unit Kit Litre	23 100	1	1	1	1	1	1 2.5	1 1 2.5	1 2.5	1 1 2.5	0 1 2.5	1 1 3 0	1 3.0	1	1 3.0	1	1 0	1	1	1	1 2.5	1 2.5	0 1 2.5	2.5	0 1 2.5	1	1	1	1
Round-up 1 litre NPK Crate	bag 100 pound	39 75 55	5	5	5	5	5	5	5	5	5	5	5	5	3.0 5	5	5	5.5 5.5 8.0 8.0	5.5 8.0	5.5 8.0	5.5 8.0	6	6	6	6	6	6	6	6	6
Insecticide	units package	55 10	1	1	1	1	1	8	8	8	1	8	1	5 1	1	1	1	8.0 8.0 1.1 1.2	1.30	8.0 1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30 1
Other inputs Irrigation system	Amount	500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 1		-	- 1	-	-	-	1	-	-	-	1	1
15% input financing Lease Fuel/oil	% Per year Gallon	15 400 14.4	1 1	1 1	1 1	1 1	1	1 1	1 1	1 1	1 1	1 1	1	1	1	1 1	1	1 1	1	1 1	1 1	1	1 1	1 1	1 1	1	1 1	1 1	1 1	1
Fuel/oil Tractor service	Gallon Service	14.4 60	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	2	8 10 2 2	12	15 2	15 2	15 2	15 2	15 2	15 2	15 2	15 2	15 2	15 2	15 2
Transport Family labour	Service	500		1	- 1		1		1	1	1	-	1		-	1	1	1 1	1	-	1		- 1		1		1	- 1	1	1
Land Clearing Ploughing	Day Day	45 45	9	9	9	9	9	10 9	10 9	10	10 9	10 9	10	11 9	11 9	11 9	9 9	9	9	9	9	9	9	9	9	9	9	9	9	9
Ploughing Preparation of beds Fertiliser Application	Day Day	45 45	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5 5 6 3	5	5 3	5	5 3	5	5	5	5	5	5	5 3	5	5
Planting Digging holes	Day Day	45 45	9	6	9	9 6	6	6	6	6	9	6	6	6	6	6	9 9 6 6	9	9	9	9 6	6	6	9 6	9	9	9 6	6	6	6
Planting Digging holes Weed Control Pest Control	Day Day	45 45	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	1.5 3	15 3	15 15 3 3	15	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3
Thinning Irrigation Harvesting	Day	45 45	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 3 4 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Harvesting Washing, grading Moulding	Day Day	45 45	15	15	15 3	15 3	15 3	15 3	15 3	15	15 3	15 3	15 3	15 3	15 3	15 3	15 17 3 3	18	18 3	8 3	19	19	19	14 3	19	19	19 3	14	19 3	19 3
Moulding Total Labour	Day	45	83	83	1 83	1 83	1 83	1 86	1 86	1 86	1 86	1 86	1 86	88	1 88	88	1 1	84 85	86	75	1 86	1 86	1 86	1 81	1 86	1 86	1 86	81	1 86	1 86
Economic budget (EC)		Unit Cost	WOP																											
Output			WOP														With Project													
			32,556	32,556	32,556	16,278	32,556	32,556	32,556	16,278	32,556	32,556	32,556		32,556	12,556 32,5		Yr2 811 37,439		4 Y	rs Yrd	5 Yr 39,548	r7 Yr8	29,661	39,548		7 r11 Yr 39,548			Yr15 9,548 39,5
Watermelon Dasheen	EC EC		32,556 6,448 12,251	32,556 6,448 12,251	32,556 6,448 12,251	3,224 6,126	6,448	6,448	32,556 6,448 12,251	16,278 3,224 6,126	6,448	6,448	6,448	3,224	6,448	6,448 6,4	48 7 51 13	093 7,415 176 14.089	7,738	16,278 3,224 6,126	39,548 8,060 14,702	39,548 8,060 14,702	39,548 8,060 14,702	29,661 6,045 11,026	39,548 8,060 14,702	8,060 14,702	8,060 14,702	6,045	8,060 1 14,702 14	8,060 8,0 4,702 14.3
Watermelon Dasheen Beet Tannia	EC EC		32,556 6,448	32,556 6,448 12,251 10,688 3,169	32,556 6,448 12,251 10,688 3,169				32,556 6,448 12,251 10,688 3,169	16,278 3,224 6,126 5,344 1,585		6,448	6,448	3,224	6,448		148 7 151 13 188 11 69 3	093 7,415 476 14,089 756 12,291 486 3,644	7,738	16,278 3,224 6,126 5,344 1,585	39,548 8,060 14,702 12,825 3,961	39,548 8,060 14,702 12,825 3,961	39,548 8,060 14,702 12,825 3,961	29,661 6,045 11,026 9,619 2,971	39,548 8,060 14,702 12,825 3,961	8,060	8,060	6,045 11,026	8,060 1 14,702 14	
Watermelon Dasheen Beet Tannia Investments and Equipements	EC EC EC		32,556 6,448 12,251	32,556 6,448 12,251 10,688 3,169 0	32,556 6,448 12,251 10,688 3,169 0	3,224 6,126	6,448	6,448	32,556 6,448 12,251 10,688 3,169 0	16,278 3,224 6,126 5,344 1,585 0	6,448	6,448	6,448	3,224	6,448	6,448 6,4	448 7 51 13 888 11 69 3 0 13	093 7,415 476 14,089 756 12,291 486 3,644 500 0	7,738	6,126 5,344 1,585 2,000	39,548 8,060 14,702 12,825 3,961 0	14.702	14,702 12,825 3,961 2,000 0	11.026	14,702 12,825	8,060 14,702 12,825 3,961 11,500 2,000	8,060 14,702	6,045	8,060 1 14,702 1- 12,825 1: 3,961 : 2,000	8,060 8,0 4,702 14.3
Watermelon Dascheen Beet Tannia Hyvestments and Equipements Pump Weed easter Start ur-labour	EC EC EC EC EC EC		32,556 6,448 12,251	32,556 6,448 12,251 10,688 3,169 0 0	32,556 6,448 12,251 10,688 3,169 0 0	3,224 6,126	6,448	6,448	32,550 6,448 12,251 10,688 3,169 0 0	16,278 3,224 6,126 5,344 1,585 0 0	6,448	6,448	6,448	3,224	6,448	6,448 6,4	148 7 151 13 188 11 69 3 0 13 0 2 0 2	7,415 76 14,089 756 12,291 486 3,644 500 0 000 0 585 0	7,738	6.126	75 Yee 39,548 8,060 14,702 12,825 3,961 0 0 0	14.702	14,702 12,825	11.026	14,702 12,825	8,060 14,702 12,825 3,961 11,500 2,000 0	8,060 14,702	6,045	8,060 1 14,702 14	8,060 8,0 4,702 14.3
Watermelon Dasheen Beet Tannia Investments and Equipements Pump Weed eater Start up-labour Construction of roof/shed Naples / Guttering/ PVC	EC EC EC EC EC EC EC		32,556 6,448 12,251	32,556 6,448 12,251 10,688 3,169 0 0 0 0	32,556 6,448 12,251 10,688 3,169 0 0 0 0	3,224 6,126	6,448	6,448	32,550 6,448 12,251 10,688 3,169 0 0 0	16,278 3,224 6,126 5,344 1,585 0 0 0 0	6,448	6,448	6,448	3,224	6,448	6,448 6,4	148 7 13 13 188 11 169 3 0 13 0 2 0 2 0 0 6 0 0 1 1 0 0 1 1 0 0 0 0 0 0 0 0 0	093 7,415 476 14,089 756 12,291 486 3,644 500 0 000 0 585 0 000 0 0415 0	7,738	6,126 5,344 1,585 2,000	39,548 8,060 14,702 12,825 3,961 0 0 0 0	14.702	14,702 12,825 3,961 2,000 0	11.026	14,702 12,825	8,060 14,702 12,825 3,961 11,500 2,000 2,000 0 6,000 0	8,060 14,702	6,045	8,060 1 14,702 1- 12,825 1: 3,961 : 2,000	8,060 8,0 4,702 14.3
Watermelon Dasheen Boet Tannia Investments and Equipements Pump Weed easter Start up-labour Construction of roof / shed Naples / Guttering / PVC Tanks Costs	BC BC BC BC BC BC BC BC BC BC		32,556 6,448 12,251	32,556 6,448 12,251 10,688 3,169 0 0 0 0	32,556 6,448 12,251 10,688 3,169 0 0 0 0 0	3,224 6,126	6,448	6,448	32,556 6,448 12,251 10,688 3,109 0 0 0 0 0	16,278 3,224 6,126 5,344 1,585 0 0 0 0 0	6,448	6,448	6,448	3,224	6,448 12,251 10,688 3,169 0 0 0 0 0 0	6,448 6,4 2,251 12,2 0,688 10,6 3,169 3,1 0 0 0 0 0 0 0 0	148 7 13 13 188 11 169 3 0 13 0 2 0 2 0 0 6 0 0 1 1 0 0 1 1 0 0 0 1 1 0 0 0 0	7,415 76 14,089 756 12,291 486 3,644 500 0 000 0 585 0	7,738	6,126 5,344 1,585 2,000	39,548 8,000 14,702 12,825 3,961 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0	14,702 12,825 3,961 2,000 0	11.026	14,702 12,825	8,060 14,702 12,825 3,961 11,500 2,000 0 6,000 0 1,500	8,060 14,702	6,045 11,026 9,619 2,971 0 0 0 0 0	8,060 1 14,702 1- 12,825 1: 3,961 : 2,000	8,060 8,0 4,702 14.3
Watermelon Dasheen floot Investments and Equipements Pump Weed eater Start up - labour Construction of roof / shed Naples / Guttering / PVC Conts Linguit Ling	EC EC EC EC EC EC EC EC EC		32,556 6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 3,534	32,556 6,448 12,251 10,688 3,169 0 0 0 0 0 0 0	32,556 6,448 12,251 10,688 3,109 0 0 0 0 0 0 0 0	3,224 6,126	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0	6,448	32,550 6,448 12,251 10,688 3,109 0 0 0 0 0 0 0 0 0 0 0 0 0	16,278 3,224 6,126 5,344 1,585 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448	3,224	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0	6,448 6,4	148 7 7 151 13 13 188 11 169 3 3 10 13 10 2 0 0 2 0 0 0 0 0 0 0 0 0 1 1 1 1 1	093 7,415 476 14,089 756 12,291 486 3,644 500 0 000 0 000 0 588 0 000 0 415 0 699 4,353	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 4,538	6,126 5,344 1,585 2,000 0 2,000 0 0 0 0 0 0	12,825 3,961 0 0 0 0 0 0 0 0	14.702	14,702 12,825 3,961 2,000 0	11.026	14,702 12,825	8,060 14,702 12,825 3,961 11,500 2,000 0 0 6,000 0 1,500 4,933 25	8,060 14,702	6,045	8,060 1 14,702 1- 12,825 1: 3,961 : 2,000	8,060 8,0 4,702 14.7, 2,825 12.8 3,961 3,5 0 0 0 0 0 0 0 0
Watermelon Dacheen Tannia Trannia Tran	EC E		32,556 6,448 12,251 10,688 3,169 13,500 0 0 0 0 0 0 0 0 0	32,556 6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0	32,556 6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126	0,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,109 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 6,4 2,251 12,2 0,688 10,6 3,169 3,1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	148	093 7,415 14,089 14,089 00 14,089 00 00 1886 3,644 00 00 000 0 0 00 000 0 0 00 115 0 0 00 107 00 00 108 0 00 109 4,353 00 109 0 00 109 4,353 00 109 0 00	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 4,538 25 0	6,126 5,344 1,585 2,000 0 2,000 0 0 0 0 0 4,426 25 0 40	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 2,000 0 0 0 0 0	11,026 9,619 2,971 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 4,867	8,060 14,702 12,825 3,961 11,500 2,000 0 6,000 0 1,500 4,933 25 102 40	8,060 14,702 12,825 3,961 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0	8,060 i 14,702 i 12,825 i 3,961 i 2,000 o 0 o 0 o 0 o	8,060 8,0 4,702 14,7 2,825 12,8 3,961 3,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Watermiden Danbeien Tamin Investments and Eppipements Pump Weed outer Sweet of the State of the	BC B		32,556 6,448 12,251 10,688 3,169 13,500 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,088 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 3,771 25 102 40 68	6,448 12,251 10,688 3,109 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4 2.251 12.2 0.688 10.2 0.3,100 3.1 0 0 0 0 0 0 3,631 3.7 25 0 40 0	148	093 7,415 14,089 14,089 00 14,089 00 00 1886 3,644 00 00 000 0 0 00 000 0 0 00 115 0 0 00 107 00 00 108 0 00 109 4,353 00 109 0 00 109 4,353 00 109 0 00	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 4,538 25 0	6,126 5,344 1,585 2,000 0 2,000 0 0 0 0 0 4,426 25 0 40 0 502	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 2,000 0 0 0 0 4,867 25 0 40 0 0	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 14,702 12,825 3,961 11,500 2,000 0 6,000 0 1,500 4,933 25 102 40 68	8,060 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 1 14,702 1 12,825 1 2,926 1 3,961 2 0 0 0 0 0 0 0 0 0 0 5,104 4 25 0 0	8,060 8,0 4,702 14,7 2,825 12,8 3,961 3,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Watermiden Deathean Tamini Misselments and Epitjements Transport Start up-labor S	BC B		32,556 6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 3,534	10,688 3,169 0 0 0 0 0 0 0 0 0 3,157 25 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0	6,448 12,251 10,688 3,109 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 6,4 2,251 12,2 0,688 10,6 3,169 3,1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	148	7.415 14.089 15.6 12.291 14.089 000 000 000 000 000 000 000 000 000	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 4,538 25 0 0	6,126 5,344 1,585 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,961 0 0 0 0 0 0 0 0 4,803 25 102	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 0 0 0 0 0 4,867 25 0 40 0	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 4,712 25 0 40 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 14,702 12,825 3,961 11,500 2,000 0 6,000 0 1,500 4,933 25 102 40	8,060 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 0	8,060 1 14,702 1 12,825 1 3,961 2 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 8,0 4,702 14,7 2,825 12,8 3,961 3,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Wedermelon Boot Transia Boot Transia T	BC B		32,550 0,448 12,251 10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 0.4 (2.251 12.2 (2.251 12.2 (2.351 12.2 (2.351 12.2 (2.351 12.2 (3.160 3.1 (3.160	148 7 7 151 148 7 151 148 7 151 148 148 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.415 14,089 156 12,291 14,089 050 000 000 0000 0000 0000 00000 0000 0000	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,126 5,344 1,585 2,000 0 2,000 0 0 0 0 4,426 25 0 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 0 0 0 0 0 0 4,867 25 0 40 0 628 113 33 65 23	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0,000 0 1,500 4,933 25 102 40 68 828 113 0 0	8,060 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 1 14,702 1 12,825 1: 3,961 2 2,000 0 0 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 8,0 4,702 14,7 2,825 12,8 3,961 3,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Watermiden Beet Beet Beet Beet Beet Beet Beet Be	BC B		32,550 0,448 12,251 10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4 2.251 12.2 0.688 10.6 3.100 3.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	148 7 7 151 148 7 151 148 7 151 148 148 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.415 14,089 156 12,291 14,089 050 000 000 0000 0000 0000 00000 0000 0000	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,126 5,344 1,585 2,000 0 2,000 0 0 0 0 4,426 25 0 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 0 0 0 0 0 0 4,867 25 0 40 0 628 113 33 65 23	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0,000 0 1,500 4,933 25 102 40 68 828 113 0 0	8,060 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 1 14,702 1 12,825 1: 3,961 2 2,000 0 0 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 8,0 4,702 14,7 2,825 12,8 3,961 3,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Waterwiden Beet Francis Beet Weed outer Weed outer Weed outer Volume of the Control of the Control Supher / Cuttering / PVC Fashe Waterwiden seeds Desheen plants Francis Fran	EC E		32,556 6,448 12,251 10,688 3,169 13,500 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,088 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12.251 10.688 3.100 0 0 0 0 0 0 0 3.204 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,281 12,281 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,109 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4 2.251 12.251 13.7 0.688 10.6 3.100 3.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	148 7 7 151 148 7 151 148 7 151 148 148 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.415 14.089 1556 12.291 14.089 000 000 000 000 000 000 000 000 000	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,126 5,344 1,585 2,000 0 2,000 0 0 0 0 0 4,426 25 0 40 0 502	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 0 0 0 0 4,867 25 0 40 0 628 113 33 65	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 14,702 12,825 3,961 11,500 2,000 0 6,000 0 1,500 4,933 25 102 40 68	8,060 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,060 1 14,702 1- 12,825 1- 12,825 1- 3,961 3 2,000 0 0 0 0 0 0 0 0 0 5,104 4 0 0 40 0 753 150 33 33 65	8,060 8,0 4,702 14,7 2,825 12,8 3,961 3,5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Watermaken Beet Beet Beet Water Wate	BC B		32,550 0,448 12,251 10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4 2.251 12.2 0.688 10.6 3.100 3.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	148	7,415 1 2,291 2	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.126 5.344 1.585 2.000 0 0 0 0 0 0 0 4.426 25 0 0 0 0 0 0 100 77 77 413 440 13 1,089	12,825 3,961 0 0 0 0 0 0 0 0 0 0 4,803 25 102 40 68 502 73 33 65 23 100 77 413 440 143 440 143 1440 1441 1441 1441	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 0 0 0 0 0 4,867 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0 0,000 0 1,500 4,933 25 102 400 68 628 113 0 0 0 0 0 0 0 1,500	8,000 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 100 1100 1100 13 2,049	8,000 14,702 14,702 14,702 14,702 14,702 12,825 13,3041 2,000 0 0 0 0 0 0 0 0 0	8.0e0 8.4 4.702 14.4 2.825 12.9 3.961 3.3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Watermiden Beet Beet Familie and Egylpe me ets Proteg Word outer Construction of Copylpe me ets Vegel outer of end? shed Vegels of Construction of end. Vegels of Construction of Construction Leaders Fork How Leaders Fork How VEK Word Word Water Water	EC E		32,550 6,448 12,251 10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 5,157 25 0 40 0 0 0 0 0 100 10 11 1,207	10,688 3,169 0 0 0 0 0 0 0 0 3,3125 0 0 40 0 0 77 77 375 440 10 10 1,288	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,088 3,169 0 0 0 0 0 0 0 5,534 25 102 40 68 25 505 23 100 77 375 440 10 1,310	6,448 12,251 10,088 3,169 0 0 0 0 0 0 0 3,594 40 0 0 0 0 0 113 0 0 0 0 100 0 0 1,594 40 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,088 3,169 0 0 0 0 0 0 0 4.771 23 102 40 68 628 113 33 20 628 140 64 64 64 65 65 66 67 67 68 67 68 68 68 68 68 68 68 68 68 68 68 68 68	6.448 12,251 10,688 3.100 0 0 0 0 0 0 0 3.3994 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,281 10,688 3,169 0 0 0 0 0 0 0 0 3,787 25 0 40 40 155 150 33 36 52 31 160 116 375 440 116 4,339	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 12,251 10,088 3,100 0 0 0 0 0 4,008 25 102 4008 25 102 40 33 150 33 65 23 100 101 135 150 34 100 1,365	6,448 6,-6, 6,488 6,-6,488	448 7 7 1551 133 888 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7,418 7,7	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 4,538 0 0 40 4,538 502 75 33 65 52 120 77 413 13 1,500	6.126 5.344 1.585 2.000 0 0 0 0 0 0 4.426 255 0 0 0 0 0 100 77 77 77 77 77 77 77 77 77 77 77 77 7	12,825 3,961 0 0 0 0 0 0 0 0 0 0 4,803 23 102 40 68 52 23 75 75 75 74 40 40 40 40 40 40 40 40 40 40 40 40 40	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 4,712 255 0 0 0 0 0 0 0 4,712 13 0 0 0 0 4,712 13 13 13 2,022 5500	14,702 12,825 3,961 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0 0,000 0 1,500 4,933 25 102 400 68 628 113 0 0 0 0 0 0 0 1,500	8,000 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 4,048 23 0 40 0 0 116 450 0 116 443 2,049 313	S,000	8.0e0 8.4 4.702 14.4 2.825 12.9 3.961 3.3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Valeranisho leads formula form	BC BC		32,550 0.448 12,251 0.318 0.318 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00000 0.00000 0.0000 0.0000 0.00000 0.00000 0.00000 0.0000 0.0000 0.00000 0.0000	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5,157 25 0 0 502 75 0 0 0 100 1100 11,207 247 400	10,688 3,169 0 0 0 0 0 0 0 0 0 3,37,2 22 7 5 0 0 0 10 10 7,77 375 440 10 1,285 400 2,465 400	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 3,157 2 0 0 0 0 0 0 100 77 375 440 10 1,267 400 100 1,267	0,448 12,251 10,088 3,169 0 0 0 0 0 0 0 0 3,534 40 68 502 75 33 65 23 100 77 77 345 40 40 40 400	6,448 12,251 10,088 3,169 0 0 0 0 0 0 0 0 3,394 2 2 0 0 628 113 0 0 100 96 375 440 10 1,294 40 10 2,24 400 400	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,088 3,169 0 0 0 0 0 0 0 4,771 23 400 68 628 113 33 100 96 375 440 10 1,557 400 0 0 0	6.448 12,251 10,688 3.100 0 0 0 0 0 0 0 3.394 23 40 0 0 628 113 0 0 0 100 96 375 440 0 100 96 274 40 0 274 40 0 0 274	6,448 12,251 10,688 3,169 0 0 0 0 0 0 3,787 25 0 0 0 0 0 0 1,787 25 150 333 150 116 375 440 116 375 440 10 1,160 10 10 10 10 10 10 10 10 10 10 10 10 10	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 3,637 25 0 0 0 0 0 0 116 375 440 102 116 375 440 0 301 400	6.448 12,251 10,088 3,169 0 0 0 0 0 0 0 4.008 255 160 68 753 150 33 150 116 375 440 116 375 440 0 386 386 387 400 0 0 386 386	6.448 6.4. 6.448 6.4. 6.481 6.4.	448 7, 448 7, 448 151 141 141 141 141 141 141 141 141 141	7,418 1,765 1,229	7,738 14,702 12,825 3,803 0 0 0 0 0 0 0 4,538 0 0 40 4,538 502 75 33 65 52 120 77 413 13 1,500	6.126 5.344 1.585 2.000 0 0 0 0 0 0 0 4.426 225 0 0 0 0 0 0 100 0 100 0 110 0 100 0	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 2,000 0 0 0 0 0 0 0 0 4,867 25 40 0 0 628 113 33 100 96 450 450 450 450 450 450 800 800 800 800 800 800 800 800 800 8	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0 0 0,000 0 0 1,500 4,283 4,283 102 40 68 628 113 0 0 0 0 0 0 0 4,240 102 103 103 103 103 103 103 103 103 103 103	8,000 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 4,048 23 0 40 0 0 116 450 0 116 443 2,049 313	S,000	8.0e0 8.4 4.702 14.4 2.825 12.9 3.961 3.3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Westermission Best Teamin Te	EC E		32,550 6,448 12,251 10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 5,157 25 0 40 0 0 0 0 0 100 10 11 1,207	10,688 3,169 0 0 0 0 0 0 0 0 3,3125 0 0 40 0 0 77 77 375 440 10 10 1,288	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,088 3,169 0 0 0 0 0 0 0 5,534 25 102 40 68 25 505 23 100 77 375 440 10 1,310	6,448 12,251 10,088 3,169 0 0 0 0 0 0 0 3,594 40 0 0 0 0 0 113 0 0 0 0 100 0 0 1,594 40 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,088 3,160 0 0 0 0 0 0 0 4.771 23 40 68 628 113 33 20 628 40 628 628 13 33 628 640 640 651 651 661 661 661 661 661 661 661 661	6.448 12,251 10,688 3.100 0 0 0 0 0 0 0 3.3994 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,281 10,688 3,169 0 0 0 0 0 0 0 0 3,787 25 0 40 40 155 150 33 36 52 31 160 116 375 440 116 4,339	3,224 6,126 5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 12,251 10,088 3,100 0 0 0 0 0 4,008 25 102 4008 25 102 40 33 150 33 65 23 100 101 135 150 34 100 1,365	6,448 6,-6, 6,488 6,-6,488	448 7, 448 7, 448 151 141 141 141 141 141 141 141 141 141	7,418 7,7	7,738 14,702 12,825 3,803 0 0 0 0 0 0 4,328 40 0 0 0 502 75 22 100 100 100 100 100 100 100 100 100	6.126 5.344 1.585 2.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,961 0 0 0 0 0 0 0 0 0 0 4,803 23 102 40 68 52 23 75 75 75 74 40 40 40 40 40 40 40 40 40 40 40 40 40	14,702 12,825 3,961 0 0 0 0 0 0 0 4,772 25 0 0 628 113 0 100 0 100 26450 440 2,022 500 628	14,702 12,825 3,961 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0 0,000 0 1,500 4,933 25 102 400 68 628 113 0 0 0 0 0 0 0 1,500	8,000 14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 2,071 0 0 0 0 0 0 0 4,948 4,948 150 0 0 100 100 116 459,000 117 117 118 118 118 118 118 118 118 118	S,000	8.0e0 8.4 4.702 14.4 2.825 12.9 3.961 3.3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Westermission Best Tannasi Teatric T	BCC BCC		32,550 0.448 12,241 13,100 13,500 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,088 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 1,588 0 0 0 0 0 0 0 0 0 40 40 40 502 502 502 70 100 100 100 100 100 100 100 100 100	0,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,088 3,160 0 0 0 0 0 0 0 3,304 40 40 60 375 440 100 100 100 100 100 100 100 100 100	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,0888 3.160 0 0 0 0 0 0 0 0 0 3.771 222 102 40 688 133 33 65 23 100 100 100 100 100 100 100 100 100 10	6.448 12,251 10,688 3.160 0 0 0 0 0 0 0 0 3.894 25 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12.251 10.688 3.169 0 0 0 0 0 0 0 0 7.787 25 40 40 7.783 150 33 36 52 31 106 1106 1106 1106 1106 1106 1106 11	3,224 6,126 5,344 1,588 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,088 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4. (2.251 12.2,251 12.	144 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.415 776 14,089 74 74 75 14,089 74 75 75 74 75 75 75 75 75 75 75 75 75 75 75 75 75	7,738 14,702 12,825 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.126 5.344 1.585 2.000 0 2.000 0 0 0 0 0 4.426 23 40 0 502 75 8 0 100 100 77 413 440 500 253 400 253 400 253 253 400 253 253 253 253 253 253 253 253 253 253	12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 1,803 102 40 68 52 102 40 68 52 103 100 100 100 100 100 100 100 100 100	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,001 2,800 0 0 0 0 0 0 0 4,867 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 9,619 0 0 0 0 0 0 0 0 4,7/2 23 0 0 0 0 628 113 0 100 96 450 96 46 46 46 46 46 46 46 46 46 46 46 46 46	14,702 12,825 3,061 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 2,000 6,000 6,000 1,500 4,933 25 102 40 68 68 68 68 61 113 0 0 0 100 100 100 100 113 2,047 500 3111 400 216 120 300 34,933	8,000 14,702 12,825 3,961 0 0 0 0 0 0 0 0 5,104 40 0 783 33 65 33 65 23 30 65 440 440 440 440 440 450 440 450 440 460 460 47 860 860 87 87 880 880 880 880 880 880 880 880	6,045 11,026 9,619 2,971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1,948 2 2 2 2 3 0 0 0 1 10 4 40 13 2,049 30 313 313 2,049 30 313 313 2,049 310 313 2,049 310 313 2,049 310 310 310 310 310 310 310 310 310 310	8.000 1 14/702 1 12/825 1 12/825 1 2.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 8,4,4,702 14,4,702 14,4,702 14,4,702 14,4,702 14,4,702 14,4,702 14,100 10,00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Watermiden Best Best Best Best Best Best Best Best	EC EC EC EC EC EC EC EC		32,550 0.448 12,241 13,100 13,500 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 3,157 25 25 25 0 0 0 100 177 2375 440 100 100 247 400 0 120 500 2,562 3,633 333	10,088 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 10 0 10 1	3,224 6,126 5,344 1,388 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,088 3,169 0 0 0 0 0 0 0 5,534 552 25 25 25 25 35 36 40 10 10 10 10 10 10 10 10 10 10 10 10 10	6,448 12,251 10,088 3,169 0 0 0 0 0 0 0 4,394 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12.251 10.088 0 0 0 0 0 0 0 0 0 123 123 40 68 688 688 688 688 688 688 698 698 698	6.448 12,251 10,088 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,281 10,088 30 0 0 0 0 0 0 3,787 25 0 0 753 100 116 1310 116 1310 116 1310 116 1310 116 1310 116 1310 130 130 130 130 130 130 130 130 13	3,224 6,126 5,344 1,588 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4. 6.448 7.4. 6.448 6.4.	1444 7 1445 7 1445 1455 1445 1455 1445	7.418 1.776 14.089 1.76 14.089	7,738 14,702 12,825 14,702 12,825 15,803 0 0 0 0 0 0 0 4,538 23 0 40 13 100 7 413 440 100 100 100 100 100 100 100 100 100	6.126 5.344 1.888 2.000 0 2.000 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,961 0 0 0 0 0 0 0 0 0 4,903 25 25 25 25 33 36 23 31 440 13 2,032 500 206 600 120 500 206 500	14,702 12,825 3,961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,823 3,061 2,825 3,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,825 3,061 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,001 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,619 12,071 0 0 0 0 0 0 0 0 4,940 0 0 753 180 0 0 0 100 101 116 117 2,070 110 110 110 110 110 110 110 110 110	8,000 1 14,702 1 12,823 1 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 8,4,4,702 14,4,702 14,4,702 14,4,702 14,4,702 14,4,702 14,4,702 14,100 10,00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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Watermelon beet lead of the le			32,550 0.448 12,241 13,100 13,500 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 3,157 25 40 0 100 77 375 440 10 10 247 400 0 120 500 20 3,672	10,088 3,169 0 0 0 0 0 0 0 0 0 0 0 2,313 25 0 0 502 75 23 100 75 24 40 40 40 40 40 40 40 40 40 40 40 40 40	3,224 6,126 5,344 1,388 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,088 3,169 0 0 0 0 0 0 5,534 40 68 502 73 363 65 23 00 100 7 7 7 7 7 7 7 7 7 7 7 7 8 7 8 8 8 8 8		10,688 3,100 0 0 0 0 0 0 0 0 0 0 0 0 5,550 25 0 628 113 33 100 96 240 10 120 250 250 250 250 250 250 250 250 250 2	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 12.251 10.688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 12,251 10,058 10,0	6.448 12,281 10,688 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,224 6,126 5,344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 12,251 10,688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.448 6.4.6.258 12.258 12.252 12.258 12.25 12.258 12.25 12.258 12.25 12.258 12.	1444 7 7 1444 7 7 1444	7,418 7,7418 7,418 7,619	7,738 14,702 12,825 14,702 12,825 0 0 0 0 0 0 0 0 4,538 23 0 40 40 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 100 13 13 100 13 13 13 13 13 13 13 13 13 13 13 13 13	6.126 5.344 1.585 2.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,061 0 0 0 0 0 0 0 0 4,803 23 100 68 502 73 23 23 100 72 24 25 25 25 25 20 25 25 25 25 25 25 25 25 25 25 25 25 25	14.702 12.825 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,823 3,83 3,83 3,93 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.702 12.825 3.001 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,961 11,500 2,000 0 0 0 0 1,500 4,023 25 102 40 68 628 113 0 0 0 0 0 0 1,000 68 628 113 102 40 100 100 100 100 100 100 100 100 100	8,000 14,702 12,825 3,001 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,045 11,026 9,610 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1,048 150 150 160 160 160 1753 180 1753 180 180 180 180 180 180 180 180 180 180	8,000 1 14,702 1 12,823 1 2,000 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 8,4,4,702 14,4,702 14,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4
Waterweisen bede level l			32,550 12,251 10,688 3,100 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,088 3,100 0 0 0 0 0 0 0 0 3,1/12 23 0 40 0 50 23 50 23 50 27 75 33 65 65 20 120 0 120 0 120 383 383 236 460 460 460 460 460 460 460 460 460 46	3,224 6,126 6,126 6,126 5,344 0 0 0 0 0 0 0 0 0 0 0 40 0 0 40 0 0 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,082 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,100 0 0 0 0 0 0 0 0 0 3,550 0 40 0 40 0 333 65 63 33 65 13 100 96 1,312 20 20 20 20 20 20 20 20 20 20 20 20 20	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 12.251 10.262 10.	6.448 6.448	6,448 12,281 12,281 10,688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.224 6.126 6.126 5.344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 (12.25) (12.25) (12.25) (12.25) (12.25) (10.25)	. C.428	444 47 48 48 48 48 48 48 48 48 48 48 48 48 48	7,418 7,7	7,738 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,703 14,	6.126 5.344 2.000 0 0.000 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,061 0 0 0 0 0 0 0 0 4,803 102 400 60 60 60 60 60 60 60 60 60 60 60 60 6	14.702 12.823 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,823 2,000 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 .619 2,071 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.702 12.825 3.00 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,001 11,500 0 0,000 0 0,000 0 1,500 4,933 2,23 102 4,933 103 100 100 100 100 100 100 100 100 1	\$,000 14,702 12,825 3,00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,045 11,026 9,071 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8.000 14.702 14.702 14.702 14.702 14.702 14.702 15.2	8,000 8,4,4,702 14,4,702 14,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4,4,702 14,4
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Vacarension local			32,550 12,251 10,688 3,100 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,088 3,100 0 0 0 0 0 0 0 0 3,1/12 23 0 40 0 50 23 50 23 50 27 75 33 65 65 20 120 0 120 0 120 383 383 236 460 460 460 460 460 460 460 460 460 46	3,224 6,126 5,344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,082 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,100 0 0 0 0 0 0 0 0 0 3,550 0 40 0 40 0 333 65 63 33 65 13 100 96 1,312 20 20 20 20 20 20 20 20 20 20 20 20 20	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 12.251 10.262 10.	6.448 6.448	6,448 12,281 12,281 10,688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.224 6.126 6.126 5.344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 (12.25) (12.25) (12.25) (12.25) (12.25) (10.25)	. C.428	444 47 48 48 48 48 48 48 48 48 48 48 48 48 48	7,418 7,7	7,738 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,702 14,703 14,	6.126 5.344 2.000 0 0.000 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,061 0 0 0 0 0 0 0 0 4,803 102 400 60 60 60 60 60 60 60 60 60 60 60 60 6	14.702 12.823 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,823 2,000 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 .619 2,071 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.702 12.825 3.00 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,001 11,500 0 0,000 0 0,000 0 1,500 4,933 2,23 102 4,933 103 100 100 100 100 100 100 100 100 1	8,000 14,702 12,825 3,001 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,045 11,026 9,071 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8.000 14.702 14.702 14.702 14.702 14.702 14.702 15.2	8.000 8.6 4.702 14.702 14.703 10.000 3.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Varienteine Varienteine Varienteine Versit and Epittements versit Versit and Epittements versit Versit and Opples Culturing PVC Jonatus Andread Culturing Jonatus Andread Culturing Jonatus Andread Culturing Versit and Opples Culturing Versit and Opples Versit and Opples Versit and Opples Versit and Opples Versit and Culturing Ve			32,550 12,251 10,688 3,100 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,088 3,100 0 0 0 0 0 0 0 0 3,1/12 23 0 40 0 50 23 50 23 50 27 75 33 65 65 20 120 0 120 0 120 383 383 236 460 460 460 460 460 460 460 460 460 46	3,224 6,126 5,344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,082 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,100 0 0 0 0 0 0 0 0 0 3,550 0 40 0 40 0 333 65 63 33 65 13 100 96 1,312 20 20 20 20 20 20 20 20 20 20 20 20 20	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 12.251 10.262 10.	6.448 6.448	6,448 12,281 12,281 10,688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.224 6.126 6.126 5.344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 (12.25) (12.25) (12.25) (12.25) (12.25) (10.25)	. C.428	444 444 77 444 77 444 74 74 74 74 74 74	7,413 7,415	7,738 11,723 13,23 13,23 13,23 13,23 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.126 4 5.384 3 2,000 0 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,061 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,802 12,	14,702 14,702 15,	11,026 9,619 9,619 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.702 12.825 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8,000 12,452 12,452 12,452 12,452 12,452 12,452 12,500 1,	8,000 14,702 12,825 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.045 11.026 0.00 0.00 0.00 0.00 0.00 0.00 0.00	8.000 1 14,702 1 1 1 1 1 1 1 1 1	8,000 8,6 8,000
substitution of the control of the c			32,550 12,251 10,688 3,100 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,088 3,100 0 0 0 0 0 0 0 0 3,1/12 23 0 40 0 50 23 50 23 50 27 75 33 65 65 20 120 0 120 0 120 383 383 236 460 460 460 460 460 460 460 460 460 46	3,224 6,126 5,344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,448 12,251 10,688 3,169 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,448 12,251 10,082 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10,688 3,100 0 0 0 0 0 0 0 0 0 3,550 0 40 0 40 0 333 65 63 33 65 13 100 96 1,312 202 202 400 120 500 120 500 120 500 120 500 120 500 120 500 120 500 120 500 120 500 121 120 500 121 120 500 500 121 120 500 500 500 500 500 500 500 500 500 5	5,344 1,585 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 12.251 10.262 10.	6.448 6.448	6,448 12,281 12,281 10,688 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.224 6.126 6.126 5.344 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.448 (12.25) (12.25) (12.25) (12.25) (12.25) (10.25)	. C.428	444 444 77 444 77 444 74 74 74 74 74 74	7,418 7,7	7,738 11,723 13,23 13,23 13,23 13,23 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.126 5.344 2.000 0 0.000 0 0 0 0 0 0 0 0 0 0 0 0 0	12,825 3,061 0 0 0 0 0 0 0 0 4,803 102 400 60 60 60 60 60 60 60 60 60 60 60 60 6	14.702 12.823 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,702 12,823 2,000 2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,026 9,619 9,619 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.702 12.825 3.00 0 0 0 0 0 0 0 0 0 0 0 0	8,000 14,702 12,825 3,001 11,500 0 0,000 0 0,000 0 1,500 4,933 2,23 102 4,933 103 100 100 100 100 100 100 100 100 1	8,000 14,702 12,825 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.045 11.026 0.00 0.00 0.00 0.00 0.00 0.00 0.00	8.000 14.702 14.702 14.702 14.702 14.702 14.702 15.2	8,000 8,6 8,000

Summary/Aggregation

	Yr1	Yr2	Yra	Yr4	Yrs	YrG	Total								
		EBD-Compo	nent 1				120	Group of							
ishery	0	1	7	4	3	0	15	2	15						
co-tourism 1- Healthcare- Full time	0	2	11	11	6	0	30	7	30						
Shadehouse-Lettuce Agroprocessing-Jam & Jellys	0	2	11	11	6	0	30 30	- 1	30					-	
		_ ^			-										
Eco-tourism 2- Birdwatching-Part time	0	7	49	56 56	28	0	140	- 1	140						
Landscaping	0	CSA-Compo	49 nent 2	56	28		140		140						-
CSA Shadehouse diversified-Full time	а		13	а	э		35	- 1	20					-	
CSA Small ruminants	12	8 25	13	8 25	2	0	34 111	*	40						
SA farmer- Part time	12	25	41	25	9	0	111	7	40						
Fishery	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
1	\$ -	s -	\$ -	\$ -	\$ -	s -	\$ -	\$ -	\$ -	s -	\$ -	\$ -	- *	s -	\$ -
2		-\$ 24,861	\$ 28,523	\$ 52,348	\$ 57,666	\$ 58,251	\$ 55,703	\$ 57,666	\$ 58,251	\$ 58,251	\$ 57,666	\$ 55,703	\$ 58,251 \$ 389,918	\$ 57,666	\$ 58,251
3			-\$ 174,029	\$ 199,658 -\$ 99,445	\$ 366,435 \$ 114,090	\$ 403,661 \$ 209,391	\$ 407,758 \$ 230,663	\$ 389,918 \$ 233,004	\$ 403,661 \$ 222,810	\$ 407,758 \$ 230,663	\$ 407,758 \$ 233,004	\$ 403,661 \$ 233,004	\$ 230,663	\$ 407,758 \$ 222,810	\$ 233,004
5				-	\$ 74,584	\$ 85,568	\$ 157,044	\$ 172,998	\$ 174,753	\$ 167,108	\$ 172,998	\$ 174,753	\$ 174,753	\$ 172,998	\$ 167,108
al	\$ -	-\$ 24,861	-\$ 145,506	\$ 152,561	\$ 463,607	\$ 756,871	\$ 851,167	\$ 853,586	\$ 859,476	\$ 863,780	\$ 871,425	\$ 867,121	\$ 853,586	\$ 861,231	\$ 862,024
					Fee	o-tourism 1- He	ealthcare- Full	time							
-tourism 1- Healthcare- Full	Yr1	Yr2	Yr3	Yr4	Yrs	Yr6	YrZ	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
time	****	772	Yra	¥ F-4	775	****	***	YFB	719	4110	4111	4112	41.13	4114	4112
1	5 -	-S 25.654	s 25.843	\$ - \$ 31.185	\$ - \$ 35.135	\$ - \$ 35,135	\$ - \$ 35,135	\$ - \$ 35,135	\$ - \$ 35.135	\$ - \$ 35,135	S 35.135	\$ - \$ 35.135	\$ - \$ 35,135	\$ - \$ 35,135	\$ - \$ 34.935
3		25,654	\$ 25,843 -\$ 141,096	\$ 31,185 \$ 142,137	\$ 171,518	\$ 193,243	\$ 193,243	\$ 193,243	\$ 35,135 \$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 35,135 \$ 193,243	\$ 193,243
4				-\$ 141,096	\$ 142,137	\$ 171,518	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243	\$ 193,243
tal 5	40	-S 25.654	-\$ 115,253		\$ 76,962	\$ 77,529	\$ 93,555	\$ 105,405	\$ 105,405	\$ 105,405	\$ 105,405	\$ 105,405	\$ 105,405		
all	\$ -	-a 25,654	-a 115,253	a 32,225	a 271,827	a 477,424	a 515,175	\$ 527,025	s 527,025	a 527,025	a 527,025	a 527,025	a 527,025	\$ 527,025	\$ 526,825
						Agroprocessi	ng- Jam & Jelly	/8							
groprocessing- Jam & Jellys	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
2		-\$ 6,000	\$ 35,920	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197	\$ 50,197
3			-\$ 32,999	\$ 197,558	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083	\$ 276,083
4				-\$ 32,999	\$ 197,558 \$ 17,999	\$ 276,083 \$ 107,759	\$ 276,083 \$ 150,591	\$ 276,083 \$ 150,591							
al	4:	-\$ 6,000	\$ 2.921	\$ 214,757	\$ 505,839	\$ 710,122	\$ 752,953	\$ 752,953	\$ 752.953	\$ 752.053	\$ 752,053	\$ 752.053	\$ 752.953	\$ 752.953	\$ 752,953
		4 0,000				Shadeho	use lettuce				4 102,000			4 102,000	
Shadehouse lettuce	Yr1	Yr2	Yr3	Yr4	Yrs	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
1	# -	\$ -	\$ 9.584	\$ - \$ 11.442	\$ - \$ 21,146	\$ -	s - 12.846	\$ - \$ 12.681	\$ - \$ 22.543	s - s 13.408	\$ - -\$ 12,910	\$ 13.408	\$ - \$ 23.900	\$ -	\$ - \$ 15.735
ŝ		-43,307	-\$ 238,517	\$ 52,713	\$ 62,929	\$ 116,301	\$ 36,226	\$ 70,653	\$ 69,746	\$ 123,988	\$ 73,742	-\$ 71,007	\$ 73,742	\$ 131,448	\$ 85,636
4				-\$ 238,517	\$ 52,713	\$ 62,929	\$ 116,301	\$ 36,226	\$ 70,653	\$ 69,746	\$ 123,988	\$ 73,742	-\$ 71,007	\$ 73,742	\$ 131,448
5					\$ 130,100	\$ 28,752	\$ 34,325	\$ 63,437	\$ 19,760	\$ 38,538	\$ 38,043	\$ 67,630	\$ 40,223	-\$ 38,731	\$ 40,223
al	\$ -	-\$ 43,367	-\$ 228,933	-\$ 174,363	\$ 6,687	\$ 214,569	\$ 199,698	\$ 182,998	\$ 182,703	\$ 245,680	\$ 222,863	\$ 83,773	\$ 66,858	\$ 182,029	\$ 273,042
					Eco-	-tourism 2- Bire	dwatching- Par	t time							
o-tourism 2- Birdwatching- Part time	Yr1	Yr2	Yr3	Yr4	YrS	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
Part time	Si -	s -	S -	s -	Si -	s -	s -	s -	s -	s -	s -	s -	s -	s -	- s
2		-\$ 22,604	\$ 3,353	\$ 14,096	\$ 49,905	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953	\$ 24,953
3			-\$ 158,226	\$ 23,472	\$ 98,671	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668	\$ 174,668
4 5				-\$ 180,830	\$ 26,825 \$ 90,415	\$ 56,384 \$ 6,706	\$ 199,620 \$ 28,192	\$ 199,620	\$ 199,620	\$ 199,620 \$ 99,810	\$ 199,620 \$ 99,810	\$ 199,620	\$ 199,620 \$ 99,810	\$ 199,620	\$ 199,620
al	\$ -	-\$ 22,604	-\$ 154,873	-\$ 143,262	\$ 84,987	\$ 262,710	\$ 427,433	\$ 499,051	\$ 499,051	\$ 499,051	\$ 499,051	\$ 499,051	\$ 499,051		
Landscaping	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	scaping Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- **	\$ -	\$ -
2		-\$ 10,136	\$ 17,643 -\$ 70,953	\$ 31,294 \$ 123,503	\$ 36,715	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357	\$ 18,357
3			-\$ 70,953	\$ 123,503 -\$ 81.089	\$ 219,058 \$ 141,146	\$ 128,502 \$ 125,176	\$ 128,502 \$ 146,859	\$ 128,502							
5					\$ 40,544	\$ 35,287	\$ 62,588	\$ 73,430	\$ 73,430	\$ 73,430	\$ 73,430	\$ 73,430	\$ 73,430	\$ 73,430	\$ 73,430
al	\$ -	-\$ 10,136	-\$ 53,310	\$ 73,708	\$ 356,374	\$ 307,321	\$ 356,306	\$ 367,148	\$ 367,148	\$ 367,148	\$ 367,148	\$ 367,148	\$ 367,148	\$ 367,148	\$ 367,148
					00.0	Shadehouse o	diversified 5	I simo							
Shadehouse diversified-															
Full time	Yr1	Yr2	Yr3	Yr4	Yrs	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15
1	-\$ 34,437	\$ 26,806 -\$ 91,832	\$ 31,519 \$ 71,482	\$ 60,970	\$ 35,111 \$ 162,585	\$ 35,501	\$ 35,111	\$ 64,371	\$ 39,134 \$ 171,655	\$ 15,299 \$ 104,357	\$ 39,134	\$ 68,731	\$ 45,772	\$ 46,163	\$ 45,772
2		-a 91,832	\$ 71,482 -\$ 149,226	\$ 84,051 \$ 116,158	\$ 162,585 \$ 136,582	\$ 93,630 \$ 264,201	\$ 94,670 \$ 152,148	\$ 93,630 \$ 153,840	\$ 171,655 \$ 152,148	\$ 104,357 \$ 278,940	\$ 40,797 \$ 169,580	\$ 104,357 \$ 66,296	\$ 183,282 \$ 169,580	\$ 122,059 \$ 297,833	\$ 123,100 \$ 198,347
4				-\$ 91,832	\$ 71,482	\$ 84,051	\$ 162,585	\$ 93,630	\$ 94.670	\$ 93,630	\$ 171,655	\$ 104,357	\$ 40,797	\$ 104,357	\$ 183,282
5					\$ 34,437	\$ 26,806	\$ 31,519	\$ 60,970	\$ 35,111	\$ 35,501	\$ 35,111	\$ 64,371	\$ 39,134	\$ 15,299	\$ 39,134
6	-S 34.437	-s 65.026	-\$ 46.225	\$ 169.347	\$ 371.324	-\$ 91,832 \$ 412,357	\$ 71,482 \$ 547,516	\$ 84,051 \$ 550,490	\$ 162,585 \$ 655,304	\$ 93,630 \$ 621,357	\$ 94,670 \$ 550,948	\$ 93,630 \$ 501,740	\$ 171,655 \$ 650,220	\$ 104,357 \$ 690,067	\$ 40,797 \$ 630,432
	34,437	65,026	46,225	g 109,347	9 3/1,324	g 412,357	g 547,516	J 55U,490	a 655,304	g 021,357	J 550,948	J 501,740	<i>a</i> 650,∠20	a 690,087	a 630,432
						CSA farme	er- Part time								
CSA farmer- Part time	-\$ 118,700	Yr2 \$ 36,397	Yr3 \$ 55,093	-\$ 40,389	Yr5 \$ 59,901	Yr6 \$ 60.542	Yr7 \$ 40,142	Yr8 \$ 138,928	Yr9 \$ 63,332	Yr10 \$ 59,548	Yr11 \$ 60,542	Yr12 \$ 139,646	Yr13 \$ 43,650	Yr14 \$ 61,260	Yr15
1 2	116,700	\$ 36,397 -\$ 246,302	\$ 55,093 \$ 75,524	\$ 40,389 \$ 114,317 -	\$ 83,807	\$ 60,542	\$ 125,625	\$ 138,928	\$ 288,275	\$ 59,548 \$ 131,413	-\$ 123,561	\$ 139,646	\$ 43,650	\$ 90,574	
3			-\$ 402,590	\$ 123,447	\$ 186,856	-\$ 136,986	\$ 203,165	\$ 205,338	\$ 136,148	\$ 471,197	\$ 214,800	-\$ 201,965	\$ 205,338	\$ 473,633	\$ 148,046
4				-\$ 244,324	\$ 74,917	\$ 113,399	-\$ 83,134	\$ 123,297	\$ 124,616	\$ 82,626	\$ 285,960	\$ 130,358	\$ 122,569	\$ 124,616	\$ 287,438
5					\$ 86,057	\$ 26,388	\$ 39,942	-\$ 29,282 \$	\$ 43,428	\$ 43,893	\$ 29,103	\$ 100,723	\$ 45,915	-\$ 43,172 &	\$ 43,893
otal	-\$ 118,700	-\$ 209,905	-\$ 271,973	-\$ 46,948	\$ 151,810	\$ 187,638	\$ 325,740	\$ 521,575	\$ 655,799	\$ 669,581	\$ 466,844	\$ 294,386	\$ 462,100	\$ 706,910	\$ 664,962
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,														
		1 14.00	14.0				Iruminants					14	1440		
	Yr1	Yr2	Yr3	\$ 46,602	Yr5 \$ 35,076	Yr6 \$ 45,276	Yr7 \$ 35,076	Yr8 \$ 45,276	Yr9 \$ 35,076	Yr10 \$ 55,374	Yr11 \$ 44,511	Yr12 \$ 54,711	Yr13 \$ 44,511	Yr14 \$ 54,711	Yr15 \$ 44,511
CSA Small ruminants	-R 102 944														
CSA Small ruminants	-\$ 192,841	\$ 14,778 -\$ 400,145	\$ 25,386 \$ 30,664	\$ 52,676	\$ 26,622	\$ 72,783	\$ 93,948	\$ 72,783	\$ 93,948	\$ 72,783	\$ 114,901	\$ 92,360	\$ 113,525	\$ 92,360	\$ 113,525
CSA Small ruminants 1 2 3	-\$ 192,841	\$ 14,778 -\$ 400,145	\$ 25,386 \$ 30,664 -\$ 654,053	\$ 52,676 \$ 50,122	\$ 96,699 \$ 86,101	\$ 72,783 \$ 158,058	\$ 93,948 \$ 118,966	\$ 72,783 \$ 153,561	\$ 93,948 \$ 118,966	\$ 72,783 \$ 153,561	\$ 114,901 \$ 118,966	\$ 92,360 \$ 187,810	\$ 113,525	\$ 92,360 \$ 185,561	\$ 113,525 \$ 150,966
CSA Small ruminants 1 22 3 4	-\$ 192,841	\$ 14,778 -\$ 400,145	\$ 30,664	\$ 52,676	\$ 26,622	\$ 72,783	\$ 93,948	\$ 72,783	\$ 93,948	\$ 72,783	\$ 114,901	\$ 92,360	\$ 113,525	\$ 92,360 \$ 185,561 \$ 91,618	\$ 113,525 \$ 150,966 \$ 112,613

EIRR and NPVe

E)	7																								
Economic IRR and NPV																									
ECD		Yr1		Yr2	Y	/r3	Yı	4	Yr5		Yr6		Yr7		Yr8	Yr9	Yr10	Yr11		Yr12		Yr13	Yr14		Yr15
Modelos de Beneficios		-		-		-		-		.	-		-		-	-	-	-		-		-	-		-
Fishery	\$	-	-\$	24,861 -	\$	145,506	\$	152,561	\$ 46	3,607	\$ 756,	371	\$ 851,167	\$	853,586	\$ 859,476	\$ 863,780	\$ 871,425	\$	867,121	\$	853,586	\$ 861,231	\$	862,024
Eco-tourism 1- Healthcare- Full time	\$	-	-\$	25,654 -	\$	115,253	\$	32,225	\$ 27	,827	\$ 477,	124	\$ 515,175	\$	527,025	\$ 527,025	\$ 527,025	\$ 527,025	\$	527,025	\$	527,025	\$ 527,025	\$	526,825
Eco-tourism 2- Birdwatching- Part time	\$	-	-\$	22,604	\$	154,873	-\$	143,262	\$ 8	1,987	\$ 262,	710	\$ 427,433	\$	499,051	\$ 499,051	\$ 499,051	\$ 499,051	\$	499,051	\$	499,051	\$ 499,051	\$	499,051
Landscaping	\$	-	-\$	10,136 -	\$	53,310	\$	73,708	\$ 35	5,374	\$ 307,	321	\$ 356,306	\$	367,148	\$ 367,148	\$ 367,148	\$ 367,148	\$	367,148	\$	367,148	\$ 367,148	\$	367,148
CSA Shadehouse diversified- Full time	-\$	34,437	-\$	65,026 -	\$	46,225	\$	169,347	\$ 37	,324	\$ 412,	357	\$ 547,516	\$	550,490	\$ 655,304	\$ 621,357	\$ 550,948	\$	501,740	\$	650,220	\$ 690,067	\$	630,432
CSA Small ruminants	-\$	192,841	-\$	385,367	\$	598,003	-\$	247,531	\$ 10	3,484	\$ 339,)84	\$ 362,317	\$	377,604	\$ 366,613	\$ 386,741	\$ 397,001	\$	439,905	\$	448,411	\$ 464,397	\$	453,887
CSA farmer- Part time	-\$	118,700	-\$	209,905 -	\$ 2	271,973	-\$	46,948	\$ 15	,810	\$ 187,	538	\$ 325,740	\$	521,575	\$ 655,799	\$ 669,581	\$ 466,844	\$	294,386	\$	462,100	\$ 706,910	\$	664,962
Rural Roads Benefits (Externalities)	\$	-	\$	-	\$	-	\$	-	\$ 56	2,800	\$ 562,	300	\$ 562,800	\$	562,800	\$ 562,800	\$ 562,800	\$ 562,800	\$	562,800	\$	562,800	\$ 562,800	\$	562,800
Job placement Benefits (Externalities)	\$	-	\$	-	\$	-	\$	-	\$ 46),680	\$ 460,	680	\$ 460,680	\$	460,680	\$ 460,680	\$ 460,680	\$ 460,680	\$	460,680	\$	460,680	\$ 460,680	\$	460,680
Total Benefits	-\$	345,978	-\$	792,920 -	\$ 1,	,611,155	\$	30,493	\$ 3,34	1,420	\$ 4,691,	576	\$ 5,361,785	\$	5,655,910	\$ 5,889,552	\$ 5,956,795	\$ 5,678,738	\$	5,356,581	\$	5,650,832	\$ 6,074,291	\$	6,053,804
Total Costs*		4,575,625		4.538,354	1	4,650,166	1	,711,258	4.0	2,216	2,515	660	229,277		229,277	229,277	229,277	229,277		229,277		229,277	229,277		229,277
Net incremental benefits		-4,921,603		-5,331,274		5,261,321		,680,766		7,797	2,175	_	5,132,508		5,426,632	5,660,274	5,727,518	5,449,461	_	5,127,304		5,421,554	 5,845,014	_	5,824,526
IRR		11.47%		3,331,277	0	0,201,021	7	,000,700		1,171	2,173	700	5,132,500	_	3,120,032	3,000,274	5,727,510	3,117,101		3,121,304	_	3,121,334	 3,013,014	_	3,024,324
NPV (@6%, 15yr, EC)		9,010,355																							
NPV (@6%, 15yr, USD)		3,337,168																							
Ratio B/C		1.73																							

Sensitivity analysis

Economic and Financial Analysis								Sensiti	ivity Analys	is							
Yr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	IRR /a	NPV /b
Add Benefits	43,088	248,032	1,390,701	2,742,975	4,594,133	4,691,576	5,361,785	5,655,910	5,889,552	5,956,795	5,678,738	5,356,581	5,650,832	6,074,291	6,053,804		
Benefits +10%	47,396	272,835	1,529,772	3,017,273	5,053,547	5,160,734	5,897,964	6,221,501	6,478,507	6,552,475	6,246,612	5,892,240	6,215,915	6,681,721	6,659,184		
Benefits +20%	51,705	297,638	1,668,842	3,291,571	5,512,960	5,629,892	6,434,142	6,787,092	7,067,462	7,148,155	6,814,486	6,427,898	6,780,998	7,289,150	7,264,565		
Benefits -10%	38,779	223,229	1,251,631	2,468,678	4,134,720	4,222,419	4,825,607	5,090,319	5,300,596	5,361,116	5,110,864	4,820,923	5,085,749	5,466,862	5,448,424		
Benefits -20%	34,470	198,426	1,112,561	2,194,380	3,675,307	3,753,261	4,289,428	4,524,728	4,711,641	4,765,436	4,542,990	4,285,265	4,520,665	4,859,433	4,843,043		
Benefits -50%	21,544	124,016	695,351	1,371,488	2,297,067	2,345,788	2,680,893	2,827,955	2,944,776	2,978,398	2,839,369	2,678,291	2,825,416	3,037,146	3,026,902		
Benefits -30%	30,161	173,622	973,491	1,920,083	3,215,893	3,284,104	3,753,250	3,959,137	4,122,686	4,169,757	3,975,117	3,749,607	3,955,582	4,252,004	4,237,663		
Project Costs	4,964,691	5,579,306	7,652,022	7,423,741	5,281,930	2,515,669	229,277	229,277	229,277	229,277	229,277	229,277	229,277	229,277	229,277		
Costs +10%	5,461,160	6,137,236	8,417,225	8,166,115	5,810,123	2,767,236	252,205	252,205	252,205	252,205	252,205	252,205	252,205	252,205	252,205		
Costs +20%	5,957,629	6,695,167	9,182,427	8,908,489	6,338,316	3,018,803	275,133	275,133	275,133	275,133	275,133	275,133	275,133	275,133	275,133		
Costs +50%	7,447,036	8,368,959	11,478,033	11,135,612	7,922,895	3,773,503	343,916	343,916	343,916	343,916	343,916	343,916	343,916	343,916	343,916		
Cash Flow																	
Base scenario	-4,921,603	-5,331,274	-6,261,321	-4,680,766	-687,797	2,175,908	5,132,508	5,426,632	5,660,274	5,727,518	5,449,461	5,127,304	5,421,554	5,845,014	5,824,526	11.47%	9,010,355
Costs +10%	-5,418,072	-5,889,204	-7,026,523	-5,423,140	-1,215,990	1,924,341	5,109,580	5,403,704	5,637,346	5,704,590	5,426,533	5,104,376	5,398,627	5,822,086	5,801,599	9.48%	6,132,945
Costs +20%	-5,914,541	-6,447,135	-7,791,725	-6,165,514	-1,744,183	1,672,774	5,086,652	5,380,777	5,614,419	5,681,663	5,403,605	5,081,449	5,375,699	5,799,159	5,778,671	7.74%	3,255,535
Costs +50%	-7,403,949	-8,120,927	-10,087,332	-8,392,636	-3,328,762	918,073	5,017,869	5,311,993	5,545,635	5,612,879	5,334,822	5,012,665	5,306,916	5,730,375	5,709,888	3.55%	-5,376,694
Benefits +10%	-4,917,295	-5,306,471	-6,122,251	-4,406,468	-228,383	2,645,065	5,668,686	5,992,223	6,249,229	6,323,198	6,017,334	5,662,962	5,986,637	6,452,443	6,429,907	13.56%	12,788,800
Benefits +20%	-4,912,986	-5,281,667	-5,983,180	-4,132,171	231,030	3,114,223	6,204,865	6,557,814	6,838,184	6,918,877	6,585,208	6,198,620	6,551,721	7,059,872	7,035,287	15.56%	16,567,245
Benefits -10%	-4,925,912	-5,356,077	-6,400,391	-4,955,063	-1,147,210	1,706,750	4,596,329	4,861,041	5,071,319	5,131,838	4,881,587	4,591,646	4,856,471	5,237,585	5,219,146	9.28%	5,231,909
Benefits -20%	-4,930,221	-5,380,880	-6,539,461	-5,229,361	-1,606,623	1,237,592	4,060,151	4,295,450	4,482,364	4,536,159	4,313,713	4,055,988	4,291,388	4,630,156	4,613,766	6.94%	1,453,464
Benefits -50%	-4,921,603	-5,331,274	-6,261,321	-4,680,766	-687,797	-169,881	2,451,615	2,598,677	2,715,498	2,749,120	2,610,092	2,449,013	2,596,138	2,807,868	2,797,625	0.90%	-6,364,495
Delays 1 YR	-4,964,691	-5,536,218	-7,403,990	-6,033,040	-2,538,955	2,078,464	4,462,299	5,132,508	5,426,632	5,660,274	5,727,518	5,449,461	5,127,304	5,421,554	5,845,014	8.54%	4,488,555
Delays 2 YR	-4,964,691	-5,579,306	-7,608,935	-7,175,709	-3,891,229	227,307	4,364,856	4,462,299	5,132,508	5,426,632	5,660,274	5,727,518	5,449,461	5,127,304	5,421,554	6.12%	214,641
Costs +10% Benefits -10%	-5,422,381	-5,914,008	-7,165,593	-5,697,437	-1,675,403	1,455,183	4,573,402	4,838,113	5,048,391	5,108,911	4,858,659	4,568,718	4,833,543	5,214,657	5,196,218	7.38%	2,354,500
Costs +20% Benefits -10%	-5,918,850	-6,471,938	-7,930,795	-6,439,811	-2,203,596	1,203,616	4,550,474	4,815,186	5,025,463	5,085,983	4,835,731	4,545,790	4,810,616	5,191,729	5,173,291	5.71%	-522,910
Benefits -20% Costs +10%	-5,426,690	-5,938,811	-7,304,663	-5,971,735	-2,134,816	986,025	4,037,223	4,272,522	4,459,436	4,513,231	4,290,785	4,033,060	4,268,460	4,607,228	4,590,838	5.14%	-1,423,946
Benefits -20% Costs +20%	-5,923,159	-6,496,741	-8,069,866	-6,714,109	-2,663,009	734,459	4,014,295	4,249,595	4,436,508	4,490,303	4,267,858	4,010,132	4,245,532	4,584,300	4,567,910	3.55%	-4,301,355
Benefits -30% Costs +20%	-5,439,616	-6,013,220	-7,721,874	-6,794,628	-3,513,056	-421,447	2,428,687	2,575,750	2,692,571	2,726,193	2,587,164	2,426,086	2,573,211	2,784,941	2,774,697	-2.86%	-12,759,281
Climatic event every 4 yrs	-4,930,221	-5,331,274	-6,261,321	-4,680,766	-687,797	1,237,592	5,132,508	5,426,632	5,660,274	5,727,518	4,313,713	5,127,304	5,421,554	4,630,156	5,824,526	10.48%	7,205,119
Climatic event every 3 yrs	-4,930,221	-5,331,274	-6,261,321	-4,680,766	-1,606,623	1,237,592	5,132,508	5,426,632	5,660,274	4,536,159	5,449,461	5,127,304	4,291,388	5,845,014	5,824,526	9.96%	6,459,034
Climatic event every 2 yrs	-4,930,221	-5,331,274	-6,261,321	-5,229,361	-687,797	1,237,592	5,132,508	5,426,632	4,482,364	5,727,518	5,449,461	4,055,988	5,421,554	5,845,014	4,613,766	9.84%	6,171,388
a/ Internal Rate of Return																	
b/ Net Present Value @ 6%																	

To be updated and completed by the PMU, approved by the PSC, and send for No objection to IFAD and CDB

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Climate Smart Agriculture and Rural Enterprise Programme (SAEP)

Final project design report

Appendix 11: Draft Programme Operations Manual

Abbreviations and acronyms

AFDP Artisanal Fisheries Development Project **APWB** Annual Programme of Work and Budget

Business Development Centre BDC BNTF Basic Needs Trust Fund BDO **Business Development Officer**

CARDI Caribbean Agricultural Research and Development Institute

Caribbean Regional Unit for Technical Assistance **CARUTA**

CBO Community-Based Organization

Climate Change CC

CCCCC Caribbean Community CC Centre CIAT Centre for Tropical Agriculture Caribbean Development Bank CDB

Competency based Economies through the Formation of Enterprises CEFE

CPA Country Poverty Assessment CPI Corruption Perception Index CPM Country Programme Manager Climate Smart Agriculture CSA

CU Credit Union

CYEP Caribbean Youth Empowerment Programme

EBD Enterprise Business Development

Eastern Caribbean Dollar ECD

EIRR Economic Internal Rate of Return FAO Food and Agriculture Organization **FIRR** Financial Internal Rate of Return Financial Management Assessment FMA Grenada Agricultural Census **GAC**

Grenada Authority for the Regulation of Financial Institutions **GARFIN**

GCB Grenada Cooperative Bank

GCIC Grenada Chamber of Industry and Commerce

Grenada Development Bank GDB

Grenada Investment Development Corporation GIDC GOAM Grenada Organic Agricultural Movement

GOG Government of Grenada

GPRS Growth and Poverty Reduction Strategy ICT Information and communication technology **IFAD** International Fund for Agricultural Development

IFR Interim Financial Report

Inter-American Institute for Cooperation in Agriculture **IICA**

ICCAS Integrated CC Adaptation Strategies

IPSAS International Public Sector Accounting Standards

International Standards Auditing ISA

ΚW Kilowatt

LAC Latin America and the Caribbean

LF Logical Framework LTB Letter to the Borrower

Market Access and Rural Enterprise Development Programme **MAREP**

MCPMA Ministry of Carriacou and Petit Martinique Affairs

M&E Monitoring and Evaluation MIS Management Information System

MCPMA Ministry of Carriacou and Petit Martinique Affairs

GRENADA

Climate Smart Agriculture and Rural Enterprise Programme (SAEP)

Final project design report

Appendix 11: Draft Programme Operations Manual

MNIB Marketing and National Importing Board MoA Ministry of Agriculture and Fisheries

MoF Ministry of Finance

MoU Memorandum of Understanding

MoW Ministry of Work

MoY Ministry of Youth, Sports and Religious Affairs

MTR Mid-Term Review

NAP National Agriculture Policy

NCCC National Climate Change Committee

NEWLO New Life Organization

NHTA National Hotel and Tourism Association

NPV Net Present Value

NTA Grenada National Training Agency
OECS Organization of East Caribbean States
ORMS Operational Results Measurement System
ORMS Organisation of Eastern Caribbean States
PBA Performance Based Allocation System

PCR
PFM
Public Financial Management
POM
Programme Operations Manual
PPP
Public-Private Partnerships
PM
Programme Management
PMU
Programme Management Unit

PS Permanent Secretary

PSC Programme Steering Committee

REP Rural Enterprise Project

RIMS Results and Impact Management System

SAEP Climate Smart Agriculture and Rural Enterprise Programme

SIDS Small Island Developing States
SME Small and Medium Enterprises
SOE Statement of Expenditure

TAMCC T. A. Marryshow Community College

VAT Value Added Tax
VST Vocational Skill Training

WB World Bank

"Climate-Smart Agriculture and Rural Enterprise Programme" (SAEP)

Programme Implementation Manual

1. Introduction

1.1 Programme objectives and costs

- 1. **Goal and objectives.** The goal of the Climate-Smart Agriculture and Rural Enterprise Programme (SAEP) is to contribute to the reduction of poverty and vulnerability of men and women in rural communities in the tri-island state of Grenada. The SAEP target is to improve assets of the target population by 10%. The Programme M&E system (see chapter on M&E) will provide the data to measure the number of households receiving support services and their assets and income before and after SAEP's intervention.
- 2. The development objective is to improve the livelihoods of the beneficiaries through accessing new jobs, starting up businesses or consolidating new businesses and adopting CSA practices. The development objective is "Project beneficiaries improve their livelihoods⁵⁴ and resilience by accessing new jobs, starting-up /consolidating businesses⁵⁵ and adopting CSA practices⁵⁶". The specific objectives of the Programme include: a) supporting start-ups and existing enterprises in rural areas through capacity building, technical support services and financing; and, b) increasing the resilience and sustainability of farmers facing climate change and variability through the adoption of CSA practices.
- 3. **Total Costs**. The Programme implementation period will be six years. Total Programme costs over the six-year period are estimated at around USD 12 million (around ECD 32,4 million) including contingencies and taxes. Base costs are estimated at USD 11,29 million (around ECD 30,48 million, 94% of total costs) and both physical and price contingencies represent USD 0,71 million (around ECD 1,92 million, 6% of total costs). Investment costs are estimated at USD 9,9 million (83% of total costs) and recurrent costs at USD 2,0 million (17% of total costs).
- 4. **Costs by component and by financier**. Component 1: Entrepreneurship and Business Development, comprises 34,5% of costs; Component 2: Climate Smart Agriculture, comprises 45,9%; Programme Management comprises 14,8%; and Monitoring and Evaluation covers 4,8%. Assuming an allocation for Grenada under IFAD's next Performance Based Allocation System (PBAS) cycle 2019-2021, IFAD is expected to finance up to 53,3% of the total Program cost. There is at present a financing gap of USD 2,41 million which is expected to be covered by IFAD's next PBAS. IFAD's current PBAS financing is a concessional loan of USD 3,99 million (33,2%) and the CDB will finance USD 3 million more (25% of total programme costs). The Government will finance USD 2 million (16,7% of the total programme cost) mainly through taxes, operative costs and staff salaries (including some existing positions). Beneficiaries will contribute for around USD 0,27 million (2,2% of total programme costs), mainly in kind or labour. The following tables show Programme's costs by Component and financier and by Expenditure account and financer. The CDB funds will cover only works under component 2 (in particular the sub-component related to rural roads and drainage works implemented through a MoU with the Ministry of Works).

⁵⁴ Definition: In SAEP "livelihood", is defined as the capabilities, assets and activities required for a means of living. Livelihood refers to economic production, employment, and household income, within a broader context of reduced vulnerability, and environmental sustainability.

⁵⁵ Definition: New businesses refers to businesses operating for less than 3 years, registered or not registered, and requiring support to become consolidated / sustainable.

⁵⁶ Definition: Refers to practices and technologies (e.g. clean production, aquaponics, hydroponics, solar panels, bio-gas) that sustainably increase agricultural productivity and rural household incomes, while building resilience and adapting production practices and technologies to climate change. These practices may or may not contribute to the reduction of greenhouse gas emissions.

000 USD	GOG	IFAD PBAS 2016-18	IFAD PBAS 2019- 21a/	Beneficiaries	CDB	GIDC	Total	%
Component 1	113	1,702	1,844	153	-	330	4,142	34.5
Component 2	266	1,932	195	117	3,000	-	5,510	45.9
PMU	1,340	258	177	-	-	-	1,775	14.8
M&E	281	98	194	-	-	-	573	4.8
Total	2,000	3,990	2,410	270	3,000	330	12,000	100.0

a/ To be confirmed

1.2 Programme Area, target group and direct beneficiaries

- 5. **Programme area**. The Programme area will include rural communities in the 7 parishes of Grenada (the 6 parishes on the main island and the parish which covers the two minor islands of Carriacou & Petite Martinique), only excluding the capital town of St. George's.
- 6. **Target group**. The Programme will target two of the most vulnerable groups within rural poor, that is: (i) the unemployed and underemployed men and women, with a focus on youth (age 16-35); and (ii) smallholder farmers (full-time and part-time), vulnerable to CC and variability.
- 7. **Direct beneficiaries**. The expected direct beneficiaries of the Programme are 7,500 individuals from equal number of households (see table 2). In particular, it is estimated that around 4,500 households will benefit from technical and financial support services (financed by IFAD) and 3,000 households from rehabilitated rural roads and roads and drainage works (financed by CDB), that will improve and/or maintain climate resilience and access to markets in the Programme area.

	Youth	Adults	Total
	(=<35 years)	(> 35 years)	
Component 1	-	-	
Start up new business (up to 3 years)	500	0	500
Existing business development	50	100	150
CVQ/Job placement support	400	0	400
Component 2			
Climate change adaptation options awareness raising (through 4H ⁵⁷ /MOA)	1 000	0	1 000
Climate change adaptation options awareness raising (extension and demonstration farms)	700	500	1 200
Climate Smart Agriculture training, technical assistance, and investment (including backyards)	700	500	1 200
Capacity building MoA, GIDC, MCPMA staff	50	0	50
Sub Total	3 400 (75%)	1 100 (25%)	4 500
Infrastructure – feeder roads and drainage			3 000
Total direct beneficiaries			7 500

⁵⁷ Age group: 7-17 years

.

8. Overall, half of the direct beneficiaries will be men and half will be women, granting priority to young female-headed households (single mothers); see table 3. With respect to support to youth for business development and VST&Job placement approximately 40% of the beneficiaries will be men and 60% will be women, aiming at closing the existing unemployment gender gap. With regard to support to adult existing businesses approximately 60% of the beneficiaries will be men and 40% will be women, following existing trends of more male entrepreneurs amongst the target group. In the case of female beneficiaries, priority will be granted to unemployed young household heads (single mothers). Also, around 1,200 households (approximately 50% male and 50% female beneficiaries) are expected to benefit from climate awareness raising activities and training, 1,200 (approximately 50% male and 50% female beneficiaries) will benefit from CSA training, technical assistance, and investments, and 1,000 primary and secondary schoolchildren are expected (approximately 50% male and 50% female beneficiaries) to increase their knowledge and capacities regarding CC impact, CSA and relevant social issues, thereby ensuring a life-cycle approach.

Table 3: Direct SAEP beneficiaries, by main activities, by sex						
SAEP Key interventions	Total	In %		In absolute numbers		
SALF Rey interventions	beneficiaries	Men	Women	Men	Women	
New businesses	500	40%	60%	200	300	
Existing businesses	150	60%	40%	90	60	
VST & Job placement	400	40%	60%	160	240	
Climate change adaptation options awareness raising (through 4H/MOA)	1 000	50%	50%	500	500	
Climate change adaptation options awareness raising	1 200	50%	50%	600	600	
Climate Smart Agriculture training and investment (including backyards)	1 200	55%	45%	665	535	
Capacity building MoA, GIDC, MCPMA staff	50	70%	30%	35	15	
Roads	3 000	50%	50%	1 500	1 500	
Total	7 500			3 750 (50%)	3 750 (50%)	

9. **Enabling measures for Gender equality**. In the SAEP, affirmative actions have been mainstreamed in general programme management and in the implementation strategies of both technical components. Programme design has ensured that marginalized groups can take advantage of development activities and have access to its services; in particular, reference is made to the empowering and participation of youth and women, particularly of young male and female-headed households.

1.3 Benefits, outcomes and outputs

- 10. The Programme's strategy for reducing poverty in Grenada will be differentiated in relation to the context, constraints and opportunities of each target sub group and lies in three main principles: (i) focusing on youth, as an asset that rural communities may promote to the forefront of change and development; (ii) identifying and promoting entrepreneurship as the driver for change and improvement; and, (iii) fostering sustainability of beneficiaries' business initiatives through capacity building and through CSA practices.
- 11. The design of the new programme is built upon promoting new businesses started by youth with a strong entrepreneurship drive, focusing on market opportunities for products and services arising from the adoption of climate smart agriculture approaches, building resilience on the cluster as a whole and increasing the prospects for success and sustainability. Annex 1 presents the SAEP Logframe.

- 12. The expected impacts and outcomes from the Programme are:
 - Number of poor households reporting an increase in income: 4,500 HHs
 - Number of poor households receiving services supported by the Programme: 7,500 HHs
 - Number of farmers with greater resilience: 400 farmers
 - Number of new jobs created as a result of supported interventions: 400 jobs
 - Number of new enterprises created: 120 enterprises
 - Number of farmers increasing production by 20%: 400 farmers
 - Number of farmers improving physical access to markets: 3000 farmers.
- 13. The main outputs of the Programme will be:
 - Number of people receiving VST: 400 people.
 - Number of people receiving technical support services for start-ups: 500 people.
 - Number of youth accessing matching grants: 400 young people.
 - Number of rural enterprises accessing business development services: 270.
 - Number of people trained in innovative technologies, CSA and climate change: 2,200.
 - Number of farmers who have received extension services on CSA practices: 1,200 farmers.
 - Number of farmers receiving market support services: 400 farmers.
 - Number of adaptation and climate smart investment projects financed: 180 projects.
 - Number of rural roads rehabilitated: 30.

1.4 Programme components

- 14. As mentioned, the Programme will specifically target two of the most vulnerable groups within the rural poor, that is (i) the unemployed and underemployed men and women, with a focus on youth (age 16-35); and (ii) male and female smallholder farmers (full- and part-time), vulnerable to climate change and variability. With a view of targeting these two groups and achieving the development objectives in an efficient and effective way, the Programme will be implemented through the following three components: (i) Enterprise Business Development (EBD); (ii) Climate Smart Agriculture (CSA); and (iii) Project Management.
- 15. **Component 1: EBD**. The objective of this component is to support on-going and start-up businesses in rural areas through capacity building, technical services and financing, with a focus on youth. The component will promote innovation and the engagement of young people in the most promising sectors of the rural economy, including farming and non-farming activities. The main activities carried out will be: (i) the provision of vocational and employment skills training; (ii) the provision of entrepreneurial training and business development support services; (iii) a matching grants scheme to promote start-up businesses.
- 16. **Component 2: CSA**. The objective of this component is to increase the sustainability of small farmers through the adoption of CSA practices. The main activities carried out will be: (i) the provision of knowledge on CC issues and training on CSA practices to farmers, MoA and MCPMA extensionists and vulnerable people in poor rural communities, including the very young ones; (ii) the provision of extension services on CSA practices and on improving marketing links to farmers; (iii) a matching grant financing scheme for individual farmers and/or groups to promote the adoption of CSA practices and technologies; (iv) the rehabilitation of rural roads and drainage systems to improve and/or maintain access to markets in extreme weather events, such as heavy rainfall.
- 17. **Component 3: Project Management**. This component aims at ensuring the effectiveness and efficiency of the Programme, establishing key management systems and processes that will achieve the expected outputs and outcomes with the funds provided. It will benefit from the experience and capacities

GRENADA

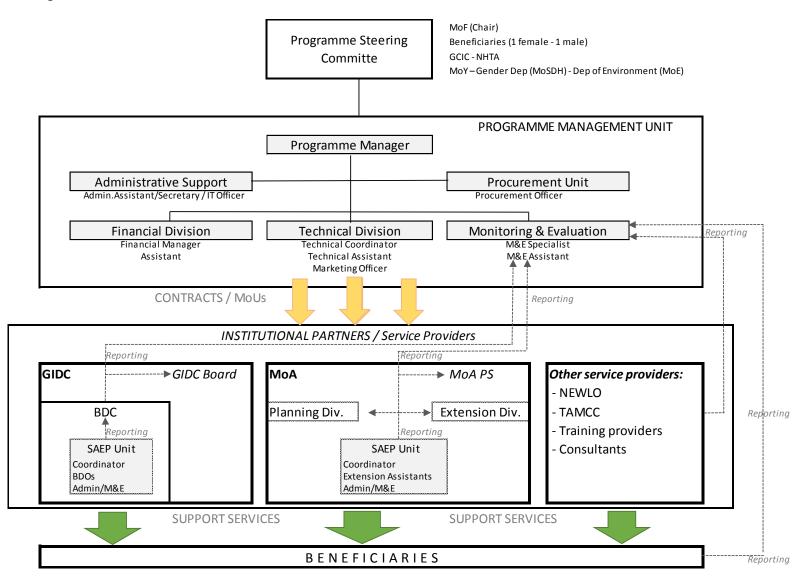
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built throughout MAREP implementation, particularly in setting up an operational Monitoring and Evaluation (M&E) system, accounting and financial systems.

1.5 The Programme Implementation arrangements

- 18. The Programme will be implemented through a Programme Management Unit (PMU) established at the Ministry of Finance (MoF) reporting directly to the Permanent Secretary (PS). The Programme will have its main office in Sauteurs, linking with the MoF in St George's, where it would have a minimal work space.
- 19. This PMU will have the core services of accounting and financial management, Monitoring & Evaluation (M&E) and technical coordination (see Figure 2). In addition, the PMU would have a supervisory, coordinating and facilitating role, ensuring that adequate measures are taken to attain targets and deliver quality services in a timely manner to beneficiaries.
- 20. Technical support will be provided through specialized service providers. The Programme will develop a Memorandum of Understanding (MoU) with GIDC for the implementation of the entrepreneurship training and business development services; with training service providers for the implementation of VST activities; with the Ministry of Agriculture (MoA) and the Ministry of Carriacou and Petit Martinique Affairs (MCPMA) for the implementation of the CSA component; and, with the Ministry of Works (MoW) for implementing the rehabilitation of feeder roads.

Figure 1: SAEP Organisational Chart



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1.6 The Programme Steering Committee

- 21. The SAEP will establish a Programme Steering Committee (PSC). The PSC will have an overall guidance role, establishing the main strategies and approving the Programme Operations Manual, the agreements and contracts with service providers, the Annual Work Plan and Budget (AWPB), the M&E reports and other reports submitted by the PMU for adequate supervision and guidance.
- 22. The PSC will be chaired by the representative from the MoF. A Deputy Chairperson would also be elected to assume the responsibilities of the chair when he/she is not available. The Programme Manager would attend all PSC meetings and serve as the Recording Secretary.
- 23. For continuity, each organization should nominate their PSC representative and indicate an alternate member. Changes to membership can be agreed by the PSC and should be if a member of an organisation consistently fails to attend PSC Meetings. The PSC will meet at least once on a quarterly basis, and more often as required. The Programme Manager (PM) could petition for additional meetings when faced with extraordinary situations. All PSC members are required in the early stage of the programme to attend workshops so that they can be oriented and have a better understanding of the culture, responsibilities and requirements as members and to ensure they are capable of making the necessary decisions.
- 24. The PSC would include:
 - (a) A representative of the MoF who will chair the PSC
 - (b) The Programme Manager as the Recording Secretary
 - (c) Beneficiary representatives (2 females, 2 males)

Private sector representatives such as:

- (d) The National Hotel and Tourism Association (NHTA)
- (e) The Credit Union (CU) movement
- (f) The Grenada Chamber of Industry and Commerce (GCIC)
- (g) The Grenada Organic Agricultural Movement (GOAM)

Public sector institutions such as:

- (h) The Grenada Marketing and Import Board (MNIB)
- (i) The Ministry of Youth, Sports and Religious Affairs (MoY)
- (j) The Grenada Development Bank (GDB)
- (k) The Gender Department of the Ministry of Social Development and Housing
- (I) A representative of the Department of the Environment of the Ministry of Education, currently acting as Secretariat of the National Climate Change Committee (NCCC).
- 25. Main implementing partners and service providers, such as the Grenada Investment Development Corporation (GIDC), the Ministry of Agriculture (MoA), the Ministry of Carriacou and Petit Martinique Affairs (MCPMA), the Ministry of Works (MoW), the Grenada National Training Agency (NTA), TAMMCC or NEWLO, would be invited to participate in the PSC meetings to allow for an additional level of coordination and networking among stakeholders. These institutions would be excluded from decisions; their participation is intended to provide more insight on the progress of implementation.
- 26. The PSC will be convened at least twice a year to discuss in depth the findings of the M&E progress reports and the proposed working plan. Only beneficiaries will receive an stipend for attending meetings. The PSC could establish sub-committees in order to increase efficiency and operational capacity, these sub-committees should include at least the MoF representative (chair), 2 beneficiaries

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and 2 representatives of the private sector and 2 representatives of public sector institutions. Other Programme Stakeholders may also participate in the PSC meetings, subject to the approval of the Chair on a meeting-by meeting basis, but only those named as representatives would be authorized to vote.

2. Description of Programme Outputs

27. The outputs of the Programme include: VST training, Business Development Services, Business Grant Financing, CSA training, Extension Services, CSA Grant Financing and Feeder Roads rehabilitation.

2.1 Vocational Skills Training (VST)

- 28. The Programme will support 400 youth in the age range of 16 to 35 years old, 60% female, to participate in VST courses. It is expected that at least 20% will be able to find a permanent job.
- 29. Beneficiaries of VST will be unemployed and underemployed youth -16 to 35 years old- from poor households in rural areas. These are characterized by: (i) more than the national average number of family members⁵⁸ per household; (ii) one or more unemployed persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. The selected candidates must meet at least 2 (two) of these conditions.
- 30. The PMU will propose areas for VST training each year according to the labour force market survey conducted by the Grenada National Training Agency (NTA) and in close consultation with the NTA and VST service providers. The training in areas where there is no standard developed (not leading to certification by NTA) should be approved by the PSC. All VST courses will start with Life Skills Training, including a module on Nutrition, developed in consultation with the Food and Nutrition Council. All VST courses will include job placement activities, that is, internships and other activities facilitating finding a permanent employment.
- 31. The PMU will develop MoUs with the VST service providers. The MoUs will be signed for three years, with annual work plans that will identify the type of courses, number of trainees per year, total annual budget and payment schedule, including performance targets. The Programme will pay for the tuition and will support beneficiaries with an allowance for transportation and training materials, based on needs, as well as child care for single parents. The MoU will establish a minimum retention rate and the final 20% payment will be subject to the attainment of the targeted retention rate. MoUs will also establish the responsibilities of the parties regarding the input of data on the Programme M&E system and the financial flow of funds.
- 32. The VST service providers, in close coordination with the Programme, will implement a communication strategy to potential beneficiaries and will receive applications, conduct interviews, tests and other activities deemed necessary for selecting beneficiaries according to the established criteria. Training service providers will be responsible for filling the beneficiary In-take form presented in the M&E Section and providing regular update on attendance and performance of trainees. The list of selected candidates will be presented to the PMU for clearance prior to starting the training.

2.2 Entrepreneurship and Business Development Services

- 33. The Programme will support 500 youth in the age range of 16 to 35 years old, 60% female, to participate in Entrepreneurship Training (ET) and will support 150 adult business persons, 60% male, to access Business Development Services (BDS). It is expected that at least 400 youth approve the ET course and develop a business idea.
- 34. Beneficiaries of ET will be unemployed and underemployed youth -16 to 35 years old-, with primary school completed, from poor households in rural areas. Beneficiaries of BDS will be adults with an ongoing business from poor households in rural areas. Poor households are characterized by: (i) more than the national average number of family members⁵⁹ per household; (ii) one or more unemployed persons

⁵⁸ The national average is 3 family members per household.

⁵⁹ The national average is 3 family members per household.

among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. The selected candidates must meet at least 2 (two) of these conditions.

- 35. The PMU will develop a MoU with the Grenada Investment Development Corporation (GIDC) for the development of the ET and the BDS. The MoU will be signed for three years, with annual work plans that will identify the number of trainees per year for the ET, the number of trainees assisted with BDS to develop / implement their business concept, the number of adult business persons assisted with BDS, total annual budget and payment schedule, including performance targets. The MoU will establish performance indicators whose attainment will allow the disbursement of the final 20% corresponding payment: a minimum retention rate for the ET and a minimum number of concept ideas and business plans to be approved by the Business Grant Selection Committee. The MoUs will also establish the responsibilities of the parties regarding the input of data on the Programme M&E system and the financial flow of funds. The Programme will pay for the implementation of training activities, including transportation, child care for single parents and materials (based on needs), the cost of the BDS and a Coordinator. The MoU will describe the contribution of the Programme to the establishment of field offices and training centres in rural areas (Seamoon Industrial Park and Sauteurs) and the commitment of GIDC to recruit the staff required to deliver services to the selected beneficiaries.
- 36. The GIDC, in close consultation with the Programme, will implement a communication strategy on the ET among rural youth; will receive applications, conduct interviews, tests and other activities deemed necessary for selecting beneficiaries according to the established criteria. GIDC will be responsible for filling the beneficiary In-take form presented in the M&E Section. The list of selected candidates will be presented to the PMU for clearance prior to starting the ET. The GIDC will sign an agreement with the beneficiary and its parents, guardian or reference person, establishing the type of training and support to be provided, a tentative schedule and performance indicators.
- 37. The GIDC, in close consultation with the Programme, will implement a communication strategy on the BDS in rural areas, will conduct diagnosis on the potential beneficiary businesses through the staff in their field offices; will conduct interviews and other activities deemed necessary to select the beneficiaries of the BDS according to the Programme targeting criteria. GIDC will be responsible for filling the beneficiary In-take form presented in the M&E Section. The list of selected candidates will be presented to the PMU for clearance prior to starting the BDS. The GIDC will sign an agreement with the business establishing the type of support to be provided, a tentative schedule and performance indicators.
- 38. The GIDC, in close consultation with the PMU, will hire specialized consultancies and training services, as required, for supporting the implementation of Training and BDS. Procurement processes will be conducted by the GIDC in accordance with Grenada Procurement Act. GIDC will provide the PMU information on procurement and contracts, as required by Audits and Supervision activities. GIDC will also be responsible for linking with the MoA and other service providers to ensure technical training and support and supervision as required by the businesses supported.
- 39. The GIDC will provide information on the progress of the ET and BDS activities, including all the information required to assess progress and performance, in accordance to the routines and formats established by the M&E system.

2.3 Business Grant Financing

- 40. The Programme will support trainees that approve the Entrepreneurship Training with grants to develop their business concept. It is expected that at least 400 trainees will develop business concepts and that at least 120 sustainable businesses will be created.
- 41. The technical activities of the Business Grant Financing will be implemented through the MoU with GIDC for providing BDS. The GIDC will support trainees that have approved the ET to write a concept note, prepare an application to the First Push Grant and implement it in case it is selected by the Business Grant Selection Committee. These will be small grants to start a trial and error process, which will contribute to improving the business plan and identifying the capacity building gaps, with a ceiling per

participant of USD 1,000 including 5% contribution of the trainee, in cash or in kind. Group proposals involving more than one participant, will have a maximum funding of USD 2,500 per initiative including the beneficiary contribution of 5% in cash or in kind. The grant will finance a specific output, that is, a short term objective towards implementing the business idea, e.g. to prepare sample products, brochures or pay for space or transportation to participate in fairs and exhibitions, to set up a small hydroponic garden, buy small equipment to improve quality or buy inputs / hire temporary staff to produce enough products to display in a market event. The grant amounts should be sufficient for advancing towards the business concept, so that the young entrepreneur may have a first actual experience on his/her new venture, yet not arising unreal expectations and keeping risks under control.

- 42. Those proposals that successfully undergo this process of trial and error will be supported to develop a full business plan. GIDC Business Development Officers (BDOs) would support the implementation of the First Push small grants aiming at identifying those entrepreneurs and ideas successful enough to proceed to the business planning stage. These would be supported with a more intense hand-holding scheme, including technical, business and mentoring services, in order to develop a business plan to be submitted to the selection committee to access a second, larger grant that aims at financing a viable business. There would be a second selection process for identifying the most promising - technically feasible, market oriented, environmentally sustainable and profitable - business plans. The selected plans would receive a maximum Business grant financing of USD 9,300 per initiative, including a beneficiary contribution of 10%, being at least 5% in cash. More ambitious proposals involving more than one participant within the same business would have a ceiling equivalent to the number of trainees multiplied by the individual limit, with a maximum of USD 30,000 per business, including the beneficiary contribution of 10%, being 5% in cash. The funds would be disbursed in tranches according to identified steps in the implementation of the idea and subject to positive reports on the progress of implementation.
- 43. The PSC will establish an ad-hoc committee for selecting proposals for financing, composed of the SAEP Programme Manager, two representatives of the financial sector, one from the Credit Unions and one from the Grenada Development Bank (GDB), one representative of the Marketing and National Importing Board (MNIB) and one representative of the National Hotel and Tourism Association (NHTA). The GIDC will support the committee as the technical secretariat with no right to vote.
- 44. The grants will be selected through competitive processes: the Programme will make calls for proposals on an annual basis among the youth participating in Entrepreneurship Training. Proposals will be ranked according to a set of criteria relating to: a) the capacity to upscale and become sustainable according to market potential; and, b) the commitment and achievement of the trainee in the training process. The Selection Committee could waive the beneficiary contribution for the youngest entrepreneurs -17 to 21 years old- and for the most vulnerable members of the target group (unemployed single parents). Eligible expenses include investment and purchase of goods and services, such as –inter alia- small works, land access legal advice, land preparation, equipment, vehicles, machinery, inputs, specialized technical assistance, permissions and certifications, laboratory analysis, temporary labour, brochures and printing material, packaging and labelling. The grants will not finance land purchase or lease, refinancing or payment of debts, house improvements not related to the business idea, activities that might harm the environment such as farming on steep slopes, deforestation (slash and burn), overuse of chemicals, brick or charcoal manufacturing, etc,
- 45. The Programme will sign an agreement with the grant recipient, establishing the items to be purchased or contracted, selected providers/contractors, the total budget, the amount and type of beneficiary contribution and proposed disbursement scheme. The grant disbursements will be managed by the PMU, based on decisions of the Business Selection Committee and progress reports on the use of funds submitted by GIDC. All grants will be disbursed in tranches and payments will be done directly to suppliers whenever possible. Procurement will be conducted by the beneficiaries with supervision and support from GIDC, following simple rules and procedures agreed with the PMU, ensuring transparency and accountability, as well as adequacy to the amounts involved. This should be regarded as a step in the capacity building of the potential entrepreneur.

46. The GIDC will monitor the implementation of grant proposals, including all the information required to assess progress and performance, procurement procedures and provide clearance for subsequent disbursements, in accordance to the routines and formats established by the M&E system. The PMU will keep records on fund disbursements.

2.4 Climate Smart Agriculture (CSA) Training

- 47. The Programme will support 1,200 farmers and fishermen, 50% female, and 1,000 school students, 50% female, with Climate Change (CC) options awareness raising and training, and 50 extension workers, 30% female, from the public and private sector with capacity building to address CC and variability.
- 48. Beneficiary farmers are those who have access to no more than 7 acres of farm land, being at least 80% those with access to no more than 2.5 acres.
- 49. Beneficiary fishermen will be artisanal fisherfolks with boats type I and II Longliner belonging to poor rural households. These are characterized by: (i) more than the national average number of family members⁶⁰ per household; (ii) one or more unemployed persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. The selected candidates must meet at least 2 (two) of these conditions.
- 50. Beneficiary school students will be attending schools participating in the 4H Programme of the Ministry of Agriculture (MoA).
- 51. Beneficiary extension workers will be up to 50 years old, with at least two years' experience in extension services in the public or private sector, with formal training in agriculture or with practical training as farmers. Priority will be given to extension assistants of the MoA and the MCPMA not attending other training courses and farmers sponsored by farmers' organizations.
- The Programme will sign a MoU with the MoA for the implementation of the CSA component in the island of Grenada. The MoU will be signed for three years, with annual work plans that will identify the number of extension workers to be trained per year, the number of demonstration farms to be established and the activities of the 4H Department (including demonstration farms) to be implemented, the total annual budget and payment schedule, including performance targets. The MoU will establish performance indicators whose attainment will allow the disbursement of the final 20% corresponding payment: a minimum retention and approval rate for the extension workers training, a sustainability rate of the demonstration farms over time (on-going after ... year time) and a minimum attendance of the 4H activities. The MoU would also establish the responsibilities of the parties regarding the input of data on the Programme M&E system and the financial flow of funds. The Programme will finance the implementation of training activities, inputs, minor equipment and labour for the demonstration farms and awareness raising activities planned by the 4H Department under the Programme framework. The MoA would establish a Programme Unit reporting directly to the Permanent Secretary (PS) responsible for coordinating all activities and reporting to the PMU. The MoA Programme Unit will have a coordinator financed by the Programme, recruited by competitive bidding processes and located at the PMU office in Sauteurs. The MoA will second Extension Assistants (EA) to the Programme. The EAs will be selected in agreement between the Programme and the MoA and will attend the CC and CSA practices training.
- 53. The Programme will sign an MoU with the MCPMA for the implementation of the CSA component in the islands of Carricou and Petit Martinique. The MoU would be signed for three years; the Programme will hire and train an extension officer for these islands and the MCPMA would commit to absorb this staff after the three year period. The Programme would also provide training to extension staff of the MCPMA.
- 54. The formal training of extension workers will be planned by the MoA Programme Coordinator, in close consultation with the Environment Department of the Ministry of Education and the PMU. Topics will include: CC and variability and CSA practices; update on agricultural practices and technologies, including irrigation systems and water management systems; the use of ICT to develop new approaches

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⁶⁰ The national average is 3 family members per household.

that reduce operational costs; the increase in the scope of the technical advice to provide guidance on marketing issues and business development, particularly record keeping; and, social inclusion and gender issues, including nutrition concepts. Service providers will be recruited at the national and/or regional level using competitive bidding processes. Procurement processes will be conducted by the PMU, based on the technical input provided by the MoA Programme Unit.

- 55. Demonstration farms will be planned by the MoA Programme Coordinator, in close consultation with the PMU, and implemented in sites that allow access to all Programme beneficiaries for training and awareness raising activities (e.g. farmers' organizations, schools, MoA distric offices). The Programme will sign an agreement with the owner of the land establishing the maintenance scheme for keeping the demonstration plot operational and the access for training and awareness raising activities.
- 56. The MoA Programme Unit will be responsible for gathering information on training and awareness raising activities, including beneficiary data, and report to the Programme M&E System.

2.5 Extension Services

- 57. The Programme will provide extension services to 1,200 small farmers and fishermen, 45% female, aiming at increasing resilience to CC and yields on sustainable basis.
- 58. Beneficiary farmers are those who have access to no more than 7 acres of farm land, being at least 80% with access to no more than 2.5 acres.
- 59. Beneficiary fishermen will be artisanal fisherfolks with boats type I and II Longliner belonging to poor rural househols. These are characterized by: (i) more than the national average number of family members⁶¹ per household; (ii) one or more unemployed persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. The selected candidates must meet at least 2 (two) of these conditions.
- 60. The extension services will be provided through the trained Extension Assistants (EA) seconded to the Programme by the MoA in the island of Grenada, and by the extension officer hired by the Programme for the islands of Carriacou and Petit Martinique. These extension workers would be supported by a group of experts recruited on competitive bidding process. The Terms of Reference of the experts will be developed by the MoA Programme Unit Coordinator in close consultation with the PMU. The PMU will conduct the procurement processes, based on the technical input provided by the MoA Programme Unit.
- 61. The Programme will finance basic equipment to all extension workers, the salary of the extension officer attached to the MCPMA and a compensation package to the EAs of the MoA for the full-time dedication to the Programme and the increase in scope of their work. The EAs will be coordinated by the MoA Unit Coordinator and will work at the district level. Whenever possible the EAs will be attached to farmers' or fishermen' organizations and will provide extension services to the members of the organization, focusing training on selected members of the organization that will become focal points for supporting farmers in selected tasks (vaccination, soil tests, quality standards, etc) and for linking with EA. The specific fields of EA crops, livestock, forestry and fisheries will be selected based on the needs of the rural poor and their farmers' and fishermen' organizations. The Programme would sign an agreement with the beneficiary organization and the MoA, establishing the list of beneficiary farmers, their basic data as required by the beneficiary In-Take Form described in the M&E Section. The MoA Coordinator would liaise with the MCPMA and the PMU to provide technical support as required to the extension officer attached to the MCPMA.
- 62. The Programme will provide marketing orientation to farmers and extension workers through the Marketing Officer (MO) of the PMU. The MA will provide training and technical assistance to extension workers and farmers and will keep a data base on market information available to all beneficiaries and technical support staff.

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⁶¹ The national average is 3 family members per household.

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63. The EAs and MCPMA extension officer will record in their activity log the training, visits and other activities with beneficiaries. The EAs and MCPMA extension officer, supported by the MoA Unit Coordinator and Programme contracted experts, will prepare farm plans and other technical reports for farm development and support farmers for the preparation of CSA proposals to the Programme. The EAs and MCPMA extension officer will report progress on farm development, providing all the information required to assess progress and performance, in accordance to the routines and formats established by the M&E system.

2.6 CSA Grant Financing

- 64. The Programme will support small farmers to adopt CSA practices, including backyard gardening. It is expected that at least 180 initiatives will be financed, of which 60 backyard gardens.
- 65. Beneficiary small farmers are those who have access to no more than 2.5 acres of farm land and belong to poor rural households. These are characterized by: (i) more than the national average number of family members⁶² per household; (ii) one or more unemployed persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. The selected candidates must meet at least 2 (two) of these conditions.
- 66. Beneficiary small <u>commercial</u> farmers are those who have access to between 2.5 and 7 acres of farm land and meet at least 1 (one) of the poor rural household conditions. Small <u>commercial</u> farmers will be no more than 20% of total beneficiaries of CSA grants.
- 67. Beneficiaries of backyard gardens will be unemployed and underemployed men and women from poor households in rural areas. These are characterized by: (i) more than the national average number of family members⁶³ per household; (ii) one or more unemployed persons among adult family members; (iii) one or more adult family members without secondary or tertiary education; and, (iv) the head of the household being single. The selected candidates must meet at least 2 (two) of these conditions.
- 68. Priorities will be linked to the impact of CC according to the geographical location and analysis of the farm conducted by the extension services. There are three main types of CSA practices and investments to be supported by the SAEP: (i) those contributing to increase water availability, either through increasing access or improving efficiency of water management; (ii) those that reduce soil run-off in case of heavy rain; and, (iii) backyard gardens.
- 69. Water related practices and investments are intended to address longer drought periods and thereby enabling production planning to target higher prices in the dry season. These CSA investments include inter alia drip irrigation systems, efficient water harvesting systems, solar panel pumps, mulching, terracing and shredding contributing to keep moisture in vulnerable eco-systems such as grazing lands. For livestock farmers, these practices would also include pens and fencing, cut and carry pastures and compost production from droppings, promoting a more efficient use of chemicals that are damming the rivers, particularly affecting the parishes of St George's, St John, St Patrick and St Andrews. Water harvesting and fencing to improve fodder management and availability along dry periods would be promoted in Carriacou, where the climate is drier, there are less sources of surface water and 60% of the land is classified as shrubs or grassland used for goat rearing. The CSA practices oriented to adapt to heavy rainfall include small on-farm drainage works, intercropping and shade houses.
- 70. Grants will also be available for backyard gardens which, in the country context of Grenada, do not equal kitchen gardens, which have the main purpose to increase consumption of nutrient-rich vegetables. In a cash-deficient population, selling will be always the priority but guiding the selection of nutrient-rich food to grow in the backyard coupled with nutrition education will improve healthy food choices. Backyard gardens, in particular when principles of CSA will be applied, have the potential to improve food security and nutrition and thereby to strengthen the resilience of beneficiaries. Priority beneficiaries shall be female headed households and poverty-stricken households with nutritional challenges.

⁶² The national average is 3 family members per household.

⁶³ The national average is 3 family members per household.

- 71. The SAEP will define backyard gardens as plots close to the beneficiaries with an average size between 1/8 and ½ acre. Crops to be selected are those with high nutrient value like orange flesh, sweet potatoes, cabbage, carrots and green leafy vegetables. These are also crops classified by MNIB as having high market value. Vegetable gardens can also be mixed with fruit trees or the multipurpose Moringa tree. When possible, integrated homestead food production (IHFP) with small livestock such as goats, chicken and rabbits should be preferred over backyard gardens exclusively focusing on vegetable and fruit trees. Adding animal sourced protein in the diet will increase dietary diversity and nutrient supply for nutrition vulnerable beneficiaries (women and children). A seasonal calendar will provide the information which crops have to be planted at what time to increase the accessibility of food throughout the year.
- 72. As is the case of all CSA practices to be promoted, backyard gardens/IHFP need to be accompanied by agricultural extension services. In the particular case of backyard gardens, it also requires tailored nutrition education.
- 73. The maximum grant financing per individual farmer will be the equivalent to USD 8,000 and the contribution of beneficiaries will be set at 10%, being 5% in cash. Group proposals will have a ceiling equivalent to the number of members multiplied by the individual limit with a maximum of USD 30,000 per initiative, including a 10% contribution of beneficiaries, 5% being in cash. The backyard gardens would have a maximum funding of USD 1,000 per household including a minimum contribution of 5% in kind or in cash. The beneficiary contribution may be waived for the most vulnerable sectors, such as unemployed single parents. For small commercial farmers, farming between 2.5 and 7 acres of land, the contribution would be set at 20%, 10% being in cash.
- 74. The CSA grants will finance investments and purchase of goods and services, such as –inter aliasmall works, land access legal advice, land preparation, equipment, vehicles, machinery, inputs, specialized technical assistance, permissions and certifications, laboratory analysis, temporary labour, packaging and labelling. In order to avoid negative environmental effects, the SAEP would not finance land purchases or house improvements not conducive to improving farming activities or nutrition of the household, activities that might harm the environment such as inter alia farming on steep slopes, deforestation (slash and burn, uprooting perennial crop), brick or charcoal manufacturing. In addition, the programme will monitor the adequate use of chemicals and the adoption of appropriate waste disposal and management practices (as part of the Environmental and Social Management Plan ESMP).
- 75. The proposals will be prepared by beneficiaries based on simple formats developed by the MoA Programme Unit and the PMU. The EAs and MCPMA extension officer will support beneficiaries to prepare the grant applications. The Programme will release calls for CSA grant proposals among beneficiaries of SAEP's extension services every year, establishing the specific goals of the call and the criteria for assessing applications. The MoA Programme Unit and the PMU will develop and implement the corresponding communication strategy.
- 76. The PSC would set up a CSA Grant Selection Committee for grant approval composed of the Programme Manager, a representative of the Department of the Environment, an expert on CSA practices from the MoA, and representatives of the MNIB and the GDB to bring in expertise in business assessment. The CSA Grant Selection Committee could reduce the beneficiary cash contribution for the most vulnerable groups, such as single parents unemployed or underemployed, farming on part-time basis. The Programme could hire consultants through competitive processes to assess proposals and score them according to the criteria established for the call for proposals. The SAEP will build upon the formats and scoring methodologies applied by the Department of the Environment for CC adaptation programmes.
- 77. Proposals will be ranked according to a set of criteria relating to: a) the severity of the impact of CC on production and income; and, b) the socio-economic condition of the beneficiary, that is, to the contribution to improve the livelihood of the most vulnerable sectors of the target population, either by improving income or nutrition. The specific geographic and sectoral priorities for each call will be established in consultation with the Environment Department of the Ministry of Education and the MoA, to

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comply with the overall guidelines and best practices for addressing CC impact in Grenada, as well as the targeting strategy of the Programme.

- 78. The selected proposals would be sent to the National Climate Change Committee (NCCC) for clearance and coordination with other funding available for CC adaptation. In case the NCCC identifies and recommends other sources for financing, the Programme's extension services will support the beneficiary/ies to comply with the procedures to access the recommended source and the CSA Grant Committee will follow up to facilitate the process.
- 79. The PMU will develop and sign an agreement with the grant recipient establishing the items to be purchased or contracted, selected providers/contractors, the total budget, the amount and type of beneficiary contribution and proposed disbursement scheme. The grant disbursements will be managed by the PMU, based on decisions of the CSA Grant Selection Committee and progress reports on the use of funds submitted by EAs and MCPMA extension officer.
- 80. Procurement will be conducted by the beneficiaries with supervision and support from the MoA extension services following simple rules and procedures proposed by the PMU, ensuring transparency and accountability, as well as adequacy to the amounts involved. There will be no cash disbursements to farmers or groups; payments will be done by the PMU directly to suppliers based on the decisions of the CSA Selection Committee and the reports of the corresponding extension worker. This will contribute to control the use of chemicals and the quality standards of the inputs and equipment financed.

2.7 Feeder Roads Rehabilitation

- 81. The Programme will finance the rehabilitation of rural roads. It is expected that 30 rural roads will be upgraded during Programme implementation.
- 82. The works will be identified by the MoA and the Ministry of Works (MoW). The PMU will develop a MoU with the Ministry of Works for the implementation of the works. The MoU will be signed for three years, with annual work plans that will identify the works to be implemented and the corresponding budget. The MoU will establish the responsibilities of the parties: the PMU will make available the funds for the MoW; the MoW will develop the technical designs according to national and international standards with its corresponding budgets; will conduct the procurement processes according to the Procurement Act, and the maintenance of works to ensure sustainability.
- 83. The EAs of the MoA will gather the information on beneficiaries of the feeder roads to report on the Programme M&E System. The MoW will report to the PMU on procurement and contracts as required by audit and supervision activities.

3. Budgeting, Planning, Monitoring, Evaluation, and Knowledge Management

84. The Programme's Planning, Monitoring and Evaluation cycle would include the following key elements: (a) Start-up; (b) Annual Planning with stakeholders (annual evaluation and planning consultation workshops); (c) Monitoring AWPB implementation, LogFrame (LF) and RIMS indicators (data collection and registration, analysis and feedback); (d) Reporting (quarterly, half yearly and annual reporting to the Borrower and IFAD); (e) Evaluation (baseline and impact studies); (f) Knowledge generation and knowledge sharing; (g) Programme Supervision; (h) Mid-term review; and (i) Programme Completion Process and Report.

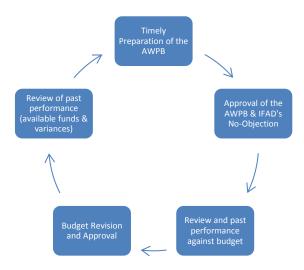
3.1 Development of the AWPB

- 85. The PMU is responsible for the preparation of the AWPB (see Annex 2 for IFAD Template), containing key features such as;
 - i. The Narrative;
 - Introduction and Brief Background
 - Strategic Focus and Outputs
 - Major Risks and Mitigation Actions
 - Training and Technical Assistance Schedule; and
 - PMU Staff Development Plan

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- ii. Budget and Financing Plan
- iii. Procurement Plan

Figure 2:Budget and Planning Cycle



- 86. Budget and Financing Plan provides a detailed statement of the projected resouces available for the year and how these resources will be distributed. It serves as a management and reporting tool.
- 87. The Annual Workplan and Budget (AWPB) is the outcome of the annual project planning process. Through annual work planning, the PMU decides what activities will be carried out over the next 12 months, by whom, the resources and the time needed to complete them. The AWPB is therefore a planning and management tool that specifies what is expected to be done during the year, by whom, how and at what cost. In the AWPB, the annual planned RIMS first-level results should be specified.
- 88. On an annual basis the PMU would implement in both "Grenada" and "Carriacou and Petite Martinique", Evaluation and Planning Workshops. The result of the workshops is a draft AWPB's for key implementers that are an integral part of SAEP's overall AWPB. These workshops (minimum 2 days) would bring together representatives off key implementing partners (MOA, Ministry of Carriacou and Petite Martinique Affairs, GIDC, and MoW), other stakeholders and direct beneficiaries (including young male and female) in order to:
 - (i) take stock of progress made during the year;
 - (ii) identify obstacles encountered during implementation and proposals to avoid them in next year's planning; and
 - (iii) identify activities for next year's planning.
- 89. The timing of these workshops would be such that the results can feed into the elaboration of next year's AWPB and its timely submission to IFAD.
- 90. Quarterly review of the AWPB is encouraged to capture variances and their possible determinants. Variances must be included in periodic progress reports and responses reviewd in collaboration with the Programme Management Unit (PMU).

3.2 M&E and Management Information System

91. The design of the M&E and Management Information System (MIS) will be based on MAREP's experience, but will aim at including innovations, such as a dashboard for performance management and monitoring of the implementation of the AWPB, and the utilization of ICT tools for information transparency and knowledge sharing. It is expected that the MIS will generate information for three

distinct functions: (i) management; (ii) accountability; and (iii) learning and policy dialogue. A consultant will be contracted by the PMU to develop under supervision of the M&E Specialist the MIS; after which it will be validated with the support of field staff from key implementing partners.

- 92. The M&E/MIS should assist implementers with monitoring progress on:
 - Compliance with targeting strategy;
 - Implementation progress of the AWPB; and
 - Achievement of Logical Framework and RIMS indicators.
- 93. The M&E system will be based on the logical framework and will report on the RIMS indicators and other relevant data, disaggregated by age and sex. Monitoring of progress of implementation of the AWPB and achievement of LF/RIMS indicators will be a shared responsibility between the PMU and the key implementing partners (GIDC, MOA, MCPMA and MoW). As most of the implementation of both technical components will be executed by MOA, MCPMA, GIDC and MoW, the PMU should play a proactive role in monitoring compliance of the targeting strategy.
- 94. In order to verify compliance with the targeting criteria, but also in order to measure changes in the lives of beneficiaries, the implementing partners need to develop, in close coordination with the M&E Specialist, an "intake" (base line) form that will be the basis for the monitoring for each beneficiary they are supporting (see example in Annex 3). This would include personal data (name, sex, age, address, educational attainment, employment, monthly income, marital status, number of children), data on the household (members, income sources or employment status of other HH members, HH members educational attainment), data on the business (type of product/service, type of market outlet, sales, income from business, number of employees, amongst others) or data on the farm (size, land tenure, type of crops, type and number of livestock e.g. small ruminants, poultry, pigs, other -, number of partime/fulltime employees, participation of household members in production, income from farm, type of market outlet, main climate change vulnerability, amongst others).
- 95. The "intake" form will be developed by the PMU in coordination with the key implementing partners, would be filled out at the application stage and could later on be verified during the interview process in case of VST and businesses; it would serve as evidence of the correct use of the targeting criteria and why certain individuals were rejected, and for those that would become SAEP beneficiaries it would be their personal baseline. Similar activity would be carried out by the extension officers. All the data (intake and monitoring forms) would be uploaded to the MIS and would allow the PMU, GIDC, MoA, MCPMA and MoW, to measure some of the indicators of the LF, such as increase in production and assets.
- 96. Data collection would be kept simple, not time consuming and would ensure the reliability and especially the usefulness of the data collected. Disaggregated (by age and sex, where relevant) data is used in order to allow the monitoring of the targeting strategy and the outreach to vulnerable groups. Building on MAREP experience, the Programme will collect data directly in the field by key implementing agencies (eg. MoA, MCPMA, GIDC, MoW) through the use of tablets. The information would be uploaded using an Internet connection to the MIS located at a server at the PMU.
- 97. This means that key implementers such as the MoA, MCPMA, GIDC and MoW will play an active role in data collection; the MoA, MCPMA, GIDC and MoW will analyse data to monitor progress on the implementation of their respective AWPB, whereas the PMU is responsible for the analysis of all data and monitoring the overall SAEP progress, including the AWPBs of GIDC, MoA, MCPMA and MoW that are an integral part of the SAEP AWPB.
- 98. While access to MIS data will be readily available for all programme stakeholders, so they can monitor the activities they are responsible for and remain informed as to overall implementation progress, the PMU would maintain a key responsibility in analyzing the data and providing feedback to the implementers and other stakeholders on a timely basis and according to their specific needs. The key implementers will be fully engaged not only in the recollection of field data, but also discussion and

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analysis regarding implementation progress64, and decision making regarding changes or corrective measures that might be required for a more effective or efficient Programme implementation.

- 99. Training and support would be provided to PMU staff and key implementers, such as MoA, MCPMA and GIDC, in the use of the data collection system. The M&E Specialist and Officer would be responsible for ensuring the quality of the data, and that information is registered according to the agreed upon timing and frequency, and the database is up-to-date.
- 100. While setting the priorities concerning the information that is needed, it is also important to consider the information flows: who will give which information to whom, what happens with the information at different levels, which information is gained where, how is the feedback organised for (i) management decisions at programme implementation level (PM/PMU, MoA, GIDC, MCPMA, MoW) and (ii) policy decisions (PSC and Borrower).

3.3 Social inclusion and Gender equality monitoring

- 101. The M&E system will monitor the implementation of the Programme to ensure social inclusion and gender equality measures are being implemented as planned. The Programme's implementation will take into consideration, amongst others:
 - (i) Experience of working with youth and gender equality will be included in the Terms of Reference of all PMU staff;
 - (ii) Experience of working with youth and gender equality would be included in the Terms of Reference and contracts and MOUs with service providers;
 - (iii) The participation of two (2) representatives of beneficiaries in the Programme Steering Committee ⁶⁵, ensuring representation of youth and female beneficiaries;
 - (iv) In accordance to SAEP targeting strategy, gender and age specific selection criteria in call for proposals and differentiated counterpart requirements have been established in the Programme Implementation Manual for the Matching grants and grants for Climate-Smart Agriculture initiatives;
 - (v) Differentiated counterpart requirements for Matching grants and grants for Climate-Smart Agriculture initiatives have been established for vulnerable groups (young men and women in the age group of 16-21 and single mothers could be awarded exceptions from contribution in cash);
 - (vi) Monitoring and evaluation will use disaggregated data (registration, collection, analysis and reporting) and the Programme's implementation strategy will be adjusted, if gender and youth targets are not met;
 - (vii) Carry out a specific social inclusion/gender equality impact study as part of the learning process and the elaboration of knowledge management products:
 - (viii) Provisions for training to be implemented as much as possible in rural communities and not in St. George's (to reduce transportation costs and make them more accessible to youth and women);
 - (ix) Awareness raising and training materials would be adequate and understandable for its specific audiences; and provisions would be made to facilitate women's and youth participation in any exchange visits organized or financed by the Programme;
 - (x) Capacity building in gender equality for staff of key implementing partners: MoA, GIDC staff and MCPMA;

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⁶⁴ In relation to AWPB, LF and RIMS indicators.

⁶⁵ These would receive a stipend to cover traveling costs and a compensation for the time dedicated to the PSC.

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- (xi) 4H: Awareness raising of primary and secondary schoolchildren (male and female) not only of climate change and CSA, but also of social issues relevant to their age group; and
- (xii) Support to the Gender Department for training of ministerial gender focal points.

102. The M&E Specialist would develop a check list to assist the PMU, key implementing partners and service providers that basic gender considerations are adhered to (example in Table ...).

Table 4. Checklist Social Inclusion and Gender Equity							
Question	Yes	No	Action				
General:							
Is social inclusion and gender equality included as a responsibility and as a requirement in ToR of staff, consultants, and/or service providers?							
Does monitoring and evaluation use disaggregated data in: -registration and collection -analysis -reporting							
Is the Programme's implementation strategy adjusted on a regular basis, if gender and youth targets are not met?							
If it is applicable, are social inclusion and gender equity incorporated as crosscutting issues in the topics that the Project will include in the event?							
For Invitations to Training, Technical Assistance, and Call of Proposals:							
Do invitations and Call of Proposals clearly mention that both men and women are invited/can participate?							
Do invitations and Call of Proposals make a special effort to motivate young men and single mothers?							
For events, training, technical assistance:							
Have conditions (temporary daycare, toys, and logistics, among others) and necessary funds been considered to make women's participation easier when they bring small children to the event?							
Does the event venue help to expedite women's participation?							
If the event is held outside a rural community, have funds to pay for transportation for participants been included in the event budget?							
Is the support (written or audiovisual) material for the event appropriate for the schooling levels and the main language of participants?							
Do printed or audiovisual materials for events, technical assistance use inclusive language and photographs that represent the various groups (men, women, and young people)?							
If the event takes place in a community, have meal arrangements been made with local food providers so that financial resources remain in the community?							

3.4 Reporting

103. Quarterly progress reports, measured against the AWPB, would be submitted by PMU and key implementers (GIDC, MOA, Ministry of Carriacou and Petite Martinique Affairs, MoW) staff to the M&E Specialist who would be responsible for the integration of these reports into an overall SAEP Progress report to be submitted to the Programme Manager (PM), who would endorse them for presentation to the PSC. More detailed mandatory six-monthly and annual reports to the Borrower and IFAD would be

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prepared with input from all Programme staff members and consolidated by the M&E Specialist. The latter would be presented to and approved by the Steering Committee before submission. These reports would inform on progress with regard to the AWPB as well as the Logframe indicators (MAREP Templates can be used for this purpose).

3.5 Impact studies

104. In order to be able to evaluate over time progress made and impact achieved, it is essential to have access to baseline data. The minimum requirement of data for the baseline is that they provide the information required to be able to measure the indicators defined in the Logframe (LF) and RIMS Outreach and Core Indicators. The SAEP Baseline has been carried out at the same time as the MAREP Impact study; thus, ensuring that the SAEP PMU will have a Baseline Study readily available at programme start-up.

105. An Impact study and analysis of LF and RIMS indicators in Y6 has been planned and budgeted for, as well as a specific impact study on social inclusion and gender equality (Y5). ToR and procedures for regional procurement can be based on MAREP experience.

3.6 Mid-Term Review

106. A Mid-Term Review (MTR) would be carried out three years after Programme start-up; this would be an external review led by IFAD in close coordination with the GOG/MOF and PMU. The scope of the MTR would be wide-ranging so as to assess progress in implementation and achievement of LF and RIMS indicators, programme objectives and outcomes, effectiveness of institutional arrangements, resources used and allow time for adjustments to be made in programme implementation. The MTR would assess the effectiveness of the targeting approach and of the youth and gender equality strategy.

107. It is anticipated that the MTR would specifically assess the timeliness of response to requests made for Vocational and Skills Training (VST) and to the "Matching Grants" and funds for Climate Smart Agriculture, and the extent to which these funds have helped the target group improve their assets, income and climate change resilience.

108. The MTR would also carefully analyse the level and quality of implementation of the MoUs with GIDC, MoA, the MCPMA and MoW.

3.7 Programme supervision

- 109. IFAD's supervisory function will be ongoing and support will be provided for implementation and resolving issues that arise. Supervision missions from the Latin America and Caribbean Division (LAC) will take place once a year and will be organized by IFAD's Country Programme Manager (CPM) in coordination with the Borrower, the PMU, MOA, GIDC, MCPMA and MoW.
- 110. The Supervision missions will pay particular attention to smooth and timely implementation of the Programme and to achieving its intended objectives and outcomes and to the progress made on achieving the LF and RIMS indicators.
- 111. The PMU would be in charge of preparing the draft Mission agenda's, logistical arrangements, and providing an update as to progress regarding "Agreed upon Actions". The key tasks to be undertaken by the supervision missions, are presented in the table below.

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Table 5. Key Tasks for Supervision Missions

Help identify and discuss actual and potential/emerging problems and constraints, and agree on solutions, changes or improvements and the responsibilities for their implementation.

Assess the appropriateness of the targeting strategy and its effective execution by the PMU and key implementing partners, making necessary adjustments to increase outreach and review programmme performance in terms of youth and gender-equity considerations.

Review the programme's implementation progress against Final Design Report targets and the AWPB, using the key indicators as defined in the Logframe.

Discuss with PMU and representatives of key implementing partners their perception of the Programme and their participation in its implementation; actively seek their opinion on improving programme performance.

Discuss with beneficiaries their perception of the Programme, the level of their participation and access to Programme services and results achieves to date; actively seek their opinion on improving programme performance.

Explore the adequacy of the M&E and Management Information System and its use by different stakeholders; assess whether the system satisfies the information demand of project stakeholders and provides an ongoing monitoring of project activities (AWPB), LF and RIMS output and higher-level results, including targeting performance and gender equity.

Examine programme expenditures and make realistic estimates as to whether the Programme can be expected to be completed within the original cost estimates (foreign currency and local currency).

Identify possible cost overruns/savings on IFAD financed categories and ascertain the need for a reallocation between categories, or cancellation due to savings.

Review the progress of procurement and disbursement; based on comparisons of the records of IFAD and the Programme, verify the terms of the contracts awarded and the commitments and disbursements made; and obtain copies of approved contracts not yet submitted to IFAD.

Check a sample of Statements of Expenditure to verify their accuracy against IFAD records.

Review the financial and accounting systems of the Programme and implementing partners, and ensure that these systems are adequate for IFAD's reporting requirements.

Review compliance by the Borrower with loan covenants.

Explore such other matters related to the Programme that may delay or adversely affect programme implementation and that would impact the achievement of the development objectives.

Undertake field visits to the programme area to spot check and verify reported physical progress.

3.8 Programme Completion Process and Report

- 112. The completion review is a process undertaken by the Borrower in close coordination with IFAD at the end of the project implementation cycle in order to report on the results achieved through programme interventions. The main purposes of the completion review process are to promote accountability, reflect on performance and elicit lessons learned to inform new project design, and to define an appropriate post-project strategy. The learning dimension of the completion process should be regarded by both IFAD and the Borrower as the foundation for improvements in future project design and programming. The completion review process is also critical for identifying opportunities for scaling-up best practices (IFAD, 2015).
- 113. A well-managed completion process is of key importance for identifying the ways and means to enhance the sustainability of programme interventions. It provides all stakeholders with a unique

opportunity to reflect on overall programme performance and generate useful lessons learnt from implementation. Key findings of the completion review are summarized in a standard Project Completion Report (PCR).

114. At the end of the Programme, the PMU will plan and implement "Closing Workshops" in Grenada and in Carriacou and Petite Martinique, with the objective of discussing experiences with stakeholders, programme results and success stories, as well as obstacles encountered during implementation, as inputs to the Project Completion Report (PCR).

4. Procurement

- 115. Procurement of all goods, works and services by the PMU will be carried out in accordance with IFAD AND CDB "Procurement Guidelines and the agreed procedures described in the Legal Agreements (TBC).
- 116. Procurement shall be undertaken only during the Programme implementation period, i.e. from the date of effectiveness to Programme Completion date (TBC) and in accordance with the procurement plan approved by IFAD. Procurement will be directly implemented by the PMU and will be subject to the provisions of IFAD and CDB "Procurement Guidelines" (TBC) and the procedures set out and or referred to in schedule (TBC) in the IFAD loan agreement and Article ... of section ...in (TBC) CDB Loan Agreement.

4.1 Procurement arrangements

- 117. **Procurement decisions** to the extent possible, the goods, works and consulting services shall be bulked into sizeable bid packages in such a manner as to permit the optimal use of competitive bidding. The thresholds for various procurement methods and procedures and prior review (mentioned below exclude duties and taxes) are indicative and subject to changes as may be acceptable to IFAD. In general, contracts estimated to cost USD 50 000 or more for whatever category of procurement will be subject to prior review by IFAD. Producers and other beneficiaries will be represented in procurement Committees and Tender Boards (TBC).
- 118. **Procurement of goods and works** will be packaged to attract International Competitive Bidding (ICB) or National Competitive Bidding (NCB). Such procurements will follow ICB or NCB procedures whichever is applicable. Materials, supplies and operating costs will be small and fall under LCB or Local Shopping procedures. In principle, a contract for supply of goods estimated to cost USD 200 000 equivalent or more will be awarded under ICB. Contracts which are equal to or less than USD 200 000 equivalent but more than USD 50 000 will be through NCB acceptable to IFAD, and those more than USD 5 000 but equal to or less than USD 50 000 equivalent through local shopping with at least three quotations.
- 119. Contracts for consultants' services and studies will also be in accordance with IFAD procurement guidelines. Terms of reference, conditions and terms of contracts, and the qualifications and experience of consultants will be subject to prior review and approval of IFAD, where applicable. Each contract for the supply of technical assistance, studies and training, and other services provided by consultants and other service providers shall be in principle awarded as indicated in Table 1 below. Before agreeing to any material modification or waiver of the terms and conditions of any contract, or granting an extension of the stipulated time for performance of such contract, or issuing any change order (except in cases of extreme urgency) that would increase the cost of the contract by more than 10% of the original price, the Borrower shall inform IFAD on the proposed modification.
- 120. **Review of Documents by IFAD-** The award of any contract for goods or work through direct Contracting or estimated to cost fifty thousand (USD 50,000) equivalent or more, shall be subject to prior review by IFAD. Also, the award of any contract for consulting services through Single Source selection

or estimated to cost thirty thousand US dollars (USD 30,000) equivalent or more shall be subject to prior review by IFAD.

- 121. **Review of procurement decisions-** Procurement is fundamentally the responsibility of the Government, but the IFAD supervision involves three main tasks in relation to procurement: (i) Review of the procurement plan; (ii) prior or ex-post review of procurement, and (iii) Review of pre-qualification of bidders.
 - (iv) Review of Procurement Plan. The PMU will have a duly approved annual work plan and budget, which includes a procurement plan for all major procurements of goods, works and consulting services to be carried out within a period of at least 18 months. The first procurement plan will be updated after loan effectiveness and is to cover the initial 18 months of the Programme implementation period and is to be submitted to IFAD for approval. The procurement plan is to be updated annually (or as needed) to cover every subsequent 12-month period of Programme duration as part of the AWP&B.
 - (v) Ex-post Review of Procurement. Where prior review is not required, IFAD conducts post-award reviews on a sample basis of documentation and contracts submitted as supporting documents for withdrawal applications.
 - (vi) Review of Pre-qualification of Bidders. Pre-qualification involves review by IFAD in two instances: (a) prior to the government issuance of invitations to prequalify, IFAD reviews the draft documents to be issued, including the text of the invitation to prequalify, the qualification questionnaire and the evaluation methodology, together with a description of the advertising procedures to be followed; and (b) following the government's evaluation of submissions IFAD reviews the draft evaluation report together with the list of prequalified bidders and a statement of their qualification, and of the reasons for excluding any applicant from prequalification.

4.2 Procurement Plan (linked to AWPB)

122. Before the commencement of procurement and annually thereafter, the PMU through the MOF shall furnish IFAD for approval an 18-month procurement Plan as described in Appendix 1, paragraph 1 of the IFAD Procurement Guidelines. The Procurement Plan shall specify, among others, the method of procurement for each contract to be financed, including thresholds, ceilings and preferences to be utilised in the implementation of procurement under the Programme. The Procurement Plan shall also specify any additional requirements as may be set out in the IFAD Procurement Guidelines with respect to certain methods of procurement. An Indicative Procurement Plan for the first eighteen (18) months of Programme implementation has been prepared, will be revised in consultation with the PMU at the start of the programme and submitted to IFAD for 'no objection'.

4.3 Procurement Monitoring and Reporting

123. The PMU will keep a complete and up- to- date record of all procurement documentation and relevant correspondence in its files, which will be reviewed during supervision missions. It should be proposed that Monitoring reports on procurement progress will be submitted as part of progress report on program implementation. The report shall include all information related with the completed, on –going and planned contracts.

Method	Description	Applicability/Characteristics	Advertising	Remarks
Limited International Bidding (LIB)	ICB by direct invitation (no open advertisement)	Smaller valueLimited number of suppliers	Restricted ITB	- Domestic preference not applicable
National Competitive Bidding (NCB)	Procedure for public procurement in Borrower Country	 Small value contracts Geographically scattered, laborintensive or time-spread works Local prices below international market No or limited interest from international business community ICB advantages outweighed by financial and administrative costs 	Local press Open ITB	- IFAD to establish acceptability of national procedures - Foreign suppliers allowed to bid
International Shopping	Comparison of price quotations from at least 3 suppliers in 2 different countries	 Small value procurement Off-the-shelf goods, standard specification commodities, simple civil works 	Request for quotation (restricted)	- Purchase order or brief contract
National Shopping	Comparison of price quotations from at least 3 suppliers	 Same as International Shopping Goods available locally from several sources at competitive prices 	Request for quotation (restricted)	- Purchase order or brief contract
Direct Contracting	Single or sole-source selection	 Extension of existing contract Standardization for vehicles, equipment Proprietary equipment obtainable from one source only Condition of performance guarantee Emergency procurement 	No advertising No competition	
Procurement by Financial intermediaries				
Procurement with Community Participation				
·		urement of Consulting Services		
Quality and Cost Based Selection	Competitive selection from short-listed firms based on quality and cost of proposal	Two-step evaluation: quality (technical proposal) and cost (financial proposal)	GPN (large contracts) Request for Proposal (RFP)	Preferred selection method for most consulting services

Refer to the IFAD Procurement Guidelines for further details

4.4 Records of procurement/contract management

124. **Period of Record.** The PMU will need to maintain records of bidding proceedings and contract management for a minimum period of 2 years from the closing date of the loan agreement. If a contract is challenged or involves a dispute or is expected to involve a dispute, the records should be kept for a longer period or until the completion of the settlement of the dispute.

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- 125. **Content of Procurement Records.** All bidding records maintained by the PMU should contain at least the following documents, where appropriate:
 - (a) the request that initiated the procurement activity (requisition) from the user;
 - (b) a copy of the published advertisement(s) or shortlist of suppliers;
 - (c) a copy of the pre-qualification document and pre-qualification evaluation report (as applicable) and invitation to bidding/proposal invitation or invitation to quote and any amendments or clarifications requests;
 - (d) the records of bid closing and bid openings;
 - (e) copies of all bids evaluated and any clarifications requested from bidders and responses received;
 - (f) the evaluation report including the recommendation of award;
 - (g) minutes of any meetings related to the procurement, including pre-bid and negotiation meetings;
 - (h) all documents approving and authorizing certain tasks including all submissions to and all decisions of the Programme manager;
 - (i) copies of all No Objections from IFAD/CDB (as applicable);
 - (j) copies of all other communications from bidders, suppliers, contractors or providers in relation to the procurement/contract, in particular any bid and securities (originals to be stored in a safe) and record of their return.
- 126. **Content of Contracts Records.** All contract records maintained by the PMU should contain the following documents:
 - (a) the notice of acceptance to the supplier;
 - (b) the signed contract document including any signed contract amendments;
 - (c) all post contract documentation relating to the fulfillment of contract obligations in particular photocopies of performance securities or advance payment guarantees (originals kept in a safe);
 - (d) minutes of any meetings related to the contract management, including contract progress or review meetings including any meeting held with the supplier;
 - (e) all delivery documentation evidencing deliveries of supplies or completion certificates in relation to contracts for services or works under the contract;
 - copies of all invoices for goods including papers verifying the accuracy of payments claimed and details of the actual payment authorized;
 - (g) copies of cumulative payment worksheets evidencing management of all payments made;
 - (h) copies of any claims made by the PMT in respect of any warranty, non-warranty, short supply, damage and other claims upon the supplier or upon the PMT;
 - (i) all correspondence between the PMT and supplier/contractor;
- 127. **Procurement and contract process control.** The purpose of a procurement control system is to be able to control the key activities of the procurement process throughout the programme, to ensure:
 - (a) Any procurement activity undertaken has been authorized by the correct programme authority prior to commencement of any associated work;

- (b) Administratively that each activity of the programme that requires procurement action is recorded into a register so that it can be identified as a specific activity,
- (c) Each procurement activity is provided with a unique identifier for clear identification throughout its life, particularly important during commitment and payment stages;
- (d) Adequate monitoring of activity from its procurement through to its contract thereby providing a control and an audit trail.
- 128. **Minimum procurement and contract control.** There are two forms of control that are the minimum arrangement and consisting of separate registers held by the Programme Manager (TBC) and through which the control is exercised. These are:
 - (a) procurement register in which any activity requiring procurement should be registered. This should be updated on a daily basis by the programme manager (TBC); and
 - (b) contract register effectively an extension of the procurement register, recording the complete list of all contracts placed. Its information is crucial as this register should contain the full list of commitments against programme funds.
- 129. **Content of the Procurement Register.** The procurement register would typically include only the key summary information relating to each piece of procurement. This would normally cover data recorded on both a horizontal and vertical basis. Vertically the information would relate to the actual key data of the procurement while horizontally the data would relate to that of the actual requirement.
- 130. The procurement information would normally include:
 - (a) procurement reference number allocated to the requirement;
 - (b) the date the requirement was received in the PMU;
 - (c) the Programme component against which the requirement will be actioned;
 - (d) a brief, general description of the requirement;
 - (e) the anticipated cost or budget that has been allocated to the requirement;
 - (f) the procurement method that will be applied to the requirement;
 - (g) the type of IFAD review that will apply to the procurement method.
- 131. The procurement register therefore, provides the manager with a complete list of all procurement being undertaken and with a list of work against which programmed reports and tables can be cross-checked. The register enables the manager to verify the authority to commence any particular procurement prior to any actual work being commenced. The register also provides a total of the estimates of all requirements (a simplified process if kept in spreadsheet form). A sample of such a procurement register is illustrated in the **Annex X**.
- 132. **Content of the Contracts Register -** The main portion of the contracts register would include key data giving a summary of each contract placed. The contract information would include:
 - (a) a contract reference number allocated to the contract;
 - (b) the date the contract was placed;
 - (c) the contract amount estimated in the currency of the credit/grant agreement;
 - (d) the name of the supplier/contractor awarded the contract;
 - (e) any special annotation needed against the entry.
- 133. The contracts register should provide a total for all the contracts, representing the total committed cost to the Programme. This total committed cost is an estimate as individual sums are converted to the

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currency of the credit but is useful as it provides a key parameter of programme performance and can be compared with other parameters produced from programme monitoring reports.

- 134. The contracts register provides the Programme Manager with a complete list of all contracts placed, permitting a simple overall control and oversight over the contracted workload and a means against which to cross check procurement and contracts monitoring tables.
- 135. Additionally, the contract register can provide (on its right, but not shown above) a breakdown by component should this be required at this stage of the programme by the programme manager.
- 136. **Review Using the Procurement and Contract Control System**. This basic procurement and contract control system should be used to manage the incoming workload and control the workload processed by the procurement resources. It should be reviewed regularly on at least a weekly basis by the Programme Manager, involving the financial accountant.
- 137. New requirements should be entered in the procurement register as soon as they are known. Possible requirements may be included as these represent workloads that may need to be factored into future workload calculations. Procurement requirements or contract entries should not be deleted, but annotated when all action has been completed.

5. Accounting System

- 138. An effective Accounting System should reflect the needs of all stakeholders and respect the covenants of the loan and or grant agreements. This system is integral to the financial management system and be responsive to required submissions including withdrawal application requests and progress reports.
- 139. The Programme Accountant is responsible the following elements of the accounting system:
 - (a) Designing the Accounting System
 - (b) Selection and Maintenance of an Accounting System
 - (c) Developing an Accounting Manual

5.1 Design of the Accounting System

- 140. Key steps involved in designing the Accounting System
 - Step 1: Identify the reportin requirements
 - Step 2: List the transactions and activities which must be included
 - Step 3: Design the specific accounting books including:
 - a) charts of accounts
 - b) records to be maintained
 - c) transactions to be recorded
 - Step 4: Incorporate the systemic accounting issues as agreed with IFAD and the government including the accounting standards used and valuation criteria
 - Step 5: Establish appropriate reporting requirements from field officers
 - Step 6: Determine users and level of authority within the accounting system
 - Step 7: Procure the appropriate system when steps 1-5 are satisfied

5.2 Selection of an Accounting Software

- 141. The accounting software is integral to data collection, analysis, storage and dissemination of information. The information aids decision making, as well as, enhance transperancy and accountability.
- 142. The software should provide the following items as a minimum;
 - (a) Financial reports and information as required by stakeholderst and in various formats
 - (b) Should be modular or integrated
 - (c) Ability to account under different bases of accounting

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- (d) Use the double-entry systems of transactions
- (e) Allow for multi-period and multi-user processing and reports
- (f) It should have security levels and different access levels
- 143. Installation Phase, the Programme Accountant needs to determine:
 - Access level and different user rights
 - Information storage and back-up
 - Design of chart of accounts

5.3 Financial Manual

- 144. The Financial Manual will be part of the POM and should include:
 - References to national legislation and financing agreements of IFAD and CDB
 - Relevant Accounting Standards
 - Chart of Account maintenance and reviewe
 - Budget and AWPB Preparation /Analyses and forecasts
 - Recording and Processing of Transactions
 - Account Reconciliations
 - Withdrawal Application
 - Financial Reporting
 - Fixed Asset Register
 - · Stipulated period for which records must be kept
 - Authority levels

6. Records Management

- 145. SAEP is required to maintain its financial records for a minimum of ten (10) years after the closure of the programme. These documents include written and electronic documents.
 - Internal Forms
 - o E-mails
 - Vouchers (journals, payment)
 - Copies of cheques
 - Copies of Withdrawal Applications
 - Copies of coontracts
 - o Invoices
 - Receipts
 - o Bank Statements
 - Other relevant documents

7. Audit Arrangements

146. The Internal Audit department of MoF plans to include SAEP in its annual internal audit plans with reports thereon to be submitted to the PSC with consequent follow up by MOF on recommendations provided therein. The Audit of the annual Programme Financial Statements will be conducted under Terms of Reference to be approved by IFAD in accordance with IFAD's Audit Guidelines available at http://www.ifad.org/pub/basic/index.htm. The audited statements are due within six months following the end of the financial period.

8. Loan Completion and Closing (As per IFAD Guidelines)

147. The closing of the loan/grant is due six months after the project completion date. Both the completion and the closing date of the loan have financial implications on the project management such as: development and submission of a recovery plan, ensuring eligibility of expenditures and submission of the necessary documents outlined below. Refer to section 1.3 of the IFAD Disbursement Handbook.

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8.1 Recovery Plan

148. To ensure that the designated account is completely and timely justified, the financial officer/PMU has to develop and submit to the Fund a so called recovery plan outlining the percentages per withdrawal application that will recovered and paid respectively. The recovery plan should be submitted to the fund around six months before the completion date or when the outstanding balance (amount still undisbursed by IFAD is less than the double of the authorized allocation.

8.2 Loan Completion

- 149. As defined in the Financing agreement the completion date of the loan its 6th anniversary; that is six years after it entered into force. By the completion date all the project activities must have been finalised. The payments can be done also after the completion date, as long as the commitments/ contracts are signed prior to the completion date. Activities that have continued after the completion date are not considered as ineligible expenditures and can therefore not be financed by the IFAD funds.
- 150. After the completion date but no later than the closing date (six months after the completion date) the PMU can still incur expenditures related to so called winding up expenditures e.g. Final Audit, Project completion report, Project staff salaries involved in the winding up activities, PMU maintenance cost, project completion workshop.

8.3 Loan Closure

- 151. The Fund requires the following to be provided by the PMU in order to close the loan:
 - Confirmation of last withdrawal application
 - Submission of final audit report
 - Submission of project completion report
- 152. The Final Audit Report has to cover, the final project year up to the final expenditures and it can be paid from the loan available balance by using for example direct payment or Reimbursement of pre financed expenditures.

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Annex 1: Logical Framework

Results Hierarchy	Indicators [of which Core Indicators - CI - in sq	uare bracke	ets]		Me	ans of Verifica	tion	Assumptions (A)
	Name	Baseline	Mid-Term Target	End Target	Source	Frequency	Responsibilit y	
Outreach	 Number of persons receiving services promoted or supported by the Programme Corresponding number of households reached Corresponding total number of household 	0	3,200 3,200	7,500 7,500	Programme M&E system	Annually	M&E unit - PMU	
	members	0	9,600	22,500				
Goal: contribute to the reduction of rural poverty and vulnerability of men/women in rural	Number indigent, poor and vulnerable HHs increasing their assets by more than 10%.	0	1,500	4,500	Baseline and final impact survey	At start and completion	M&E unit - PMU	A 1: Reasonable growth in the economy.
communities in GOG.	- [N. III.] reporting on increase of at least 400/	0	4.500	4.500				A 2: There are no
Development Objective: Project beneficiaries improve	• [N HHs reporting an increase of at least 10% of income (by sex and age of HH head)]	0	1,500	4,500				natural disasters,
their livelihoods ⁶⁶ and resilience by accessing new	■ [Cl 3.2.2: Number of farmers reporting adoption of at least one CSA practice]	0	200	500	Baseline and	At start and	M&E unit -	such as hurricanes.
jobs, starting-up /consolidating businesses ⁶⁷ and adopting CSA practices ⁶⁸ .	 [CI 2.2.1: N of new jobs created (by sex, age, and employed/self-employed)] 	0	150	400	survey	completion		
Component 1: Enterprise and BD	N of enterprises created/consolidated	0	40	120	Programme M&E system			A 3: Focus on self-employment and youth is a
Outcome: Start up and new enterprises in rural areas are supported through capacity building, technical services and financing.		J	70	120	Employment/ national records	Annually	M&E unit - PMU	successful strategy.
Outputs 1.1: Youth receive employment	■ N of youth (by sex, age) receiving VST.	0	250	400	Programme M&E system	Semi- annually	M&E unit - PMU	A 4: Technical

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⁶⁶ Definition: In SAEP "livelihood", is defined as the capabilities, assets and activities required for a means of living. Livelihood refers to economic production, employment, and household income, within a broader context of reduced vulnerability, and environmental sustainability.

⁶⁷ Definition: New businesses refers to businesses operating for less than 3 years, registered or not registered, and requiring support to become consolidated / sustainable.

⁶⁸ Definition: Refers to practices and technologies (e.g. clean production, aquaponics, hydroponics, solar panels, bio-gas) that sustainably increase agricultural productivity and rural household incomes, while building resilience and adapting production practices and technologies to climate change. These practices may or may not contribute to the reduction of greenhouse gas emissions.

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support services skill training. Reports of are provided to 1.2 Start-ups ■ N of people (by sex, age) receiving technical 0 300 500 receive - NTA enterprises in an technical support services for support services. - GIDC efficient manner. business development. 1.3 Youth start-up N of youth (by sex) accessing Youth Business 0 250 400 businesses access grant Grant Fund financing. 1.4 Start-ups and new [CI 2.1.1: N of rural enterprises accessing 0 80 270 enterprises supported with business development services] capacity building and technical services M&E unit -A 5: Rural Component 2: CSA [CI 1.2.4: N of farmers increase production by 0 100 400 Programme Semi-Outcome: Farmers have 20% (by sex and age of HH head)] M&E system annually PMU communities are increased access to CSA aware of the practices. challenges related ■ [CI 2.2.6: N of people reporting improved 0 1000 3000 MoA Reports to CC physical access to markets] 0 700 **Outputs:** N of people (by sex, age) trained in innovative 2 200 Service A 6: Services are 2.1 Farmers, MOA technologies, smart agriculture and CC. providers provided to extensionists and vulnerable people in poor farmers in an communities receive training MoW efficient and wellon CC and CSA practices. coordinated way Farmers • [CI 1.1.4: N of farmers (by sex, age) receiving 0 600 1 200 receive extension services on CSA extension services on CSA practices. 169 • [CI 2.1.2: N of farmers (by sex, age) receiving practices and on improving 0 200 400 marketing links. market support services.170 2.3 Individual farmers and/or N of adaptation and climate smart investment 0 60 120 projects financed through CSA Grant Fund. groups receive grant financing for CSA initiatives N of backyard gardens financed through CSA 0 20 60 Grant Fund. **2.4** Rural roads rehabilitated N of rural roads rehabilitated in the project 0 10 30 to improve and/or maintain area. access to markets.

. .

⁶⁹ Corresponds to the following Core indicator: 1.1.4 Number of persons trained in production practices and/or technologies.

⁷⁰ Corresponds to the following Core indicator: 2.1.2 Number of persons trained in income-generating activities or business management.

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Annex 2: Terms of References of Key Staff

Final PMU versions to be developed

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Annex 3: Intake Form for Beneficiaries

Intake form for beneficiaries						
Personal data of beneficiary:						
Name:	Date of birth:	Sex:	Marital status:	Address:	Number of children:	
Educational	Employment	Monthly				
attainment:	status:	income:				
Data on the household						
Number of household members:	Income sources members:	of other HH	Employment sta members:	itus of other HH	Educational attainment of other HH members:	
For VST and ET						
Areas of interest:						
Distance to training center:	Transportation assistance required:	Child care support required:				
For BDS	•					
Existing Businesses						
Location:						
Type of product/service						
Type of market outlet:						
Sales (volume)/month:						
Income from business/r	nonth:					
Other sources of incom		Employment:		Remittances:		
Number of persons business:	working in the	Family members:		Hired employees:		
For CSA training, exten	sion services and C	SA grant financir	na			
Location of the farm:			ľ			
Farm size:						
Land tenure:						
Type of crops (and acre	age per crop):					
Type and number of ruminants, poultry, pigs	livestock (small					
Number of partime/ working in the farm:	fulltime persons	Family members:		Hired:		
Participation of house	hold members in	Female:		Male:		
production (who, in wha		. ciriaio.				
Average income from fa						
Type of market outlet:						

Annex 4: Annual Work Plan and Budget Template

lts#	Budget	Objectives /	India	cators	Ti	imetabl plemen	e for tation	nsible Staff			Imple	mentati	ion targets									Budg	get (USC	0'000)					
Results		Expected Results	Project Indicators	RIMS Indicators	Q1	Q 2 C	Q4	Respor Unit/	Appraisal (Total)	Revised (Total)	Planned (Annual)		Achieved (Cumulative)	%	Achieved (Annual)	%	Appraisal (Total)	Revised (Total)		1	nd Balan	l	I _	Planned (Annual)	-		Financ		
-		(1)												(1)		(1.1)			Total	IFAD	GCF	GOB	Ben		Category	IFAD		GOB	Ben
		(A)	(B)	(C)				(E)	(F)	(F.a)	(G)	(Ga)	(H)	(I)	(J)	(K)	(L)	(L.a)	(M)	(M.a)	(M.b)	(M.c)	(M.d)	(N)	(0)		(P)	
Total B	udget:										I	I	l			1													

Appendix 12: Compliance with IFAD policies

- 1. IFAD does not have a precise definition of what is meant by "policy" or "strategy", nor does it provide a clear distinction between them. Nonetheless, it is understood that corporate policies and strategies are the instruments to guide management and staff in the implementation of operational activities. It is not expected that these instruments act as rigid boxes nor promote a compliance culture. Rather they need to be considered in the framework of an appropriate context analysis of the issues that need to be addressed.
- 2. Grenada is both an Upper Middle Income Country and a Small Island Development State (SIDS). As such, it falls into a specific category of countries in which IFAD, like any other development agencies, needs to operate on the basis of local challenges and opportunities. In particular, the legacy from past interventions, a limited absorptive capacity, a subsidized economy, and governance issues are frequent issues observed in SIDS that inevitably make the design of new interventions challenging. At the same time, the potential for testing innovative ideas and policy engagement in Grenada can be considered among the opportunities that IFAD can avail of.
- 3. The recent document submitted to the April 2017 session of IFAD's Executive Board, "Tailoring operations to country context a holistic approach" has identified the need to sharpen IFAD's engagement in different categories of countries. However, it did not provide concrete guidance on how to ensure that IFAD's operations could respond to the specific challenges faced by SIDS.
- 4. The following Excel Table lists the actions taken during SAEP's design to meet the provisions of the IFAD policies and strategies. The list does not include the following policies, considered not to be relevant in SAEP: i) the Indigenous People Policy; ii) the Grant Financing Policy; iii) the Fragile Situation Strategy.

⁷¹ Review of IFAD's operational policies and strategies. Discussion Paper. April 2017.

⁷² A "Policy" normally provides the guiding principles and rules that help ensure consistency in its operations. IFAD corporate policies often contain a definition, a goal and a purpose, some general principles of engagement, and a review of experience. A "Strategy" on the other hand, normally consists of a comprehensive plan to achieve a desired outcome. While Policies rarely have an expiration date, Strategies are more dynamic and action oriented and are usually adjusted over time as contexts change.

Year	Policy/Strategy/Action Plan	Summary Key Points	SAEP's Compliance
2016- 2025	IFAD Strategic Framework	The Framework refers to seven SDGs (1,2,5,8,10,13 and 15). Under the strategic vision of "Inclusive and Sustainable Rural Transformation" it identifies: i) one Overarching Goal "Poor Rural People Overcome Poverty and Achieve Food Security hrough Remunerative, Sustainable and Resilient Livelihoods"; ii) three main Strategic Objectives - SO1 Increase Productive Capacities, SO2 Increase Benefits from Market Participation, and SO3 Strengthen the Environmental Sustainability and Climate Resilience of Economic Activities; and iii) five Principles of Engagement - Targeting; Empowerment; Gender Equality; Innovation, Learning and Scaling up; and Partnership.	SAEP is complying with the overarching goal of overcoming poverty and achieving food security through remunerative, sustainable and resilient livelihoods. Its activities support all three Strategic Objectives, related to increased productive capacities and increased benefits from access to markets (Component 1); and related to the environmental sustainability and climate-change focused interventions (Component 2). Further on, all the five principles of engagement will be implemented.
2004	Rural Enterprise Policy	The policy encourages IFAD to follow a holistic approach that would facilitate the access of entrepreneurial poor people to various business support services (financial and nonfinancial, including entrepreneurship training, vocational training, access to pro-poor technology and market-related services), delivered by public or private providers.	SAEP is fully aligned with the Rural Enterprise Policy. Component 1 will aim at supporting enterprise business development in rural areas. In particular, SAEP's focus will be on the entrepreneurial drive of young men and women, providing them with financial support for start-ups, plus technical and vocational training. Business development services will be delivered by GIDC.
2007	Targeting Policy	The targeting policy calls for the following measures and methods, depending on the situation: geographic targeting, enabling measures, empowerment and capacity-building measures, self-targeting measures and direct targeting. As guiding principles, in all operational situations IFAD will: focus on rural people who live in poverty and food insecurity and are able to take advantage of the opportunities offered; expand outreach to proactively include those who have fewer assets and opportunities (in particular, marginalized groups such as minorities and indigenous peoples); have a special focus on women within all identified target groups, for reasons of equity, effectiveness and impact; recognize that relative wealth or poverty can change rapidly; identify and work with likeminded partners at all levels; pilot and share learning on effective approaches to targeting hard-to-reach groups; and build innovative and complementary partnerships with actors that can reach target groups that IFAD cannot reach with the instruments at its disposal. In cases when better-off people need to be included – because of economic and market interdependencies, or to avoid conflict, or to engage them as leaders and innovators – the rationale will be provided, and the risk of excessive benefit capture will be carefully monitored.	SAEP's targeting approach is aligned with the guiding principles set out by the policy. Geographically, SAEP will cover the seven parishes of Grenada with the exclusion of the town of St.George's. This is a common approach in Small Island Development States. In rural areas, SAEP will target two main groups: i) the most vulnerable, that is the unemployed men and women, with focus on youth (defined in the age range 15-35) and female headed households; and ii) smallholder farmers vulnerable to climate change. Targeting criteria will include poverty levels, socioeconomic vulnerability and vulnerability to the impacts of climate change.

2007	Innovation Strategy	The strategy also makes provisions to encourage IFAD to promote more innovations in its country program and within the organization. According to the strategy an "Innovation" should be: (i) New to its context of application. The novelty may refer to country context, scale, domain, discipline or line of business; (ii) Useful and cost-effective in relation to a goal. An innovation must have positive value for its users. In the case of IFAD, it needs to empower the rural poor to overcome poverty better and more cost-effectively than previous approaches; (iii) Able to "stick" after pilot testing. An innovation is a product, idea or technology with the potential for wide adoption, which it demonstrates through pilot testing.	The promotion of innovative start-up businesses is one of SAEP's strong design features. The project will establish a competitive process to select and eventually support innovative ideas promoted by youth and their organizations, for viable business proposals in the rural economy. In addition SAEP will promote an innovative mechanism to deliver extension services, by seconding extension officers of the MoA to farmer's organizations and other private organizations located in rural areas.
2008	Access to Land and Tenure Security Policy	The policy lists the following guiding principles: i) Alignment with national priorities and support to poverty reduction strategies; ii) Adherence to the "do-no-harm principle" at all times; iii) Appreciation of the diversity and dynamic nature of existing agrarian structures and tenure systems; iv) Centrality of the empowerment of poor rural people and the organizations that represent them; v) Forging complementary partnerships with likeminded actors; vi) Focus on the gender dimensions of land rights; vii) Adherence to the principle of free, prior and informed consent; and viii) Support to production services and market linkages to maximize the positive effects of access to land and ensure security.	As mentioned in the Country Strategy Note, the 2015 Government's National Agricultural Plan aims among its objectives to increase the contribution of agriculture and enhance national food security. At the same time, there is recognition that large areas of agricultural land remain idle and in fact agricultural lands have decreased from 60,000 acres in 1960 to 23,600 acres in 2012. This will be the basis for a long-term policy engagement since access to land remains a top priority, especially for rural youth. At present idle land is mainly concentrated in private hands and attempts are under way to establish a land bank, to give owners the possibility to rent the land under a secure framework. This however requires trust of the population in the enforcement of contracts.

2225	I 5 . I 5 . I 5 . I		
2009	Rural Finance Policy	The policy identifies the following giuding principles: i) Support access to a variety of financial services, including savings, credit, remittances and insurance, recognizing that rural poor people require a wide range of financial services; ii) Promote a wide range of financial institutions, models and delivery channels, tailoring each intervention to the given location and target group; iii) Support demand-driven and innovative approaches with the potential to expand the frontiers of rural finance; iv) Encourage – in collaboration with private-sector partners – market based approaches that strengthen rural financial markets, avoid distortions in the financial sector and leverage IFAD's resources; v) Develop and support long-term strategies focusing on sustainability and poverty outreach, given that rural finance institutions need to be competitive and cost-effective to reach scale and responsibly serve their clients; and vi) Participate in policy dialogues that promote an enabling environment for rural finance, recognizing the role of governments in promoting a conducive environment for pro-poor rural finance.	Access to finance has been the main concern of the design mission, due to the negative experiences made in past IFAD projects in all attempts to involve Grenadian financial institutions in the financing of agriculture and fisheries. The finding was that under current conditions local financial institutions, including commercial banks and credit unions, remain reluctant to provide credit without collateral, because of high defaults on past loans and the recognition that farming is a high-risk sector. This is even more the case for start-ups, as which are at the core of the proposed new Programme. There is no great experience with guarantee funds nor with insurances in the region. Also remittances (representing around 3% of the GDP) are mainly used for consumption purposes. The matching grant arrangements proposed by SAEP can be considered the relative best and only alternative. Also the World Bank project uses matching grants, even if it works with a theioretically more creditworthy population than IFAD. In terms of sustainability, it is expected that once businesses have taken off and proven viable, additional financing, if required, will be provided by credit unions which have expressed an intention to expand their portfolio for small business with a track record of at least 3 years. SAEP will ensure a close monitoring on the use of matching grants to avoid the potential risks of elite capture and rent-seeking behaviours. SAEP will also promote record-keeping of the supported business to ensure the creation of a credit history. Furthermore, SAEP will engage with GOV and the local banks on the issue of access to finance.
2010	Climate Change Strategy	The first purpose of the strategy is to support innovative approaches to helping smallholder farmers build their resilience to climate change. Priority will be to ensure that project identification, design (including quality assurance), and implementation are based on an understanding of climate change in a local context, how it affects different categories of poor rural people, and women as compared with men. Rather than special treatment for climate change, this requires including it alongside other relevant project risks and opportunities.	The mission held meetings with the National Climate Change Committee Secretariat, which acts as the main advisory body to GOG on any matters related to climate change. SAEP's approach aims at building resilience of the production systems in the face of increased climatic pressures (the entire component 2 is dedicated to this). SAEP will give priority to individual and community adaptation Climate Smart agriculture proposals, including promotion of organic farming, crop diversification, improved control of agro-chemical use. The SECAP Review Note was prepared in accordance with the Climate Change Strategy

2011	Environment and NRM Strategy	The goal of the ENRM strategy is "to enable poor rural people to escape from and remain out of poverty through more-productive and resilient livelihoods and ecosystems". The purpose is "to integrate the sustainable management of natural resources across the activities of IFAD and its partners". In addition, the strategy highlights 10 core principles that call for IFAD's support to, among which: i) Scaled-up investment for sustainable agricultural intensification; ii) Climate-smart' approaches to rural development; iii) Greater attention to risk and resilience in order to manage environment- and natural-resource related shocks; iv) Engagement in value chains to drive green growth; v) Improved governance of natural assets for poor rural people by strengthening land tenure and community-led empowerment; vi) Livelihood diversification to reduce vulnerability and build resilience for sustainable natural resource management; vii) Equality and empowerment for women and indigenous peoples in managing natural resources. Finally the policy includes best-practice policy statements guiding IFAD's action in: Crop Production; Livestock; Value Chain; Biodiversity; Land, Water; Fisheries and Aquaculture; Forestry; Energy, Infrastructure and Rural Finance.	Grenada is affected by the increased frequency of extreme weather events which are undermining farming activities. The most recent was cyclon Ivan which devastated the islands in 2005. Component 2 of SAEP will be entirely focused on the introduction and support of climate-smart activities. Among these: the adoption of more efficient water management and conservation measures, including rainwater harvesting systems terracing and mulching, and rehabilitation of rural roads subject to erosion due to heavy rainfalls and of drainage systems. The SECAP Review Note was prepared also in accordance with the Environment and NRM Strategy.
2011	Private Sector Strategy	The strategy identifies the following principles of engagement with the private sector: i) The support or partnership should be driven first and foremost by the interests and needs of small farmers and poor rural producers in the countries where IFAD operates; more specifically, poor rural men and women should benefit from this engagement as producers, suppliers, customers, distributors or employees; ii) To the extent relevant, there should be evidence of country ownership and support for private-sector partnerships (as stipulated in the COSOP or the project design or grant document); iii) Particularly where large and international companies are involved, the companies must comply with social and environmental standards (assessed through due diligence during project preparation, at a minimum based on the 2009 Guidelines on Cooperation between the United Nations and the Business Sector); iv) The impact of the engagement should be sustainable after IFAD's contribution to the partnership has ended; and v) Partnerships should ensure: transparency; the integrity, independence and neutrality of IFAD; and clear and agreed responsibilities and accountability by all partners.	SAEP will contract the services of the Grenada Industrial Development Corporation (GIDC) – which is a public statutory body in contact with private businesses - to provide business development support to launch and sustain start-up enterprises. It is expected that most of them will target local domestic markets, but there is a potential that at a later stage export markets may be reached. Partnership with private sector companies, hotels, restaurants and cruise ships will be required in order to ensure marketing of agro-food products, in particular. The private sector will also be involved in the new Programme through the Project Steering Committee and in the selection process of the grants for start-ups (in particular, the Grenada Chamber of Industry and Commerce, the Credit Unions, the National Hotel Association, the Grenada Organic Association, etc.) Climate-smart agriculture activities may also require partnerships with private suppliers of technologies.

2012	Gender Equality and Women's Empowerment Policy	The policy aims at promoting gender equality and strengthen women's empowerment in poor rural areas. This will be achieved through three strategic objectives: Strategic objective 1: Promote economic empowerment to enable rural women and men to have equal opportunity to participate in, and benefit from, profitable economic activities. Strategic objective 2: Enable women and men to have equal voice and influence in rural institutions and organizations. Strategic objective 3: Achieve a more equitable balance in workloads and in the sharing of economic and social benefits between women and men.	In Grenade there is a large number of poor female-headed households. Gender equity will be mainstreamed in overall programme implementation through tailor-made affirmative actions. This will enable rural women to overcome obstacles to equal access to economic development opportunities. In addition, activities will be tailored also to support young male, which are unemployed and represent a gender problem in the Caribbean (due to the risk of them being involved in illicit activities).
2012	Partnership Strategy	The strategy provides guidance on the following aspects: assessment of partnership opportunities; facilitation and effective management of partnerships; management of risks; and measurement of results. The strategy also invited IFAD to draw up a model for drafting partnering agreements.	SAEP will contract out a number of activities to service providers (in part pre-selected on the basis of their past performance in MAREP and in part to be selected). The MoUs will specify expected deliverables and monitoring mechanisms. Likewise, the Caribbean Development Bank, which will provide additional cofinancing for the feeder roads and drainage sub-component, has proven to be an effective partner in a number of past operations in Grenada. Finally partnerships will be sought with the OECS Secretariat in St Lucia, in order to evaluate the possible up-scaling of the proposed activities at the regional level.
2016	Mainstreaming Nutrition	IFAD is requested to work to achieve the following strategic outcomes:(i) Nutrition-sensitive projects shape agriculture and food systems in ways that contribute to nutritious diets; (ii) Projects promote behaviour-changing communications to improve food choices and related preparation and post-harvest practices; (iii) Projects promote the equality and empowerment of women in ways that help them improve nutrition for themselves, their children and their families; (iv) Activities in policy engagement, advocacy and partnerships, as well as research and knowledge management, contribute to better governance, a supportive enabling environment for projects and more effective projects.	SAEP will not be classified as one of the nutrition-sensitive projects in IFAD's portfolio. However, the support of the 4H program targeted to children and youth in the age range 7-17 will include nutritional education activities aimed at raising awareness and behavioural change in food choices.

Annex 1: SECAP review note⁷³

I. Major landscape characteristics and issues

A. Socio-cultural context

- 1. The Grenadian economy is mainly based on agriculture and tourism. Grenada's GDP was US\$1.211 billion in 2008 and per capita GDP was US\$13,400. The economic growth rate is 3.7%. Tourism is the main source of foreign exchange. The main towns and key socio-economic facilities are located on the coast (WB, 2016).
- 2. The large majority of the population is of African descent (more than 80%). The population growth rate is roughly 1.5%. According to the last Country Poverty Assessment (CPA, dated 2008), poverty levels are high. Approximately 38% live below the poverty line, with an estimated 2.4% being considered as indigent and an additional 14% being considered highly vulnerable⁷⁴. A significant proportion of the population and in particular of the rural communities are categorized as highly vulnerable, socially and economically impoverished. Unemployment levels have been extremely high since 2008: the current unemployment rate is 29% overall and 42% for youths; females have higher unemployment rates than males, 32% and 26% respectively⁷⁵.
- 3. Land tenure. With the exception of Grand Etang Forest Reserve, Mt. St. Catherine and a few agricultural estates, most of the land in Grenada is privately owned. The land has been sub-divided among family members and passed on through generations. This has led to the development of very small holdings and difficulty in tracking the ownership of properties (GOG, 2014).

B. Natural resources and NRM

- 4. The Island of Grenada is 34 km long and 18km wide and the three islands taken together have a land area of 345 sq. km. Grenada is volcanic in origin, characterized by mountainous terrain with high slopes exceeding 20°. Approximately 3% of the land area in the country is at sea level.
- 5. Land use. Grenada retains considerable natural forest cover in highlands, which is important for the protection of watersheds. Forest and protected areas cover 30% of the main island, with perennial crops (spices and fruit plantations) accounting for a further 31%. Annual crops cover just 5% of land area, while there are no permanent pastures. A notable feature of Grenadine land use is the large amount of unproductive land, i.e., abandoned cropland, and shrub and grassland, which account for 20% and 5% of the total land area, respectively. Currently, perennial and mixed cultures are concentrated in the northern part of the island of Grenada. In the South, annual crops, pastures, wooded areas, and major urban areas predominate. Western Grenada encompasses large areas of abandoned land (mostly large plantations). On the second largest island, Carriacou, the climate is drier and almost 60% of the island is classified as shrub and grassland. Pasture and grazing accounts for almost 25% of land area, and forests only 5%, while there are small areas of temporary crops (WB et al., 2014).
- 6. **Agricultural production systems.** Grenada has a diverse agricultural sector consisting of permanent crops, such as nutmeg, cocoa, banana, sugar cane, citrus, avocados, spices, breadfruit, mangos and other fruits, and temporary crops such as pigeon peas, beans, peppers, sweet potatoes, dasheen, yam, tannia, cabbage, tomatoes and other vegetables. There are relatively few large areas under crop monoculture, which indicates a high agricultural biodiversity. The presence of diverse and intercropped agriculture can lead to the use of a wide range of agrochemicals. Attempts are currently

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⁷³ The concept of CSA entails sustainable increase of productivity and incomes, adaptation and resilience building, reduction and removals of GHGs (FAO CSA Sourcebook). In the Grenada context, less emphasis is placed on the mitigation pillar, given the country's limited potential as a small island economy to contribute to global mitigation efforts.

⁷⁴ The poverty line was set at USD 2,16/per capita per day, and the vulnerability line at USD 2,7/per capita per day.

⁷⁵ Grenada CSO and WB, Grenada Labour Force Survey 2013-2015, St Georges, 2016.

being made by the Pest Management Unit to develop less chemically dependent pest and disease control systems known as Integrated Pest Management (IPM). There are also initiatives to increase organic farming thus reducing fertilizer use in Grenada as a whole (GOG, 2014).

- 7. The principal permanent crops in Grenada in terms of production value and land-use coverage are nutmeg and mace, other spices, tropical fruits, and cocoa. In 2011, production of nutmeg was twice as high as in the aftermath of the hurricanes Ivan (2004) and Emily (2005), but still less than 15% of 2003–2004 volumes. In contrast, cocoa production had almost recovered to pre-hurricane levels by 2011. Nutmeg and cocoa are commercial products, for export, and, in the case of cocoa, for the tourist market. These crops are cultivated alongside tropical fruits in more extensive plantations in upland areas, typically 5 to 7 ha in size. The other principal agricultural products are fruits, vegetables, roots and tubers, and livestock. Goats rearing is the principal agricultural activity on the island of Carriacou. Over 80% of farmers in the fruits, vegetables, and roots and tubers subsectors are considered small-scale farmers, i.e. farming on less than half an acre or 0.2 hectares. Production of fruits, vegetables, and roots and tubers at this scale is primarily for subsistence and occasional sale in local markets, and there are just a few larger, commercial growers. The area of agricultural land has fallen markedly since the 1960s due to conversion to manufacturing, tourism, and residential uses, as well as abandonment of lands owned by absentee landlords. For many smaller landowners, farming is no longer their principal economic activity (WB et al., 2014).
- 8. **Agricultural greenhouse gas emissions**. The agricultural sector makes a minor contribution to Grenada's GHG emissions, accounting for less than 1% of the total. Most of the agricultural emissions are from synthetic fertilizers (75%). By contrast, permanent crops, such as spices and fruits, are a store of carbon, thus agriculture is not considered a net emitter of GHG (WB et al., 2014).
- 9. Water resources. Grenada is generally endowed with an abundance of surface water resources, characterized by (i) three main volcanic lakes (Grand Etang, Levera and Antoine); (ii) one man-made lake (Palmiste); (iii) several surface water streams including an intricate network of rivers; and (iv) a small number of springs. Most of the surface flows originate from the high rainfall areas in the central mountain ranges of the island. Overall, there are 71 watersheds on the island. All of the major watersheds have perennial flows, though these are greatly reduced during the dry season. The magnitude of variability and the timing and duration of periods of high and low supply are not predictable, particularly during the dry season and droughts. This poses great challenges to ecotourism, agriculture and other sectors. Water for agriculture is typically pumped from the downstream of rivers for larger operations, while for small backyard type gardening treated water from public mains is the main water source.
- 10. Rivers have traditionally provided an important source of rural household water. The continued importance of the source of water supply is manifested during severe dry seasons and in the aftermath of hurricanes and tropical storm induced disasters. However, the quality of the water in the rivers is threatened by uncontrolled development on the river banks. Although there are laws that restrict development on river banks, it is not uncommon to see patches of bamboo removed along the banks to make way for farming. In Southern Grenada, groundwater sources are used to augment surface water sources during the dry season. This is important to meet the demand since surface water yields drop by 25% during the dry season. In Carriacou, where there are no perennial streams or rivers, the potential importance of groundwater is higher than on the main island (GOG, 2000).
- 11. An important source of water use of crop and livestock production are rainwater harvesting (RWH) and abstractions from rivers. RWH has declined with the improvement of public water supply. However, in some remote high elevation areas, where the public water supply is inaccessible due to low pressure, rooftop RWH is often the main source of potable water. RWH ponds have been used in livestock production and, in a few cases, for the provision of water for intensive vegetable production. Public awareness of RWH technologies is high among the people and the potential for growth is real. Currently, irrigated agriculture is largely undeveloped in Grenada. The irrigation potential for selected sites is shown in Annex 1. Water for irrigation can become available from a number of surface,

groundwater and RWH sources to be developed in the future. This would require about 10 million cubic meters of water annually (UNDESA, 2012).

- 12. Development actors in coordination with the Grenada National Water and Sewerage Authority (NAWASA) have recently completed a vulnerability assessment of the water sector and developed a national adaptation plan for the sector, and action plan for the mapping of water resources and testing of water quality. The full extent of Grenada's potential potable water resources is still unknown. A water deficit mapping for Northern Grenada shows that some of the water producing catchments have a positive water yield except at Bellvue, Birchgrove and Munich, where the yield could be negative in the dry season. This indicates that in these catchments during the dry season and particularly during severe dry periods, stream flows could be low resulting in the inability of NAWASA to provide reliable supplies in these areas. Water shortages have been reported in many communities, particularly during the dry season. The most serious shortages are usually in Northern Grenada.
- 13. The main concerns with regard to water resource management (WRM) are: levels of pollutants and watershed degradation, water shortages during the dry season, the state of water storage and distribution infrastructure, inadequate financial and technological resources and poor human resources capacity, all of which place constraints on sustainable water management. Changing land use patterns in the upper watersheds have led to reduced flows in the streams and rivers and siltation of the dams. Growth in population and the tourism industry, and the future implementation of irrigation schemes would lead to a rapid increase in the total water requirements in the future (GOG, 2000).
- 14. **Forests.** Most terrestrial forest ecosystems are currently in a recovery phase dominated by secondary forest with pockets of climax forest. According to Beard's classification these include six forest communities: cloud forest; rain forests and lower montane rain forest; evergreen and semi-evergreen seasonal forest; deciduous forest and dry woodlands; littoral woodland; and mangrove forest. Currently protection exists for only a few forest areas in Grenada, and not all forest types are represented in these areas. Several communities are located within and in close proximity of the forested areas, which support their livelihoods. Non-timber forest products, primarily screw pine (*Pandanus utilis*) and bamboo (*Bambusa vulgaris*) are harvested and utilised for making baskets and other handicraft. In Carriacou a major obstacle to the regeneration of natural vegetation, other than the conversion of land for development, is the effect of grazing by livestock. Where grazing is intense, particularly in the dry season, soil erosion becomes more severe (GOG, 2014).

Table 1. Baseline Forestry Data (WB, 2011)

Total Land Area (ha)	34,000
Total Natural Forest Area (ha) / percent of total Land	6,000 / 17.6%
Plantation Area (ha)	160
Other Wooded Lands (ha)	5,000

15. **Biodiversity**. Despite its small size, Grenada possesses a relatively high degree of biodiversity which is essential to the provision of ecosystem goods and services. However, population growth, infrastructural development, as well as unsustainable regional and local production and consumption patterns, drive the increasing demand for, and extraction of raw materials and other natural capital as well as conversion of natural environments to generally unsustainable productive systems (GOG, 2014).

C. Climate

16. **Current climate and recent trends**. The country is characterized by humid tropical climate, with relatively constant temperatures throughout the year averaging 26 degrees centigrade. The mean maximum temperature is 31.4 degrees centigrade, while the mean minimum is 24.0 degrees centigrade. Temperature has increased by 0.6 since 1960 (GOG, 2000). Rainfall on the island of Grenada varies from 1,000 mm from the coast to 4,600 mm or more in the central mountains, about

20% to 30% of the annual rainfall drops during the dry season, from January to May. Evaporation rates, particularly in the dry season, are high. The areas where the difference between the monthly rainfall and potential evapotranspiration is negative, are vulnerable to droughts and from time to time can experience severe water shortages due to extremely low rainfall (UNDESA, 2012). Carriacou and Petit Martinique generally receive lower levels of rainfall and during the dry season can experience severe drought conditions. Grenada is also exposed to tropical storms, occasional hurricanes and storm surges (GOG, 2000).

- 17. Current climate-related disaster risk, impacts and vulnerabilities. Over the past 100 years Grenada experienced less than 10 hurricanes. However, the two most devastating events for Grenada in the last 13 years were Hurricanes Ivan in 2004 and Emily in 2005. Ninety five per cent of the water supply was disrupted after Hurricane Ivan and it took up to one month to restore 95% of the pre-hurricane supply. Overall damage for both events was estimated to be as high as 2.5 times the Gross Domestic Product (GDP). The country annual average loss from hurricanes is US\$ 8.2M (0.9% of GDP) (WB, 2016). Grenada is vulnerable to the anticipated impacts of CC and is already experiencing changes in its climate system, evidenced by increased incidence of drought, longer dry seasons, shorter rainy seasons, increased temperature, coastal degradation and intrusion of saline water into aquifers, among others (GOG, 2016). During the 2009/2010 drought, the main water production centres experienced reductions of up to 65%. The water production during the drought months showed that NAWASA struggled to meet demands (UNDESA, 2012). As a small island developing state (SIDS) Grenada is particularly vulnerable to CC, as evidenced by recent extreme climate events and the occurrences of increased forest fires, crop loss, water shortages and incidence of pests and diseases (GOG, 2016).
- 18. Climate projections. The UNDP Climate Change (CC) Country Profile for Grenada indicates that the country is expected to undergo a warming and drying trend and to endure more frequent heat waves and droughts, as well as rainfalls with increased intensity. Mean temperatures are expected to increase by 0.7° to 2.6°C by the 2060s. Projections of mean annual rainfall from different models in the ensemble are broadly consistent in indicating decreases in rainfall. Ensemble median changes for all seasons are negative. Carriacou and Petite Martinique, which have few surface water resources, will be severely impacted by these trends. Grenada's main economic sectors, tourism and agriculture, can be severely impacted by CC. The potential costs of inaction for Grenada comparing an optimistic (low impact, reduced emissions) and a pessimistic scenario (business as usual) indicates that inaction would cost about 21% of the current GDP by 2025, 46% by 2050, 76% by 2075 and 111% by 2100 (WB, 2014).
- 19. Under the A1B scenario of the Intergovernmental Panel on Climate Change (IPCC), sea level rise within the Caribbean is expected to be between 0.17 m and 0.24 m by 2050 (IPCC, 2007). It is estimated that the potential groundwater aquifers in Northern Grenada could lose between 23m and 60m through landward movement of the interface between seawater and freshwater. This result could translate into a 15% to 30% reduction of the current groundwater potential in the next 50 years (UNDESA, 2012). In Carriacou and Petit Martinique, where the 27 major open wells are with 100m of the shoreline, high salinity would lead to abandonment of such traditional wells (GOG, 2000). Grenada is expected to be increasingly vulnerable to hurricanes as a consequence of the increased intensity and changed distribution of tropical cyclones associated with rising sea temperatures (UNDESA, 2012).
- 20. **Agriculture and CC**. Grenada's export agriculture is predominantly forest crop based (nutmeg, cocoa, banana, spices, and non-traditional fruit crops). All these crops are of the C3 type and would respond favourably to CO2 increases. However, higher temperatures would increase evapotranspiration, and the impact of CC with reduced annual rainfall by itself would be negative on crop yield. Non-irrigated subsistence farming is vulnerable to droughts, pests and diseases. In 2010, the country suffered the first drought in its history, with serious effects on agricultural production. It is well established that the use of irrigation would greatly enhance yields for the annual crops. On the other hand, heavy rains erode agricultural soils, reduce yields and quality of produce. They also

increase fertilizer runoff, threatening the integrity of the country's marine protected areas. Livestock farming is concentrated on the low-lying, drier areas of the country. The Island of Carriacou, which produces one third of the country's cattle and sheep and goats, has a pastured animal population density three times larger than the mainland Grenada. Livestock production in Carriacou is most vulnerable to weather conditions since it experiences less rainfall than anywhere else in Grenada during drought conditions (GOG, 2000). Long dry spells can lead to reduced productivity of grazing pastures. Lower animal yields are expected especially in the small island of Carriacou, due to reduced grass yields.

- 21. Due to the mountainous topography, direct effects of rising sea levels on agriculture would be less severe; 3% of the agricultural land would be lost if sea levels rose by one meter. However, more widespread damage to agricultural systems can be expected as a result of saline intrusions into coastal and groundwater aquifers (WB et al., 2014).
- 22. Forests and CC. Recent influxes in extreme weather events such as hurricanes and droughts have significantly compromised the forests natural ability to re-generate, hindering the proper management and preservation of Grenada's national forests. The direct relationship between rainfall levels and types of vegetation imply that there is a possibility that the range of different forest types could change and possibly migrate to higher elevations due to reduced rainfall, as projected by the CC scenarios (GOG, 2014a).

D. Key Issues

- 23. The principal problem areas identified for SAEP are:
 - Overall fluctuations of average climatic variables, with above-average temperatures and below-average rainfall imply an increased risk of crop failure.
 - The required improvements in crop production, need to be based on Grenada's efforts to maintain a healthy natural environment and achieve climate change vulnerability reduction. A key strategy to achieve this goal is the promotion of CSA practices. There are, however, key limiting factors that affect the capacity of smallholder farmers to adopt these practices: a) limited access to knowledge to develop farming as a profitable and sustainable business (information on efficient technologies, CC impacts); b) lack of financial resources to implement CSA practices; c) lack of skilled human resources.
 - Agricultural production peaks in the wet season (June–November), which is becoming less predictable and drier with CC. During the December–May dry season, the absence of irrigation to sustain horticultural production significantly reduces the consistent supply of local produce. Owing to the lack of storage facilities and farmers' tendency to produce the same products at the same time, the oversupply of certain crops in the wet season leads to food losses, lower food prices, and declining farm revenue. Strategic investments to ensure a sustained supply through the year and proper storage are crucial (WB, 2017).

Table 2. Environmental profile for Grenada Parishes, Carriacou and Petit Martinique (GOG, 2000a)

Parish	Environmental issues
St. George's	Pollution of rivers and coastal waters from wastewater; algae blooms; solid waste disposal; deforestation; wildlife habitat destruction; unplanned development; over use of agro-chemicals
St. John's	Planting on steep slopes; soil erosion; damming or rivers; improper waste disposal; overuse of agro-chemicals
St. Mark's	Improper wastewater disposal
St. Patrick's	Planting on steep slopes; soil erosion; damming of rivers; improper waste disposal, over use of agro-chemicals
St. Andrew's	Coastal erosion; inadequate wastewater disposal and management; solid waste dump site; flooding; damming of rivers; overuse of agro-chemicals
St. David's	Disposal of solid waste into waterways; destruction of mangroves
Carriacou Petit Martinique	Destruction of mangroves; over fishing; solid waste disposal problems

II. Potential project's social, environmental, and climate change impacts and risks

A. Key potential impacts

Potential social impacts

24. SAEP's design incorporates special consideration of women and youth, so that diversifying rural economies and creating employment opportunities are key to reduce poverty levels on a sustainable basis. The project targets rural communities in all the 7 parishes of Grenada, Carriacou & Petite Martinique. The target population is i. unemployed and underemployed, typically landless, with a focus on youth; ii. smallholder farmers vulnerable to CC and variability. Their current farming practices are of low profitability and provide little income; and farmers face limited opportunities to improve their livelihoods. By increasing the profitability of farms, SAEP has the potential to improve the economic situation of the target groups, both through own production of food and through increased income. The project will be careful that on farm labour demand does not involve employment of children in violation of national and international laws and agreements.

Potential environmental impacts

- 25. The project design is oriented towards addressing some of the existing environmental concerns in the target area, namely lack of water (during drought periods) or excess of it (during heavy rainfalls), overuse of agrochemicals, soil erosion, through the CSA approach that aims at increasing production and income on a sustainable basis. SAEP will focus on existing agricultural areas, and will not support the expansion of farm land, thus it will not result in encroaching on forests. There is recognition of the importance of involving the forestry extension officers, to reduce the practice of land burning, which is the cause of bush and forest fires, as well as to prevent the encroachment of agriculture into forest areas. Project interventions with regard to supporting start up and existing enterprises in rural areas are not expected to cause direct or indirect deforestation. SAEP can build safeguards against these risks into its design in the form of agreements with communities to map and monitor land use and forest cover in the communities.
- 26. The project will foster organic farming, and/or sustainable use of agrochemicals, to ensure that these are applied in quantities that are not so high as to result in any environmental contamination, or health hazards for farm owners, their families or workers. For this reason, SAEP can put emphasis on specific awareness raising, training and capacity building among MOA extension officers, organization of farmers and individual farmers on the economic, environmental and health advantages deriving from organic farming, and options to obtain certification through the Grenada Organic Agricultural Movement.
- 27. The improvement of rural roads might have small, local environmental impacts. In particular, the extraction of building materials can be an issue of concern, as sand mining occurs along the beaches. Ad-hoc selection of extraction sites by the contractors should be included as a clause in the respective contracts.

Appendix 12: Compliance with IFAD policies

Table 3. Key environmental issues, project potential impacts and proposed response measures

Key environmental issues	Proposed response measures			
Over use of agrochemicals	Advising farmers on organic farming, approaches and methods for pest management (with an emphasis on integrated pest management)			
Encroachment by farmers on forest	Define and implement CSA practices on the basis of land access and availability.			
Potential impacts of	Measures to address potential environmental impacts			
project activities				
Increased demand for water	Strengthen promotion of and support for more efficient water management and conservation measures. These measures include hydroponics, terracing, drainage, mulching, storage (increase the use of rain-water harvesting systems)			
	Improve efficiency of water use in irrigation through micro sprinklers and drip irrigation			
Rehabilitation and construction of rural roads cause local environmental impacts	Inclusion in contracts that extraction sites need to be authorized by the competent government entities and to be restored at the end of the contract			

Potential project impacts towards climate resilience and adaptive capacity⁷⁶

28. The risks identified in previous sections might reduce or hinder the success of the project, thus SAEP includes strategic investments to support resilience building through the development, dissemination and adoption of CSA practices that would significantly contribute to decrease climate vulnerability, generate climate mitigation and adaptation co-benefits, as well as reduce rural poverty. SAEP will support new or existing marketing and processing enterprises and businesses in rural areas, which require a constant flow of good quality local agricultural products (e.g. honey, dried fruits, spices), and increase farmers resilience through the following main activities to be implemented as part of Component 2:

- Build capacity of farmers and farmer organizations (including young farmers) to understand the effects of CC in agriculture, and identify and implement CSA practices;
- Provide training to MOA extension service to enhance their capacity to address CC issues, assess CSA practices and approaches and interpret climate information;
- Provide extension services to farmers on CSA practices, improved access to climate information and enhanced marketing links;
- Establish a financial scheme for CC awareness and preparedness initiatives and to implement CSA practices at the level of famer organizations and individual farmers;
- Rehabilitation and climate proofing of rural roads and their drainage systems within the project area, to ensure structural climate resilience and farmers' long lasting access to markets.

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⁷⁶ The CC risks and impacts in the agricultural sectors are discussed in sections I.C.

Table 4. CC impacts and proposed response measures and summary potential mitigation benefits

Direct risks on project activities	Measures to address the impacts					
Increased temperatures and more erratic rainfall patterns will affect production gains achieved during the project implementation, and cause food loss	- Improve access to local markets by smallholder producers to provide an					
Main crops	Example of potential CSA practices (WB et al., 2014):					
Fruit and vegetables	Soil management practices (terracing, shredding, composting, mulching, no burn agriculture) Medium adoption (30–60%) <u>Adaptation</u> : Protection of soils against extreme climate events. <u>Mitigation</u> : Conservation of soil carbon, reduced emissions from burning, reduced risk of forest fires. Productivity: Sustainable land use for production of staple foods.					
Fruit and vegetables	Intercropping (fruit trees and vegetables) and shade houses to intercept water run-off and protect soil against heavy rains Low adoption (<30%) Adaptation: Woody species intercept water and fertilizer runoff, protect soils against heavy rains, efficient use of rainfall and fertilizers. Mitigation: Some carbon capture through soil conservation and tree planting, reduced nitrogen emissions through more efficient use of fertilizer. Productivity: Improved yields, economic security through diversification of production.					
Fruit and vegetables	Water capture, storage, conservation and protection of water sources, including efficient irrigation systems, small-scale water harvesting schemes for human consumption and irrigation, small drainage works, improvement of water management and drainage systems to reduce drought risk. Low adoption (<30%) Adaptation: Resilience to drought and unpredictable rainfall patterns. Mitigation: No direct benefits Productivity: Increased quality, quantity and continuity of production.					
Root crops	Production of roots and tubers Medium adoption (30–60%) Adaptation: Relatively resistant to irregular rainfall and hurricane damage. Mitigation: no direct benefits Productivity: Enhanced food security through production of staple foods.					
Goat	CSA Practice: Stabled dairy goats with cut-and-carry fodder and compost production from droppings Low adoption (<30%) Adaptation: Resilience to droughts, erosion protection on the island's mountainous terrain. Mitigation: Carbon capture through soil conservation, fodder tree planting, composting of droppings. Productivity: High-value products for export and sale to tourists.					
Honey production	Beekeeping, Low adoption (<30%) <u>Adaptation</u> : Productive use of forest areas required for watershed protection. <u>Mitigation</u> : No direct benefits, incentive for forest conservation. Productivity: High-value product with export potential.					
Disruption of energy supply	Promote solar or wind powered irrigation pumps					

B. Climate change and adaptation

29. Grenada has re-established its National Climate Change Committee (NCCC), which provides overall guidance and support on CC activities on the Island. The NCCC Secretariat support is provided by the Climate Change Focal Point within the Environment Division⁷⁷. The Drought Early

⁷⁷ The Committee consists of 13 members, which are assigned to different working groups for which they are responsible. Within these working groups, services from members of civil society, private sector, academia and government officials are

Warning and Information Systems (DEWIS) Committee⁷⁸, has the objective of contributing to efforts to mitigate the effects of droughts in Grenada through provision of early warning, and public education and awareness information. The Drought Monitoring Network⁷⁹, is in charge of managing climatological and hydrological data, and producing the climate and water monitoring information and forecasts for EW advice (FAO, 2016). Both DEWIS and the Network are currently not fully functional.

30. In addition, Grenada's past and current adaptation actions are indicated in the National Climate Change and Action Plan (NCCPAP, 2007-2011), which is currently under revision by the Environment Division as part of the National Adaptation Plan (NAP) process, overseen by GIZ. The key strategic objectives of the NCCPAP are: climate-proofing of national development activities; strengthening collection and analysis of CC data: building local capacity to assess and respond to CC: reducing GHG emissions through increased energy efficiency and use of renewable energy; eliminating unsustainable livelihood and development practices; raising public awareness and developing CCrelated education, among others (GOG, 2016). Neither of these two recent policy documents considers agriculture in detail or contains proposals for CSA.

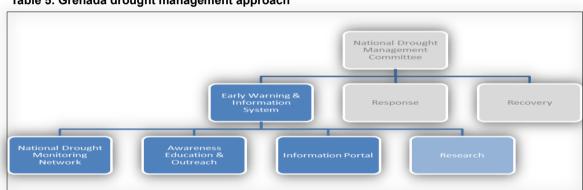


Table 5. Grenada drought management approach

- 31. The National Biodiversity Strategy and Action Plan (NBSAP, 2014) considers land use impacts on CC. It incorporates the updated Aichi Biodiversity Targets, of which the following targets directly refer to CC: Target 5 (reduce forest degradation by 50-100% by 2020); Target 10 (reduce anthropogenic pressures on vulnerable ecosystems impacted by CC by 2015 to safeguard their function); and Target 15 (restore at least 15% of degraded ecosystems to contribute to CC mitigation and adaptation by 2020).
- 32. Policy for climate risk insurance through the Caribbean Catastrophe Risk Insurance Facility (CCRIF), offers member countries, including Grenada, the option of purchasing insurance against earthquakes, hurricanes and, most recently, excessive rainfall. The insurance coverage will increase the climate resilience of agriculture along with other sectors of the economy. Another regional group that is relevant for CSA is the Caribbean Meteorological Organization (CMO), which is responsible for the operations of the Caribbean Institute for Meteorology and Hydrology (CIMH). In Grenada, reference can be made to the Meteorological Service (http://weather.mbiagrenada.com/?g=about).

designated. Meetings of the working groups are organized by the respective NCCC working group member(s). The Secretariat, via the Chair, reports monthly to the Senior Management Board, and quarterly to Cabinet.

⁷⁸ The Committee comprises the following institutions: Ministry of Agriculture (Lead Agency); Meteorological Services; National Water and Sewerage Authority, NaDMA; Farmers' representatives, Fire Department of the Royal Grenada Police Force, Media Representative, Government Information Systems, Grenada Chamber of Commerce. The Committee reports to MOA, who ultimately reports to cabinet, a copy of which is sent to NadMA.

^{79 I}t consist of: NAWASA, MOA, IICA, Farmers Groups, Meteorological Service, NaDMA, Inter Agency Group of Development Organisations. (IAGDO), Min. of Environment. Reports to DEWIS Committee.

III. Environmental and social category (A, B, C)

33. SAEP is designed to positively affect social and environmental conditions, since it incorporates special considerations for women and youth in the creation of new jobs, starting or consolidating sustainable businesses, such as ecotourism activities. Therefore, it is expected that the project will produce positive social impacts on the target groups by supporting start up and existing enterprises in rural areas, raising income levels and ultimately impacting livelihoods. CSA is expected to increase efficiency and consistency of production to satisfy food and nutrition security. The project strategy recognises that improvement of smallholders livelihood must be based upon enhancing NRM, and this must be done in a way that reduces any potential adverse environmental impacts that are: i) are less adverse than those for Category A projects; ii) are site-specific and reversible in nature; and iii) can be readily remedied by appropriate preventive actions and/or mitigation measures. The starting or consolidating of sustainable businesses, as well as construction or rehabilitation of rural roads occur in "non-sensitive areas" (e.g. not in protected areas, natural forests; wetlands; areas of global significance for biodiversity conservation or locations that include physical cultural resources).

34. In line with IFAD's Social, Environmental and Climate Assessment Procedures (SECAP), in view of the targeting of existing farms, the measures for efficient water management, the promotion of organic farming and/or integrated pest management, the project is considered to pose **moderate socio-environmental risks**, and can be classified as **category B**. The Environmental and Social Management Plan (ESMP), which is a compliance document that accompanies Cat B projects has been developed.

IV. Climate risk category (High, Moderate, Low)

35. According to the Notre Dame Global Adaptation Index (ND-GAIN 2015)⁸⁰, Grenada is ranked 61th out 181 countries, in a ranking system where countries are listed in reverse order of vulnerability⁸¹. According to a study on the vulnerability and resilience of Caribbean SIDS, both the Social Institution Vulnerability Index (SVI) and the Environmental Vulnerability Index are high, indicating Grenada's exposure to natural hazards and human pressure, and its susceptibility to disasters. However, it is also recognized that additional data would be needed to adequately quantify the social vulnerability (ECLAC, 2011).

36. The project design has incorporated all available information regarding CC vulnerability, impacts and potential adaptation responses identified in the national policies, UNFCCC National Communication, Nationally Determined Contribution (NDC), as well as existing country disaster risk profiles. Safeguards against the climate vulnerabilities discussed above are incorporated into the project through the promotion of CSA practices that buffer the crops against climate extremes and reduce the risk of crop failure. Besides, SAEP is intended to increase resilience of target groups through access to local markets by smallholder producers and provide an economic incentive for CSA.

37. The design would have benefitted from a national level technical vulnerability analysis to improve understanding of survival and productivity of current crop varieties and consideration of alternatives. The project theory of change was conceived on the recognition that increased agricultural production will only provide a lasting benefit to smallholders' incomes if smallholder homesteads are resilient to the anticipated CC (higher temperatures and erratic rainfall); and if sustainable NRM is strengthened at farm and wider levels. In addition, SAEP is designed to respond to the GOG's priorities under the ongoing National Adaptation Plan (NAP) process, and it is in line with the National Agricultural Plan (2015-2030). SAEP is also well positioned to contribute to the implementation of CC measures

⁸⁰ ND GAIN summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. http://index.gain.org/ranking

⁸¹ Grenada has a score of 58. The least vulnerable country has a score of 81, and the most vulnerable has a score of 24.9.

outlined in the Grenada NDC, which emphasizes improving adaptation in the agriculture sector. **On** the basis of the above, a classification of a moderate climate risk is here proposed.

V. Recommended features of project design and implementation

A. Mitigation measures

38. CSA technologies and practices present opportunities for addressing CC challenges, economic growth and development of the agriculture sector. MAREP beneficiaries indicated that heavy rains erode agricultural soils and damage crops, while drought can lead to temporary food scarcity and reduced productivity of grazing pastures. Higher temperatures, higher evapo-transpiration and longer and severer dry seasons can create larger soil-water deficits and a need for efficient water use. This was a particular concern among fruit and vegetable growers. Hence, SAEP will give priority to individual and community CSA proposals (e.g. drip and micro-sprinkler irrigation techniques, intercropping, improved controls on agrochemical use, and cut-and-carry pastures for the livestock sector). The adoption rates for these practices are still relatively low, indicating the need to expand MOA extension services, invest in validating practices, enhance rural livelihoods through the provision of management and marketing support services, and development of food processing capacity. Climate mitigation co-benefits will be accounted for, but will not be considered a requirement for the selection of adaptation proposals.

B. Multi-benefit approaches

39. Emphasis is given to CSA for resilient livelihoods. The core of this approach is the recognition that useful synergies for adaptation and mitigation in the agriculture sector, relevant to food security and rural livelihoods exist. These include a wide set of strategies that lead to conservation and restoration of soil, water, and ecosystem services by improving their quality, availability and efficiency of use. These strategies aim at building resilience of production systems in the face of increased climatic pressures, while enhancing carbon sequestration in soils and biomass, or reducing land-based GHG. Furthermore, these strategies aim at social, economic and environmental sustainability of the agricultural production, while limiting the carbon footprint of food production, processing and marketing (FAO, 2011). SAEP promotes these complementarities, and aims at informing and guiding ongoing national efforts towards climate resilience. In addition, the project design takes into consideration that creating stable market linkages and CSA are intricately related. When smallholders will start supplying the local markets, they will need to meet higher standards for their produce. Better land, soil and water management will lead to a more reliable and continuous crop production.

C. Incentives for good practices

40. The possibility to enhance and generate incomes through CSA will create a key incentive that stimulates interest among youth in the agriculture sector, as well as expansion and replication of the approach. In addition, enhanced production of fruit and vegetables could provide further economic incentives for food processing. A number of specific incentives and support schemes for CSA are already in operation in Grenada, under the GIZ Programme on Integrated CC Adaptation Strategies (ICCAS)⁸². SAEP will build on this ongoing successful initiative.

D. Participatory processes

41. Under Component 2, the project will provide support services and funding to individual and community proposals to enhance the profitability and climate resilience of the farms. MOA extension service, farmers' awareness raising, training and capacity building on adaptation responses will follow the principle of emphasizing demonstration and discussion in the field.

⁸² http://www.adaptation-undp.org/projects/bf-grenada.

VI. Analysis of alternatives

42. The GOG is testing and promoting a broad range of integrated adaptation approaches to increase resilience of vulnerable communities and ecosystems under ICCAS. SAEP should build on the experience gained under the Community Climate Change Adaptation Fund (CCCAF) and the 29 community projects that provide on the ground testing of alternative adaptation approaches under diverse focus areas. Development of the food processing sector is an essential component of CSA in Grenada in response to the variability of production and the small size of the local market. There is potential to develop links between food processing and organic agricultural producers to meet demand for certified products from the tourism and export markets.

VII. Institutional analysis

A. Institutional framework

43. At a national level, the key public institutions for project implementation are the Ministry of Agriculture, Forestry and Fisheries (MOA), the Ministry of Carriacou and Petite Martinique, and the Grenada Investment Development Corporation (GIDC). The Ministry of the Environment (which is part of the Ministry of Education, Human Resources, MEHRDE) will be part of the Programme Steering Committee through a representative of the National CC Committee. The CC Policy and Action Plan (2007-2011) is coordinated by the Environment Division and the National CC Committee.

44. Within the MOA, the Land Use division and the Irrigation Management Unit are key actors for adaptation to drought risk and water scarcity. Responsibility for watershed protection is shared between the Land Use Division and the Physical Development and Public Utilities Division of the Ministry of Works. Many agencies share the responsibility for water and watershed management throughout Grenada, including NAWASA, Land Development Authority, Land Use Division, Department of Forestry and National Park, Environmental Health Department, Grenada Bureau of Standards, National Science and Technology Council. Grenada's business community, including agriculture and agro-processing, is represented by the Grenada Chamber of Industry and Commerce (GCIC). Support for production and marketing is provided by a state-run purchasing agency the Marketing and National Importing Board (MNIB).

B. Capacity building

45. Appropriate measures to promote the adoption of CSA will be the establishment of a CSA Investment Fund, individual and community awareness raising, training, capacity building, and improved access to climate information, expansion of the extension service to validate CSA practices. Furthermore, SAEP will consider engaging Caribbean Agricultural Research & Development Institute (CARDI), Instituto Interamericano de Cooperación para la Agricultura (IICA) and the National Disaster Management Agency (NaDMA) in the provision of ad-hoc awareness raising, training and capacity building on CC risks and adaptation responses.

C. Additional funding

46. No additional funding under the GEF-6 or Green Climate Fund (GCF) are foreseen at this stage. The GEF-6 STAR allocation for Grenada has been already committed.

D. Monitoring and Evaluation

47. Indicators related to adaptation have been included in the logical framework. The activities related to environmental management and CSA will be screened through the use of indicators to be defined under the SAEP M&E system, on the basis of relevant indicators already in use by the GOG.

E. Record of consultations with beneficiaries, civil society, general public

48. The list of stakeholders that has been met by the design mission is in the Aide Memoire. The overall project design process has been consultative and reflects insights gained from interaction with the female and male smallholder farmers, and entrepreneurs from several Parishes.⁸³

VIII. Environmental and Social Management Plan

49. It is proposed that the following parameters are monitored during the implementation of the Programme as part of the ESMP:

Table 6. ESMP									
Parameter	Activity	Performance Indicator	Baseline data	Responsibility for monitoring during programme implementation	Monitoring means	Recommen ded frequency/ monitoring			
Climate resilience	Monitor resilience through change in household assets	% change of household assets from start-up	0%	PMU in collaboration consultants	Impact study	Baseline Final evaluation			
	Monitor changes in the adoption of CSA agricultural practices for increased adaptation	N of adaptation and climate smart investment projects financed	0	PMU in collaboration with NCCC	Regular project supervision	Yearly			
		N of beneficiaries adopting at least one CSA practice (crop and livestock sector)	TBD (Baseline study)	PMU in collaboration with MOA extension officers	Regular project supervision	Yearly			
Small scale poultry production	Prepare a waste disposal management plan	Existence of plan (Yes/No)	No	PMU in collaboration with MOA and Environmental Health Department	As part of project approval	Before project approval			
Small scale processing and marketing of agricultural produce	Prepare a waste disposal management plan	Existence of plan (Yes/No)	No	PMU in collaboration with MOA and Environmental Health Department	As part of project approval	Before project approval			

⁸³ References

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Caribbean Development Bank. 2008. Feasibility Study on Rainwater Harvesting for Agriculture in Grenada; Economic Commission for Latin America and the Caribbean (ECLAC). 2011. Study on the vulnerability and resilience of Caribbean Small Island Developing States (SIDS); Government of Grenada (GOG). 2000. Grenada's Initial Communication to the UNFCCC; GOG. 2000a. National Biodiversity Strategy and Action Plan; GOG. 2007. National CC Policy and Action Plan (2007-2011); GOG. 2014. Fifth National Report to the Convention on Biodiversity; GOG. 2015. National Agricultural Plan (2015-2030); GOG. 2016 Nationally Determined Contribution to the UNFCCC; London School of Economics (LSE) Grantham Research Institute. 2015. CC Legislation in Grenada. The Global Climate Legislation Study; FAO. 2011. CC and Agriculture Policies: How Far Should We Look for Synergy Building Between Agriculture Development and Climate Mitigation? Ex-Act Issue Paper. Module 098;- FAO. 2016. Drought characteristics and management in the Caribbean.; United Nations Department of Economic and Social Affairs (UNDESA). 2012. CC Adaptation in Grenada: Water Resources, Coastal Ecosystems and Renewable Energy; UNDP. 2006. Grenada CC Country Profile; World Bank. 2011. Grenada Strategic Programme for Climate Resilience; World Bank. 2016. Grenada Country Disaster Risk Profile; World Bank. 2017. Regional Agriculture Competitiveness Project. Report No: PIDISDSA20768; World Bank; CIAT; CATIE. 2014. Climate-Smart Agriculture in Grenada. CSA Country Profiles for Latin America Series. Washington, D.C;

Risk of sand mining to renovate rural roads and for drainage networks	Monitor the authorization of competent government entities with regard to the extraction of building material	Existence of authorization for the construction of rural roads and drainage systems (Yes/No)	No	CDB and Ministry of works	As part of project approval	Before project approval and construction
Risk of damages to rural roads and drainage networks from climate hazards	Monitor that rural roads and drainage networks are climate proof	Compliance with national construction standards for climate proof roads and drainage networks (Yes/No)	No	CDB and Ministry of work	As part of project approval and supervision	Before project approval and during construction
Risk of increased use and discharge of agrochemicals	Ensure that agrochemical application plan is based on soil test (to avoid overuse) and that discharge of agrochemicals is acceptable	Soil test has been done to define use of agrochemicals (Yes/No) Discharge of agrochemicals is acceptable (Yes/No)	No	PMU in collaboration with MOA extension officers	As part of project approval	Before project approval
Water availability	Monitor improved access to water for agriculture and agro-processing as a result of water storage	Capacity of rainwater harvesting infrastructure (m3)	TBD (Baseline study)	PMU in collaboration with MOA	Regular project supervision	Yearly
Renewable energy capacity installed	Monitor the quantity of renewable energy installed	KW of renewable power installed in the targeted communities	TBD (Baseline study)	Service provider contracted to install wind power/solar panels	Service provider's report	Yearly
Food security	Monitor changes in access and availability of food	N of backyard gardens upgraded	0	PMU in collaboration with MOA	Regular project supervision	Yearly
Poverty	Monitor economic mobility	N of HHs experiencing income increase from start up	0	PMU in collaboration consultants	Impact study	Baseline Final evaluation
Capacity building on business development	Monitor vocational skills training	N of young people (by sex, age) receiving VST	Zero	PMU	Regular project supervision	Yearly
Employment	Monitor changes in employment levels among youth (both male and female)	N of (employed/self- employed) new jobs created (by sex, age)	Zero	PMU and GIDC	Regular project supervision	Yearly

Appendix 13: Contents of the Project Life File

- Country Strategy Note
- Project Detailed Design Report with Appendices
- Excel Economic and Financial Analysis Workbook
- Excel File Project Cost Workbook
- Government request SAEP 15 February 2017
- CPMT Minutes 16 February 2017
- OSC Issue Paper 16 March 2017
- CN approved 16 March 2017
- OSC CN Minutes 30 March 2017
- AM design mission 28 April 2017
- CPMT Minutes 30 May 2017
- QE memo 7 June 2017
- QE reviewers comments 19 June 2017
- QE overall 19 June 2017
- QE panel report 28 June 2017
- AM final design mission July 2017
- CPMT minutes 29 August 2017