



Investing in rural people

Sierra Leone

Agriculture Value Development Project

Design completion report

Main report and appendices

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Currency equivalents

Currency Unit	=	Leone (SLL)
US\$1.0	=	SLL 7,800 (September 2018)

Weights and measures

1 bushel (rice)	=	0.27 metric tonne
1 metric tonne (rice)	=	36.74 bushels
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square kilometre	=	100 hectares
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres
1 metric tonne/hectare (rice)	=	14.87 bushels/acre
1 bushel/acre (rice)	=	0.067 tonne/hectare
100 paddy rice	=	65 milled rice

Abbreviations and acronyms

ABC	Agribusiness Centre
ABSL	Apex Bank of Sierra Leone
AF	Adaptation Fund
AfDB	African Development Bank
AMIS	Agricultural Market Information System
AVDP	Agriculture Value Chain Development Project
AWPB	Annual Work Plan and Budget
BSL	Bank of Sierra Leone
CB	Community Bank
C/KM	Communication and Knowledge Management
DAO	District Agricultural Officer
DSF	Debt Sustainability Frame work
EPA	Environmental Protection Agency
ESMP	Environmental and Social Management Plan
EU	European Union
FAO	Food and Agriculture Organization
FBO	Farmer Based Organization
FFS	Farmer Field School
FO	Farmer Organization
FSA	Financial Services Association
GALS	Gender Action Learning System
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoSL	Government of Sierra Leone
GYP	Gender and Youth Action Plan
HDI	Human Development Index
ICADEP	Inclusive Comprehensive Agricultural Development Programme
ICB	International Competitive Bidding
IEC	Information, Education and Communication
IFAD	International Fund for Agricultural Development
IsDB	Islamic Development Bank
IVS	Inland Valley Swamp
KFTCRC	Kenema Forestry and Tree Crop Resource Centre
KM	Knowledge Management
Km	Kilometre
M&E	Monitoring and Evaluation
MAF	Ministry of Agriculture
MG	Matching Grant
MoFED	Ministry of Finance and Economic Development
MT	Metric Tonne
MTR	Mid-term Review
NCB	National Competitive Bidding
NPCU	National Programme Coordination Unit
NSC	National Steering Committee
O&M	Operation and Maintenance
PBAS	Performance Based Allocation System
PCR	Project Completion Report
PDO	Project Development Objective
PDR	Project Design Report
PEMSD	Planning, Monitoring and Evaluation and Statistics Department
PRP	President's recovery Programme
QCBS	Quality and Cost Based Selection
RCPRP	Rehabilitation and Community-based Poverty Reduction Project

RFCIP	Rural Finance and Community Improvement Programme
RFI	Rural Finance Institution
RIMS	Results and Impact Management System
SCADeP	Smallholder Commercialization and Agribusiness Development Project
SCP-GAFSP	Smallholder Commercialization Programme - Global Agriculture and Food Security Programme
SDR	Special Drawing Rights
SECAP	Social Environmental and Climate Change Procedures
SLARI	Sierra Leone Agricultural Research Institute
SLeCAD	Sierra Leone Chamber of Agricultural Development
SLIEPA	Sierra Leone Investment and Export Promotion Agency
SLL	Leone
SLRA	Sierra Leone Road Authority
SMS	Short Message System
TOR	Terms of Reference
USD/US\$	United States Dollar
WAATP	West Africa Agricultural Transformation Project
WEAI	Women's Empowerment in Agriculture Index

Map of the project area

Sierra Leone

Agriculture Value Chain Development Project (AVDP)

Design Completion Report



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.

Map compiled by IFAD | 23-10-2018

Executive Summary¹

1. The Agricultural Value Chain Development Project (AVDP) will be implemented over six years with the overall goal of improving livelihoods, food security and climate resilience of rural farming households. The project's development objective is to increase incomes for smallholder farmers through the promotion of agriculture as a business. The AVDP will target an estimated 34,000 direct beneficiaries and their families, thereby reaching a total of 204,000 people. The project will be financed by IFAD, the Adaption Fund, the private sector, the Government of Sierra Leone (GoSL) and beneficiaries.
2. The project will work in all of the country's 16 districts, primarily with Farmers Organizations, Service Providers, and SMEs in the rice, cocoa and oil palm value chains though crop diversification to enhance nutrition and create alternative income streams will figure prominently in project activities. The ADVP will adopt a value chain approach, intervening either directly or through partners in all links in the value chain from seed supply through processing and marketing. The project has been structured to maximize synergies with two WB projects that are intervening in the same value chains. The AVDP will deploy a robust targeting strategy to ensure that women and youth represent each 40% of the beneficiaries.
3. **Political and economic context.** The Sierra Leone economy has grown substantially since the end of the civil war in 2002, but it suffered two major shocks in 2014/2015 – the Ebola epidemic and the collapse of iron ore prices, with GDP growth shrinking to -21 per cent in 2015. However, economic growth resumed following new investments in mining, agriculture and fisheries. Agriculture, the largest sector in the economy, accounted for 59 per cent of GDP² in 2016, 62 per cent of the labour force and 22 per cent of export earnings. Poverty is widespread but is particularly acute and concentrated in the rural areas where 59 per cent of the population live.³ Women and youth are particularly vulnerable due to challenges associated with access to land, skills and capital, as well as customary practices.
4. Yields of all major crops are significantly lower than most regional comparators due mainly to unavailability of improved seed, lack of physical and financial access to inputs, absence of irrigation and water control mechanisms, weak extension services and paucity of investment in tree crop replanting.
5. **Rationale for IFAD Involvement:** Agricultural development remains key to Sierra Leone's economic development and rural poverty reduction and there is considerable untapped potential for improving production and productivity of both staple and cash crops. The project will focus on three crops: rice, cocoa and oil palm though the largest share of the budget will be devoted to rice production in the inland valley swamps, consistent with GoSL priorities. The AVDP will promote crop diversification to provide flexibility and choice to beneficiaries and support improved nutrition.
6. The selection of the value chains is consistent with current government priorities and pro-poor approaches to value chain development. The crop mixture addresses increased availability of the dietary staple (rice), improved nutritional balance (vegetables), and increased incomes from all crops. The selection of value chains will also allow the AVDP to build on and strengthen the results that have been achieved in Sierra Leone through IFAD past and on-going projects

¹ Mission composition: The final design mission was composed by: Jakob Tuborgh, Country Programme Manager; Rich Pelrine, outgoing interim Country Programme Manager and Regional Economist for WCA; Mikael Andersson, Finance Officer; Geoffrey Livingston, Design Technical Lead; Dunstan Spencer, Value Chain and Tree Crop Specialist; Dajana Grandic, Economic and Financial Analysis Specialist; and Ijeoma Emenanjo, Environment and Climate Change Specialist.

²Economic Intelligence Unit, Country Report 2nd Quarter, 2018

³Statistics Sierra Leone, 2015 Population and Housing Census, December 2016

operating in the same value chains. Value chain development activities will be conducted with a view to effectively integrate smallholder farmers into the value chains.

7. **Theory of change.** Smallholder rice and tree crop producers in Sierra Leone currently face a number of limitations to enhance productivity and increase incomes. These limitations include: (i) Lack of quality inputs such as certified seeds and sufficient fertilizer; (ii) Limited access to extension services; (iii) Low investments and limited working capital; (iv) Unfavourable farm to market linkages; and finally (v) climate change is putting pressure on production.
8. The project will address these challenges through the provision of technical assistance by the Farmer Field School as well as the strengthening of farmer organisations to better plan production and purchase of inputs. Availability of certified seeds will be enhanced through the set-up of seed multiplication plots that will be linked to private sector processors. The project will provide matching grants to facilitate that beneficiaries invest in productive infrastructure to enhance productivity. The matching grants scheme will also enhance the financial inclusion, as most producer groups will need credit for their investments. Province-level multi-stakeholder platforms will better integrate the value chains by bringing the different stakeholders – including representatives of the smallholder farmers – to the table to find solutions to current obstacles, build trust and facilitate business deals. Rehabilitated feeder roads will further facilitate market linkages. Additionally, the project will seek to climate proof the productive investments and ensure relevant capacity building. The overall approach of AVDP will be market-centred and demand driven.
9. The desired scenario is that smallholder producers are organised in producer groups, have increased productivity and production considerably and that the excess production is sold through stable business connections with private sector partners thereby increasing incomes and livelihoods. Additionally, the target population will have improved nutritional status.
10. **Components.** The project has three components: (i) Climate Resilient and Smart Agricultural Production; (ii) Agricultural Market Development; (iii) Project Coordination and Management.
11. The outcome of **Component 1: Climate Resilient and Smart Agricultural Production**, is that volume and value of production is increased, and production systems are made more climate resilient. The component will support the preparation of Business Development Plans at the level of the Agri-Business Centres (ABC) that will include a comprehensive plan of the investments needed to develop the productive capacities of rice, cocoa or oil palm. Capacity building for improved production techniques and extension will be provided using the Farmer Field School (FFS) methodology.
12. **Sub-Component 1.1 Support to smallholder rice production and productivity**, will work with 5,000 rice farmers who have not previously benefited from the SCP/GAFSP project, to provide technical assistance through Farmer Field Schools and financial support for the development of inland valley swamps for double or triple cropping of rice, and improved access to quality inputs and mechanized farming services. The project will help Farmers' Organizations and ABCs mentioned above add value to paddy by improving milling capacity and quality and facilitating market linkages with off-takers. The project will similarly provide technical assistance and training to 5,000 legacy rice farmers that have benefitted from past IFAD-financed projects.
13. **Sub-Component 1.2 Support to tree crop production and productivity**, will work with 9,000 farmers (5,000 cacao and 4,000 oil palm producers) each receiving support for the establishment of a one-hectare plot, who were not direct beneficiaries of the SCP-GAFSP. The subcomponent will enhance the economic viability and climate resilience of oil palm and cocoa farmers and link them more effectively to private sector markets. The AVDP will also continue to provide technical assistance and training for 4,000 legacy oil palm farmers who received assistance under past IFAD projects.

14. Replanting and new planting of cocoa sites will be supported partially by the Adaption Fund with provision of climate resilient hybrid seeds provided by the rejuvenated clonal garden of the Sierra Leone Agricultural Research Institute (SLARI). The AVDP will provide technical and support for the establishment of community nurseries to outgrow the seedlings obtained from SLARI. The replanted or new plantations will intercrop plantains, cassava, and/or timber trees for shade provision and supplementary income generation.
15. For oil palm, AVDP will procure improved tenera variety seeds from regional private sector suppliers and establish community nurseries. AVDP will assist farmers to carry out intercropping with food crops (groundnuts and rice) during the initial growth of infant trees to improve livelihoods and household nutrition. AVDP will not support the clearing of forest areas for tree crop plantations. Rather degraded secondary bush areas will be used for such plantings.
16. **Component 2: Agricultural Market Development**, contains two sub-components: (i) Market access and (ii) Climate resilient rural infrastructure. The expected outcome of this component is the improved performance and organization of the selected value chains for increased smallholder production and productivity.
17. **Sub-component 2.1 Market Access** will focus on strengthening the business skills of ABCs, Farmer Organizations and Farmer Field Schools and facilitating value chain organization and deal making through the establishment of provincial level multi-stakeholder platforms. Key activities under this sub-component include mapping of existing value chain players, including farmer-based organisations, and the provision of capacity building according to their needs; through the multi-stakeholder platforms, the project will facilitate linkages and deal making between AVDP beneficiary organizations, input suppliers, aggregators and large scale processors and commodity buyers.
18. **Sub-component 2.2 Climate Resilient Rural Infrastructure**, financed mainly through the Adaption Fund, will rehabilitate 20 warehouses to improve product drying and storage capacity, construct secondary roads and farm tracks and undertake spot improvements on trunk roads. The AVDP will use a labor-based approach to road improvement, employing local residents for certain tasks, thereby generating temporary employment opportunities. The sub-component will also finance improved livestock and domestic water supply, sanitation, water retention structures and solar pumps among other activities.
19. **Component 3 is devoted to Project Coordination and Management**. The implementation of AVDP will be anchored within the NPCU and Ministry of Agriculture and Forestry at the district level. Staffing levels at NPCU will be complemented with technical assistance as needed.
20. **Costs and financing**. AVDP will be co-financed by IFAD loan, IFAD grant, GoSL, the Adaption Fund (AF), private sector and the direct beneficiaries' contribution. IFAD will contribute about US\$ 40.3 million, spread over two PBAS cycles, accounting for 67.4 per cent of total project costs. The AF will contribute US\$ 9.2 million representing 15.3 per cent of total costs. The Government will finance the taxes and duties (US\$ 7.7 million, representing 13 per cent of total costs) with beneficiaries and the private sector assuming the remaining costs.
21. Additionally, it is estimated that the AVDP will benefit from an estimated US\$ 10 million in parallel value chain investments under the World Bank-financed Smallholder Commercialization and Agribusiness Development Project (SCADeP) and an estimated US\$ 12 million for the rice seed value chain under the Bank's West African Agricultural Transformation Project (WAATP).

Economic analysis. The economic analysis shows that the project has the capacity to generate an economic rate of return (ERR) of 25% over 20-year period, with a net present value of SLL 116.2 billion equivalent to USD 13.4 million.

Logical Framework

Narrative Summary	Key Performance Indicators				Means of Verification			Assumptions
	Name [CORE INDICATOR (CI)]	Baseline (Y0)	Mid-Term (Y3)	EndTarget (Y6)	Source	Frequency	Responsibility	
Outreach	Number of households receiving services promoted or supported by the project(CI:1) 1 ^{Lead}	0	29,000	34,000	Project M&E system	bi-annual, annual	IFAD-PIU	Commitment of all stakeholders (government, donors, private sector) to participate in poverty reduction efforts
					Project M&E system	Bi-annual, Annual	IFAD-PIU	
Goal:								
Improved livelihoods, food security and climate change resilience of rural farming households in Sierra Leone	Targeted households that experience a reduction in length of hungry season from 4 to 2 months ^{Lead} 2	0	11,600 (40%)	20,400 (60%)	Baseline, Completion Survey or secondary data	PY1, PY6	IFAD-PIU, survey providers	N/A
	Proportion of target population below the minimum level of dietary energy consumption by gender and vulnerable groups 3	TBD	TBD	TBD	Baseline, Completion Survey. Secondary data: CFSVA	PY1, PY6	IFAD-PIU, survey providers	
	Households reporting increased assets (asset ownership index) ^{Lead} 4	N/A	7,250 (25%)	17,000 (50%)	Baseline, Completion Survey.	PY1, PY6	IFAD-PIU, survey providers	
Project Development Objective:								
Increased incomes for smallholder farmers through the promotion of agriculture as a business	Number of rural producers reporting an increase in sales (CI:2.2.5)* ^{Y,S} 5	0	8,740 (40%) of which 3,496 youth and 3,496 women	20,700 (90%) of which 8,280 youth and 8,280 women	Mid-term Review, Completion survey	PY1, PY3, PY6	IFAD-PIU, survey providers	Government policies are stable and global demand for oil palm and cocoa do no decrease.
	Number of rural producers reporting an increase in income ^{Y,S} 6	0	8,740 (40%) of which 3,496 youth and 3,496 women	20,700 (90%) of which 8,280 youth and 8,280 women	Mid-term Review, Completion survey	PY1, PY3, PY6	IFAD-PIU, survey providers	

Narrative Summary	Key Performance Indicators				Means of Verification			Assumptions
	Name	Baseline(Y0)	Mid-Term(Y3)	EndTarget (Y6)	Source	Frequency	Responsibility	
Component 1: Climate Resilient and Smart Agricultural Production								
Outcome1: Volume and value of produce increased	Number of persons reporting an increase in production (CI:1.2.4)* ^{Y,S} 7	0	12,425 (50%) of which 4,970 youth; 4,970 women	20,700 (90%) of which 8,280 youth; 8,280 women	Baseline, MTR, Completion Survey	PY3, PY6	IFAD-PIU, survey providers	Land tenure system in project districts does not pose any limitations to project activities Communities are involved and responsive to interventions made
	Number of persons reporting adoption of new improved inputs technologies or practices (CI:1.2.2)* ^{Y,S} 8	0	12,425 (50%) of which 4,970 youth; 4,970 women	20,700 (90%) of which 8,280 youth; 8,280 women	Baseline, MTR, Completion Survey	PY3, PY6	IFAD-PIU, survey providers	
	Number of persons reporting adoption of environmentally sustainable and climate-resilient technologies and practices (CI:1.2.2)* ^{Y,S} 9	0	6,212 (25%) of which 2,485 youth and 2,485 women	20,700 (90%) of which 8,280 youth; 8,280 women	PMU progress Baseline, MTR, Completion Survey	PY3, PY6	IFAD-PIU, survey providers	
Outputs	Number of Agri-Business Centers with improved capacity for service provision (CI: 2.1.6)* 10	0	88	93	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
	Number of persons trained in production practice and/or technologies (CI:1.1.4)* ^{Y,S, Lead} 11	0	21,850 of which 8,740 youth and 8,740 women	23,000 of which 9,200 youth and 9,200 women	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
	Number of rural producer organizations supported (CI: 2.1.3)* ^{Lead} 12	0	790	833 (FOs – both new and legacy)	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
	Number of supported rural producers that are part of a rural producer's organization (CI: 2.1.4)* ^{Y,S} 13	0	21,850 of which 8,740 youth; 8740 women	23,000 of which 9,200 youth and 9,200 women	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
	Number of hectares of land brought under climate-resilient management (CI:3.1.4)* 14	0	12,350	13,000	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
	Number of farmers inter-cropping food crops ^{Y,S} 15		19,665 (90%) of which 7,866 youth; 7,866 women	20,700 (90%) of which 8,280 youth and 8,280 women				

Component 2: Agricultural Market Development

Outcome2: Value chain organization and performance improved	Number of rural producer's organizations engaged in formal partnerships/agreements with public or private entities (CI: 2.2.3)* ^{Lead} 16	0	237 (30%)	750 (90%)	Baseline, MTR, Completion Survey	PY3, PY6	IFAD-PIU, survey providers	Stakeholders incl. agribusinesses keep interest in integrating smallholders in value chains.
	Jobs created through road construction and rehabilitation (temporary employment) ^{Y,S} 17	0	1,000 (750 youth)	2,000 (1,500 youth)	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
Outputs	Number of functioning multi-stakeholder platforms supported (Policy 2)* 18	0	12	12	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	Commodity prices for oil palm and cocoa stay attractive.
	Number of kilometres of roads constructed, rehabilitated or upgraded (CI:2.1.5)* 19	0	50	250	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	
	Number of families with improved access to potable water and sanitation 20 **	0	5,000	10,000	Project M&E system	Quarterly, Bi-annual, Annually	IFAD-PIU	

Legend

* The indicator is a core RIMS indicator

** Indicator will be refined in consultation with the Adaptation Fund that will finance this aspect.

S The reported data should be disaggregated by the sex of beneficiary (male or female). All targets will be disaggregated for gender in the M&E system.

Lead The reported data should be disaggregated by the sex of the head of household, small and medium-sized enterprise owner or group leader (as relevant).

Y The reported data should be disaggregated by the age status of the beneficiary ("young" or "not young") as per the national definition for youth. All targets will be disaggregated per age group in the M&E system.

I - Context

A. National context and rationale for IFAD involvement

22. **Political and economic context.** The Sierra Leone economy has grown substantially since the end of the civil war in 2002, but it suffered two major shocks in 2014/2015 – the Ebola epidemic and the collapse of iron ore prices, with GDP growth shrinking to -21 per cent in 2015. However, economic growth resumed following new investments in mining, agriculture and fisheries, registering a GDP growth of 6.3 per cent in 2016 and 5.7% in 2017. Agriculture, the largest sector in the economy, accounted for 59 per cent of GDP⁴ in 2016, 62 per cent of the labour force⁵, and 22 per cent of export earnings.⁶ Cash crops produced for export include cocoa and coffee, while oil palm is produced for domestic consumption and some export.
23. **Poverty, food security and smallholder agriculture and rural development context.** Sierra Leone's population is around 7.4 million (40 per cent youth) and growing at 2.2 per cent annually.⁷ Poverty is widespread but is particularly acute and concentrated in the rural areas where 59 per cent of the population live.⁸ The rural poverty headcount of over 66 percent is double that of the urban areas. Women and youth are particularly vulnerable due to challenges associated with access to land, skills and capital, as well as customary practices. About 59.7 per cent of rural households in Sierra Leone are food insecure, compared with 25.1 per cent in urban areas.⁹ Expenditure on food for the rural household averages 63 per cent of total household expenditures. Paradoxically, food insecurity is highest in households living in livelihood zones dominated by food crop production. It is also more visible in households headed by women, and during the leanest months of August to October. Acute malnutrition prevalence is about 4.7 per cent¹⁰, with most districts going far beyond this figure, apart from the Western Area Urban and Western Area Rural districts.¹¹
24. Yields of all major crops are significantly lower than most regional comparators. The Government of Sierra Leone (GoSL) estimates that rice yields are 0.97 t/ha due mainly to unavailability of improved seed, lack of physical and financial access to fertilizers, crop protection products and mechanization, absence of irrigation and water control mechanisms on lowlands, and weak extension services. Given the importance of rice in the national diet and in the national economy, low productivity acutely affects caloric intake, food security and the economy as the country spends USD 200 million of sparse foreign exchange importing rice to meet national requirements. Yields for cacao and oil palm are similarly very low. During the war, farmers fled their homesteads and a significant proportion of plantations was left unattended for several years and subsequently returned to forest. Although many plantations have been rehabilitated, the average age of trees has long past productive peak and the low yields reflect this. Despite low productivity, the country has ample land to expand production. Given access to improved inputs, strengthened extension services, better rural infrastructure and enabling policies, smallholders can be the drivers of widespread economic growth and improved living conditions for all citizens.
25. **National strategies, policies and programmes relevant for smallholder agriculture, rural poverty reduction and enhanced food security.** The AVDP is wholly consistent with the government's National Agricultural Transformation 2023 Programme that is currently in development. The ADVP addresses two of the three priority intervention areas that are rice self-sufficiency and crop diversification, notably for oil palm and cacao. The

⁴Economic Intelligence Unit, Country Report 2nd Quarter, 2018

⁵International Labour Organization (ILO) et al, Sierra Leone 2014 Labour Survey Report, 22 September 2015

⁶World Bank, Sierra Leone, 2015

⁷World Bank data, 2016

⁸Statistics Sierra Leone, 2015 Population and Housing Census, December 2016

⁹Government of Sierra Leone, WFP and FAO, State of Food Security in Sierra Leone 2015

¹⁰ UNICEF, Sierra Leone Nutrition Survey, 2014

¹¹Livelihood analysis conducted during the design mission

project aligns with five of the seven new strategic priorities, i.e. Priority 2: increasing investment in rice production, processing and marketing; Priority 3: Make youth and women catalysts for agribusiness development and growth; Priority 4: Invest in catalytic technologies such as agricultural mechanization, irrigation and water management; Priority 6: Strengthen sustainable biodiversity management and conservation including forest and tree crops; and Priority 7: Increase the production of other crops to ensure diversification such as vegetables.

Special aspects relating to IFAD's corporate mainstreaming priorities

26. The PDR has mainstreamed climate change, gender, youth and nutrition into proposed activities under the AVDP. Consistent with the project goal, climate resilience has been mainstreamed into all project activities. Climate resilient rice seeds and tree crop seedlings will be used in all production activities and no deforestation will occur to make way for new plantations; there will be significant investments in water retention structures and climate resilient secondary roads and farm tracks; climate smart production techniques will form the basis for FFS training for all direct project beneficiaries.
27. Regarding gender and youth mainstreaming, the AVDP will promote gender equity as well as the participation of women and youth in all the value chain activities. A Gender/Youth Working Group made up of project component representatives will ensure that gender and youth are mainstreamed in the project. Gender sensitivity training and monitoring will be integrated from the onset of programme implementation. Gender targeting activities in the AVDP will include: integrating gender responsive institutional mechanisms in the ABCs, cooperatives and rural financial institutions (RFIs); gender sensitization events at community level and knowledge sharing events on best practices; gender capacity building for project staff. Youth mainstreaming activities will include: expanding the use of the youth contractor service provider model from SCP-GAFSP and provision of targeted mentoring and business development services. The AVDP will also finance training opportunities for youth in equipment maintenance for rice mills, oil presses, threshers, rototillers, pumps, solar powered and other machinery. A minimum of 40% women and 40% youth will participate in project-sponsored activities.
28. To address improved nutritional status, the project will provide training and financial support for vegetable and fruit production in and around IVS, promote establishment of home vegetable gardens, finance fish farming in dams constructed under the AVDP and include nutrition modules in Farmer Field School curricula. Improved nutrition will be a key element of project Information, Education and Communication messaging.

Rationale for IFAD involvement

29. Agricultural development remains key to Sierra Leone's economic development and rural poverty reduction and there is considerable untapped potential for improving production and productivity of both staple and cash crops. The country needs to transition from rehabilitation to value chain agriculture development through a market driven approach. While government capacity in extension and technology remains limited, there is need to leverage fast developing private agriculture businesses into win-win partnerships with farmers.
30. The project will focus on three crops: rice, cacao and oil palm though the largest share of the budget will be devoted to rice production in the inland valley swamps. The choice of the three crops to be supported under AVDP is rooted in GoSL's economic development policy that considers: (a) rice as the "staple" food¹² whose production must be substantially increased for national food security considerations as well as to reduce the high rice import burden on the country. Rice which is grown by 85 per cent of the farmers on over 50 per cent of the total area under crops, contributes 39 per cent to the 2,330 kcal/capita/day Sierra Leonean diet¹³; (b) oil palm as vital for nutrition, cash incomes of smallholder farmers, and potential foreign exchange earnings; and (c) cocoa as a key foreign exchange earner¹⁴, with annual export values of about USD 35 million and is far and away the most

¹²Government of Sierra Leone, The Agenda for Prosperity (2013 – 2018), page 31

¹³The President's Recovery Priorities, Sierra Leone Agriculture Snapshot, September 2016

¹⁴Investing in Sierra Leone's Cocoa Sector, Sierra Leone Trade and Investment Forum November 2009

profitable tree crop in the country. IFAD projects have also gained considerable experience in supporting the production of rice, oil palm and cocoa, and AVDP will build on these investments to move the crops further up the value chain. It should be noted that project interventions in the oil palm production exclusively target smallholder producers with oil palm holdings of one hectare or less. Project interventions will be rigorously restricted to replanting on existing plantations or plantings on degraded land that has returned to bush. No forest areas will be cleared for new plantation for oil palm (or cocoa).

31. Though focussing the largest share of investments on these three crops, the AVDP will promote crop diversification to provide flexibility and choice to beneficiaries and support improved nutrition, consistent with GOSL priorities. As such, AVDP will support vegetable production in IVS both as a rotation crop after rice and in kitchen gardens to improve diet and increase revenues, particularly of women. It may also support the plantation of fruit trees on the edges of IVS.
32. The selection of the value chains is consistent with current government priorities and pro-poor approaches to value chain development. The crop mixture addresses increased availability of the dietary staple (rice), improved nutritional balance (vegetables), and increased incomes from all crops. Value chain development activities will be conducted using best pro-poor practices, emphasizing aspects of social value chain analysis, to wit: impact on poverty reduction, inclusion of youth and women, considerations of equity along the supply chain and information sharing and full participation by smallholders in key value chain issues.
33. **Harnessing synergies:** This value chain selection will also allow the AVDP to build on and strengthen the results that have been achieved in Sierra Leone through IFAD past and on-going projects. The project will therefore build on the lessons learned from the ongoing Smallholder Commercialisation Programme (SCP) which is financed by GAFSP, and which targets the same three value chains as AVDP, i.e. rice, oil palm and cocoa, as well as cashew production. The AVDP will assist 9,000 legacy farmers from the SCP-GAFSP as well as from the already closed Rehabilitation and Community-based Poverty Reduction Project (RCPRP) to consolidate gains through the provision of punctual technical assistance and marketing support of rice and tree crops. The AVDP will continue capacity-building initiatives of the 300 FOs that received support in the aforementioned projects and will build on and increase the effectiveness of Farmer Field Schools initiated through IFAD-funded projects. The new project will also replicate the Youth Service Provider model for IVS and tree crop establishment and maintenance piloted under the RCPRP.
34. The AVDP will also work closely with several on-going or planned projects supported by other donors. It will work closely with the World Bank financed Smallholder Commercialization and Agribusiness Development Project (SCADeP). AVDP will provide technical and financial support for improved production and post-harvest handling to smallholders selling to agribusinesses supported through the SCADeP program. Regarding the upcoming WB West African Agricultural Transformation Project (WAATP) that will provide substantial financing to improve the rice seed system and introduce new technologies, AVDP will train and support beneficiaries in seed multiplication, generating increased income and increasing the availability of quality seed. AVDP will also assist ABCs and FBOs to acquire or adopt new technologies introduced on a pilot basis by the WAATP. AVDP may also collaborate with the EU-funded Boosting Agriculture and Food Security Project on the cocoa value chain.

B. Lessons learned

35. The design of AVDP has incorporated the following key lessons from the ongoing portfolio:
36. **Road and market infrastructure is facilitating agriculture commercialization:** Based on an impact assessment done by the Planning, Evaluation, Monitoring and Statistics Division (PEMSD) of the MAF in February 2015, the rehabilitation of over 1,200km of roads through IFAD support has generated benefits in the following areas: (a) 10,000 youth employment (short term labour, as contractors, as supervisors); (b) increased access to

markets; (c) improved market activities; (d) increased daily average of movement of commercial vehicles by 117 per cent; (e) reduced transport cost (20-30 per cent); (f) improved access to social (health and education) and financial services; and (g) reduced travel time (30-70 per cent). This resulted in cost savings and income generation. However, only 9 per cent of Sierra Leone roads remain paved, and a large number of production area remains cut off from markets due to poor road connectivity. A rehabilitated/enhanced feeder road infrastructure remains key to input supply and output marketing.

37. **Use of the labour-based approach in feeder road rehabilitation is advantageous:** Under the completed Rehabilitation and Community-based Poverty Reduction Project (RCPRP), the labour-based approach was recommended and utilized for all the 77 roads rehabilitated. This had the advantages to create short term employment for more than 10,000 people and a significantly lower unit cost/km than the one incurred by other donors. For instance, one road had a unit cost/km of SLL43million for RCPRP compared to SLL85million for roads rehabilitated by GPC/NaCSA, but the roads required higher maintenance costs. For future road rehabilitation the labour-based approach should be associated with the use of adequate equipment that would allow construction of better quality and more sustainable roads.
38. **Use of local Service Providers including Youth Contractors in Inland Valley Swamps (IVS) rehabilitation contributes to capacity building of agricultural service providers in Sierra Leone.** The completed RCPRP innovated an approach based on the creation of service providers who are ex Government employees, and the utilization of youth contractors – groups of youths in rural areas with technical expertise in irrigation development provided employment and built the service provision capacity of underemployed persons in rural areas. As a result, a pool of 17 service providers was created, nine of which have been engaged by GIZ for other work.
39. **The adoption of double cropping of rice in IVS is feasible in Sierra Leone and leads to increases in agricultural productivity.** Experience showed that with the investment in irrigation systems in valleys with perennial streams, double cropping of rice is achievable. With double cropping seed rate has reduced from an average of 62kg/ha used in undeveloped IVS to 31kg/ha in developed IVS where effective transplanting can be practiced, with average paddy yield of project supported farmers cultivating irrigated IVS of about 3.2mt/ha versus 1.6mt/ha for non-supported farmers.
40. **Achievement of youth and gender balance among project beneficiaries is achievable and leads to positive social and economic outcomes.** RCPRP and SCP-GAFSP have required beneficiary Farmers associations to have a composition of no less than 20% disadvantaged youth and 40% women. These targets were easily achieved by the projects, even among tree crop beneficiaries where difficulties had been foreseen because of the traditional land tenure system. Youth and gender balance beneficiary groups have been observed to foster social cohesion among beneficiary communities, in addition to have a positive effect on livelihood of youth and women
41. **Monitoring and evaluation (M&E) and knowledge management (KM) are essential for successful project implementation and should be adequately resourced:** M&E has been an area of weakness in past projects affecting management decision-making and measuring of results. There has been inadequate resource allocation for M&E within the projects, lack of M&E and KM culture and lack of country level M&E framework for measuring the results and contributions towards the Agenda 2030. Over the past year IFAD has moved towards a country programme approach in Sierra Leone with dedicated M&E resources and has provided capacity building support in the areas of monitoring, analysing results and documenting lessons learned.
42. Support to farm level institutions has led to successful outcomes, but support to Apex organizations has proved to be less successful. RCPRP took over and invested in cocoa marketing cooperatives as well as an apex cocoa marketing organizations responsible for assembly and export of cocoa. Experience showed that while support to the Coops yielded positive results, support to the apex organization did not yield positive results and it went out of business due mainly to the high overhead costs of bureaucratic management. The

lessons is that IFAD projects should seek to collaborate with private sector institutions to link project supported farmers to markets.

II - Project description

A. Project objectives, geographic area and target group

43. **Project objectives.** The overall project goal is to improve livelihoods, food security and climate change resilience of rural farming households in Sierra Leone. The project development objective (PDO) is to increase incomes for smallholder farmers through the promotion of agriculture as a business. The project development objective and approach of the project are aligned with the two strategic objectives of the Country Strategy Note 2017-18, i.e. (i) improved smallholder farmers' access to technical skills and markets; and (ii) improved access to finance for rural communities.
44. **Project duration.** The project will have an implementation period of 6 years.
45. **Geographical area.** AVDP will be implemented in the current 16 districts of Sierra Leone. While rice is produced throughout the country, cacao and oil palm production is localized in specific districts thus the composition and intensity of project interventions will vary from one district to another. Table 1 summarizes some of the characteristics of the districts. Most of the districts have poverty rates of 50 percent to 62 percent, except Western Area Urban with 20.7 per cent, and Moyamba and Tonkolili with 70.8 percent and 76.4 per cent, respectively. The widespread poverty justifies the nationwide coverage by AVDP.

Table 1: Basic facts about the districts in the project area

Province/ District	No. of chief- doms ¹	Land area		Cropped area under specific major crop (%) ¹			Poverty head- count (%) ²	Prevalence of malnutrition (%) ³
		Total (km ²)	Under crop (ha) ¹	Rice	Oil palm	Cacao		
Eastern	46	15,553	473,925	46	9	18	61.3	
Kailahun	14	3,859	202,131	41	12	23	60.9	n.a.
Kenema	17	6,053	141,837	49	12	17	61.6	5.5
Kono	15	5,641	129,955	50	2	13	61.3	4.5
Northern	54	35,846	494,059	62	7	0	61.0	
Bombali								
Karene	14	7,895	79,681	62	4	0	57.9	4.7
Kambia	7	3,108	79,592	74	5	0	53.9	6.5
Koinadugu								
Falaba	11	12,121	102,387	69	3	0	54.3	5.3
Port Loko	11	5,719	125,625	58	8	0	59.9	6.7
Tonkolili		7,003	106,775	52	13	0	76.4	6.8
Southern	52	19,694	334,338	47	13	2	55.4	
Bo	16	5,219	116,346	48	19	4	50.7	4.3
Bonthe	11	3,468	51,662	30	0	13	51.4	n.a.
Moyamba	14	6,902	85,161	54	4	0	70.8	4.4
Pujehun	11	4,105	81,170	48	15	2	54.1	4.0
Western	12	557	11,272	35	3	1	28.0	
Western Area Rural	4	544	9,406	34	0	2	57.1	2.3
Western Area Urban	8	13	1,724	45	10	2	20.7	1.9
Total (National)	164	71,650	1,313,447	52	9	7	52.9	4.7

Source: ¹ Statistics Sierra Leone, 2015 Population and Housing Census, December 2016

² World Bank, A Poverty Profile for Sierra Leone, June 2013

³ UNICEF, Sierra Leone Nutrition Survey, 2014

46. AVDP will target four types of value chain actors: (a) smallholder producers of rice (only in IVS), cacao and oil palm; (b) registered farmer institutions (ABCs, FBOs and cooperatives); (c) SMEs providing services or inputs such as input suppliers, agro-dealers, agents/middlemen, aggregators and small processors; and (d) large processors of cocoa, oil palm and rice and big buyers or exporters such as TASS, Gold Tree and Mountain Lion.
47. **Targeting strategy.** The AVDP targeting strategy consists of the following pillars: (a) geographical and socio-economic targeting; (b) gender targeting; (c) youth targeting. For all target groups, the project will employ participatory approaches, including the Gender Action Learning System (GALS) and will pay particular attention to the inclusion of those most vulnerable. The project will support direct target beneficiaries and indirect beneficiaries.¹⁵ Annex 6 (PIM) contains further details on targeting while Table 2 presents a summary of the proposed AVDP targets. Over the life of the project, AVDP interventions will focus on achieving at least 40 per cent women and 40 per cent youths (men and women under 35 years),¹⁶ as well as mechanisms that promote gender equality, women's empowerment and social inclusion. Four community mobilizers will be hired as AVDP staff and posted at the provincial level. Under the direction of the Targeting, Gender and Youth Officer, they will be responsible for the implementation of the targeting strategy at field level, monitoring achievements against targeting goals and will be the primary liaison between the project and beneficiary communities for issues related to mobilization, inclusion and participation.
48. AVDP will adopt a flexible approach to targeting within each crop, for example the proportion of area of cocoa for rehabilitation may be reduced with substitution of new (replanted) area.
49. **Geographical and socio-economic targeting.** The project will work in the 16 districts of the country and focus activities where the climatic and agro-ecological conditions are favourable to produce cocoa, oil palm and rice. The inclusion of new farmers, i.e. farmers that have not benefitted from the SCP-GAFSP project, will be carried out using the following criteria:
- (a) For rice, the project will target low-income farmers that (i) live in proximity to Inland Valley Swamps (IVS) that are at least 10 hectares and have access to water for at least nine months per year;¹⁷ (ii) have experience with rice production; (iii) be in possession of a legal document indicating the long-term right to use the land (iv) belong to a farmer organisation which is registered with MAF or want to belong to such a farmer organisation and which additionally is linked to an ABC.
 - (b) For tree crops, the project will target low-income farmers that (i) live in areas with suitable climatic and agro-ecological conditions for cocoa or oil palm; (ii) have experience with tree crop production; (iii) have land available to establish tree crop plantations and that this will not require deforestation; (iv) belong to a farmer organisation or want to belong to a farmer organisation that are linked to an ABC.
50. AVDP interventions will be focussed in certain districts in Sierra Leone depending on the concentration of national production in the district. Rice is the major food crop produced in all the 16 Districts and IVS rice production occurs across the country. Consequently AVDP IVS interventions can in principle occur in all Districts. Similarly, oil palm production is the most important oil crop in all Districts in Sierra Leone, consequently AVDP oil palm interventions can in principle occur in all Districts, as is the case with the predecessor projects RPRSDP and SCP-GAFSP. National Cocoa production is concentrated in 6 Districts (Kailahun, Kenema, Kono, Bo, Moyamba, Pujehun) and AVDP Cocoa interventions will only be supported in these Districts.

¹⁵Direct beneficiaries are the people who will participate directly in the project, and thus benefit from its existence. Indirect beneficiaries are those who will derive some benefit indirectly either through the support provided to the direct beneficiaries or impact derived from the support of the project.

¹⁶ The 26,000 rural producers that will be benefitting from productive investments, technical assistance or capacity building will be disaggregated in the following way: 4,160 young women, 6,240 young men as well as 6,240 women and 9,360 men above 35 years of age.

¹⁷ Except for the IVS that will benefit from earth dams or boreholes.

51. Further to the above on the geographical targeting at district level ,the project will pursue a strategy of territorial concentration of interventions in order to enhance the implementability of the project, which in practice may mean that not all districts are targeted. The detailed criteria will be developed as part of the start-up activities and included in the Project Implementation Manual.
52. Additionally, the project will take a phased approach and give preference to areas where there are functioning ABC's as these will play a central role in service provision to the farmer organisations. Experience also shows that existing groups in the community e.g. work gangs or Savings & Loan Associations, perform better than completely new groups and existing groups will therefore be prioritised. Additionally, preference will be granted to organisations in proximity of rural financial institutions as well as of agro-industries that can offtake produce (including agribusinesses that are benefitting from SCADeP).
53. Additionally, continued support in terms of technical assistance will be provided to "legacy farmers" in around 300 FOs from the RCPRP and SCP-GAFSP Projects. However, these farmers will not be supported with investments under the AVDP.
54. Finally, the communities of the beneficiaries of productive investments will benefit from investments in access to potable water, latrines and sanitations facilities to be financed under the Adaptation Fund.

Table 2: Overview of project beneficiaries

Value Chain Commodity Player	New farmers* (and land area)	Legacy Farmers** (and land area)	Beneficiaries of capacity building	Potable water and sanitation	Total beneficiaries
IVS Rice	5,000 (4,000ha)	5,000 (2,000ha)	3,000	8,000***	34,000
Oil Palm	4,000 (4,000ha)	4,000 (4,000ha)			
Cocoa	5,000 (5,000ha)	-			

* At least 40% women and 40% youths; ** From RCPRP and SCP-GAFSP; *** 10,000 will be reached with potable water/sanitation improvements of which 8,000 will be additional to other beneficiaries.

55. **Description of target group.** The socio-economic profile of the target group will be similar to those targeted under the SCP-GAFSP, although primarily in other areas of the country. The following description is drawn from the socio-economic profiling of SCP-GAFSP beneficiaries in 2016:¹⁸
 - (a) The majority of beneficiaries (62.3%) have no education. Only 37.7% of beneficiaries have got some formal education' mostly primary or secondary but very little post-secondary/tertiary education. More female beneficiaries (69.1%) than their male counterpart (40.5%) had got no education.
 - (b) Average monthly income of beneficiaries is at 468,795 Leones. The majority of beneficiaries (70.0%) earn below 500,000 Leones (approximately USD 90 with 2016 exchange rate) per month, the minimum wage established by GoSL.
 - (c) Radio and mobile phone are popular assets that beneficiaries own as indicated by 49.8% and 41.8% of respondents, respectively. Ownership of other assets is insignificant
 - (d) Firewood is the main fuel used for cooking by almost all beneficiary household (95.2%) and only 4.7% of households are using charcoal.

¹⁸ Beneficiary Socio-Economic Profile and Baseline Survey, Final Report, October 2016

- (e) The majority of households (90.9%) use battery-powered torch as the main source of lighting. Only 1.5% of beneficiaries are using electricity from the national grid.
 - (f) 91.0% of households experienced hunger in the past 12 months before the survey; during which households had difficulties providing sufficient food to feed all members.
56. **Gender targeting.** AVDP will mainstream gender sensitive approaches and farmer-led innovations using the GALS methodology. The GALS methodology uses participants' own experiences of inequalities and discrimination at the individual household and relationship level to raise self-consciousness that transcends household power relations to group and community leadership and decision making. The AVDP will replicate the GALS methodology successfully employed by SCP-GAFSP which has integrated the methodology in all programme components using peer learning and sharing approaches for training, who then cascade new knowledge learnt to the larger group of beneficiaries. The SCP-GAFSP has so far been able to surpass the project target of 30% female and 50% youth (including 25% female youth) for rice production activities. Tree crop farming, which has traditionally being a domain of male farmers in Sierra Leone, has also been able to benefit 27% females for oil palm. The AVDP will increase the target of female beneficiaries to 40% in all components.
57. In conjunction with the MAF Gender and Nutrition Unit, AVDP will promote gender equity as well as the participation of women and youth in all the value chain activities. Gender sensitivity training and monitoring will be integrated from the onset of programme implementation and time/resources invested in correct targeting at the start of the project. The project will take the lead in collaboration with Service Providers and MAF in order to meet the targeting requirement of the project.
58. Gender targeting activities in the AVDP will include among others: gender sensitization events at community level and knowledge sharing events on best practices; gender capacity building for project staff; collecting case studies for knowledge management and undertaking gender diagnostic studies to enhance gender mainstreaming and targeting among core project staff; using indicators of the Women's Empowerment in Agriculture Index (WEAI) for monitoring progress. At project launch a conference will be organised to present best practices from other development projects and discuss how gender and youth specificities best can be addressed by the project.
59. **Youth targeting.** Specific AVPD initiatives will be implemented catering to beneficiaries under the age of 35 years. These will include supporting only FBOs, cooperatives and SMEs which have a minimum youth membership of 40%; expanded use of the youth contractor model from SCP-GAFSP and providing mentoring and business development services to youth contractors. Each youth contractor hired to provide services for plantation rehabilitation or establishment will be given a one ha. plot within the plantation and will be able to access required inputs through project-sponsored interventions. AVDP will train youth in rice seed multiplication and provide financial support for field establishment. The project will support the diffusion of new technologies piloted by the upcoming WB WAATP project by providing financial support to youth groups or SMEs interested in investing in technologies introduced by the WAATP. The AVDP will also finance training opportunities in equipment maintenance for rice mills, oil presses, threshers, rototillers and other machinery.

B. Components

Component 1: Climate Resilient and Smart Agricultural Production.

60. The outcome of this component is that volume and value of production is increased, and production systems are made more climate resilient. The component will support the preparation of Business Development Plans at the level of the Agri-Business Centres (ABC) that will include a comprehensive plan of the investments needed to develop the productive capacities of rice, cocoa or oil palm taking into consideration both the needs of the ABC as well

- as the Farmer Organisations (FO) that are members of the ABC. Capacity building and extension will be provided using the Farmer Field School (FFS) methodology.
61. Apart from support to the production, processing and commercialization of rice, cocoa and oil palm, the project will also provide support to establish vegetable gardens and intercrop with food crops in order to obtain a suitable balance between food security and cash crops. The support to vegetables and intercropping with food crops will be provided as non-reimbursable grants.
62. A brief overview of the main actors and their roles is provided here:
- (a) Farmer Organisations (FOs) are comprised of smallholders (family farmers) in a community or neighboring communities. Membership is typically 25 farmers for IVS rice cultivation, and 30 farmers in cocoa or oil palm cultivation. These are the primary beneficiaries of the project.
 - (b) All FOs will receive capacity building support provided through Farmers Field Schools (FFS). IVS FFSs will run for 2 crop seasons in the first year of support, with periodic practical training sessions conducted in an FFS plot or plots in the irrigated perimeter. Tree Crop FFS will run for up to 4 years spanning the production, processing and marketing phases with monthly practical sessions held on the farm/plot of one of the members. Each FFS will have a locally resident community facilitator meeting the conditions set out in the PIM and a technical facilitator or facilitators who are Extension staff of MAF and/or private sector consultant(s). On graduation from the FFS (the first year for Tree Crop FFS), FOs will be transformed and/or amalgamated into FBOs which are registered with MAF, and an ABC.
 - (c) ABCs are processing/marketing agribusiness organizations set up by MAF in all Districts of Sierra Leone. The ongoing SCP-GAFSP has capacitated and capitalised 52 ABCs (4 per District) with a so-called “transformation package” which builds on a business plan and includes appropriate equipment to transform the ABCs to viable commercial enterprises. ABCs have legal status and provide services to their members according to the main crop in the associated FBOs. This approach will be continued by the AVDP which however will work with another set of 92 ABCs. The provision of productive infrastructure and equipment to the ABC will be financed through matching grants and contributions from the ABC (details can be found in the PIM). ABCs are governed by a Board of Directors, with farmers in associated FBOs expected to pay membership dues, if requested.
63. **Subcomponent 1.1 – Support to smallholder (family farm) rice production and productivity:** This subcomponent will facilitate access to improved rice seeds, fertilizers and agrochemicals, irrigation, and mechanization for land preparation and harvesting, as well as parallel cropping or rotation of vegetables in order to improve household nutrition by farmers cultivating IVS.
64. **Support to new farmers:** AVDP will identify and support 5,000 new farmers, i.e. farmers that have not been benefitted from the SCP-GAFSP, organized into approximately 200 FO, with the development of a business plan. The business plans will be developed in a demand-driven manner at the level of the ABC and include the identified needs to address challenges in the production in the associated FOs. It is foreseen that each farmer will be cultivating an average of about two acres equivalent to 0.8ha with rice,¹⁹ which is double the farm size as compared with SCP-GAFSP beneficiaries. The larger farm size, compared to legacy farmers is adopted to increase the possibility of integration into the market. If necessary, AVDP will work with Agricultural Engineering Division of MAF to conduct an inventory to identify suitable IVS,

¹⁹ Additionally, 0.15 ha of vegetables planted as a rotation or in the fringes of the IVS for each family.

- outside the 4,300ha (of the estimated 690,000 ha available nationwide) already inventoried under SCP-GAFSP.
65. The second aspect of the targeting strategy will be the identification of the landowners and getting them to sign land lease agreements with the project. The objective is to enable farmers in the communities, without access to IVS land but with access to other inputs such as family labor or operational capital for rice cultivation, to join FOs that would eventually benefit from the inland valley swamp development. Once an IVS in a target community has been identified for development by the Service Provider in consultation with community elders, the landowner(s) or family members, as well as other members of the targeted community who meet the conditions of the Project, (e.g. have the necessary family labor and are willing to undertake double cropping in the IVS), come together to form a beneficiary Farmers Organization. The lease agreement is signed with the landowner(s), representative of the Farmers Association, and witnessed by the Paramount Chief, Village/Town Chief, District Agriculture Officer, Chiefdom Councillors and registered (sample draft agreement in PIM). The registered lease is enforceable under The Provinces Land Act of 1927, Cap 122 of the Laws of Sierra Leone. (Please see draft lease agreement in the Project Implementation Manual).
 66. The membership of each FO will be a maximum of 25 people with a gender disaggregation of at least 40% women and 40% youth. Where there are existing groups in the community that meet the criteria above they would be registered as FOs. AVDP Community Mobilizers will play an important role in helping communities select farmers to cultivate in the newly developed IVS (as demand will undoubtedly exceed available land). They will work with communities to establish transparent selection criteria, ensuring that women and youth will represent each 40% of the FO members.
 67. Having formed the groups and developed the business plans at the ABC level, contracts will be given out to service providers to carry out the land development works, rehabilitation and build the capacity of the beneficiaries especially youth contractors to enable them do maintenance work on the developed IVS from time to time.
 68. Using experience from RCRC and SCP-GAFSP, the recruited service providers (SPs) for the IVS development would be required to execute the following scope of work:
 - (i) Brushing, felling, clearing and de-stumping of IVS
 - (ii) Construction of bunds (peripherals, main-drain, internal / contour)
 - (iii) Construction of earth dams or bore holes
 - (iv) Excavation of canals (peripheral, main-drain, return)
 - (v) Head bund, spillway, settling basin and riprap protection – energy dissipaters
 - (vi) Installation of inlets and outlets
 - (vii) Upstream and downstream protection
 - (viii) Leveling, puddling and transplanting /cultivation of the swamp
 69. AVDP will use a community based development approach, with active participation, and a leading role of the project beneficiaries in the design, implementation and monitoring of the interventions to ensure that benefits actually reach the target communities. AVDP will support SPs by capacity building (training, supply of tools and equipment), cash-for-work and service fees
 70. New farmers will be organized into FOs and participate in one cycle of IVS FFS, lasting over two crop seasons, and as in the case with legacy FOs, will be further supported to amalgamate with neighbouring FOs to form larger FBOs that will be linked to ABCs or other private sector marketing organizations such as large rice milling companies, and receive support through the Matching Grants (MG) scheme of the project for procurement and operation of mechanization

and processing equipment. The thresholds and percentages to be financed by the project can be found in the PIM.

71. Rice based FBOs will be strengthened with institutional capacity building. This activity will build the production and marketing capacity of FBOs, ABCs and cooperatives by supporting: (a) provision of quality inputs as discussed above; (b) FFS training on improved farming techniques, group dynamics, management and good governance, enterprise planning and management, financial and business management, participatory M&E, and functional literacy; (c) orientation towards value chain linked agriculture production, including linkages with SCADeP agribusiness and aggregator schemes as well as the certified rice seed multiplication scheme of the planned WAATP; (d) dissemination of climate smart technologies; and (e) with support from the AF, training of lead farmers through the FFS to monitor correct fertiliser and pesticide application and disposal, to reduce greenhouse gas (GHG) emissions. This will be the main vehicle for targeting smallholder rice farmers, rural youth and women with the development of participatory production and business plans, improved agricultural production, and advocacy on land tenure.
72. **Earth dams and boreholes.** To improve the climate resilience of IVS, AVDP will support the construction of 30 earth dams in appropriate seasonal IVSs drawing on experience of the 4 pilot earth dams constructed under the RCPRP in 2014, and up to 20 solar powered bore hole irrigation schemes. The construction of small dams is an attractive solution to retain water from the rainy season for use in the dry season for irrigation of a second crop of rice or vegetables. Small earth dams are water harvesting storage structures, constructed across narrow sections of valleys, to impound runoff generated from upstream catchment areas. The construction is best suited in areas having a landscape featuring rolling or hilly land and where small natural streams provide water to fill the reservoir formed behind the dam. Small earth dams require minimal maintenance (unless in difficult locations or in extraordinary climatic situations), and are better able to withstand foundation and abutment movements than the more rigid concrete and masonry structures. The reservoirs formed by the earth dams will be stocked with fish to be managed by the women members of the FBOs for improvement of household nutrition and livelihoods. An experienced NGO or private sector Service Provider will be contracted to provide aquaculture training and technical assistance to women members of the FBOs.
73. **Support to legacy farmers:** RCPRP and SCP-GAFSP provided support to farmers cultivating IVS rice through an estimated 300 FOs covering some 2,000 hectares. To enhance the sustainability of previous investments under the RCPRP and SCP-GAFSP, AVDP will support capacity building of the FOs by putting all legacy FO members through FFS which will last for two crop seasons during the first year of the project. Learning modules for Improved vegetable and other secondary crop production in the IVS will be part of the curriculum of the new IVS FFS, as part of the rice-vegetable cultural system to attract the participation of women, generate additional household income and increase household nutrition and food security for the target group.
74. AVDP will also support the organization of legacy FOs into larger FBOs that will be linked to ABCs or other private sector marketing organizations such as large rice milling companies and aggregators supported by SCADeP. No funds are available to finance investment or operating costs of the productive activities of this target group.
75. **Collaboration with other projects.** Collaboration and parallel financing for both new and legacy rice farmers is envisaged from SCADeP for (a) Agribusiness rice processors and aggregators to which AVDP rice FBOs in some locations will be linked as out growers, and (b) WAATP in which some AVDP rice growers will be linked in some locations as certified seed growers. With an estimated 8mt per ha from two crop seasons, AVDP FOs that register with WAATP to produce certified seed, could produce around 80mt of seed per FO (under the assumption that they will each cultivate 10 hectares). The 5,000mt of certified seed that is

planned to be produced with the assistance of WAATP could therefore be produced by 62 AVDP FOs.

76. **Subcomponent 1.2 – Support to tree crops production and productivity.** This subcomponent will enhance the economic viability and climate resilience of oil palm and cocoa farmers and link them more effectively to private sector markets. When defining the specific interventions at ABC/FO level, considerations will include climate conditions and site suitability assessment; emphasis on the use of climate resilient planting materials and agronomic practices; enlargement of tree crop farm sizes (1 ha per beneficiary) through the replanting of new areas. Improvement of household nutrition and livelihoods will be promoted through intercropping food crops in plantations and parallel cultivation of vegetables in home gardens. AVDP targets for oil palm will be the development of 4,000 new hectares and the provision of technical assistance for 4,000ha cultivated by legacy farmers. For cocoa, funds are available to develop 5,000ha to be cultivated by 5,000 "new" farmers.
77. The project will provide support to intercropping with food crops as outlined below in order to achieve the right balance between interventions aimed at tree crop production and at food security. The interventions for intercropping will be provided as grant to the beneficiaries as part of the tree crop production packages.
78. **For cocoa**, through their business plans at ABC level each selected farmer will be assisted with 1.0 ha of cocoa farm, comprising any area of existing farms that need to be replanted (plantations with trees that are more than 40 years old and are yielding less than 14 pods per tree), and establishment of new plantations on degraded secondary bush regrowth areas. Additionally, the hybrid cocoa can be planted with plantain for shade and with 0.15 ha of parallel cropping of vegetables.
79. Replanting and new planting of cocoa sites will be supported partially by the AF with provision of climate resilient hybrid seeds provided by the rejuvenated clonal garden of the Sierra Leone Agricultural Research Institute (SLARI), and will involve smart agrochemical input regimes. Replanting of old cocoa plantations will be by either the strip or block replanting system, to preserve the economic livelihood of farmers during the replanting period. The replanted or new plantations will intercrop plantains, cassava, and/or timber trees for shade provision and supplementary income generation
80. **For oil palm**, AVDP will support approximately 4,000 new farmers with the establishment of 1.0 ha each of planting on new farms, using the system successfully practiced under the SCP-GAFSP. This involves procurement of improved tenera variety seeds from regional private sector suppliers, prenursery activities by Njala University, community nursery activities by oil palm FOs, and field plantings by beneficiary farmers. AVDP will assist farmers (including vulnerable community members) to carry out intercropping with food crops (groundnuts and rice) during the initial growth of infant trees, before the plantation canopy closes, to improve livelihoods and household nutrition.
81. The project will also provide assistance to the approximately 4,000 farmers that have been supported with the production of 4,000 hectares of infant oil palm crops from SCP-GAFSP/RCPRP through the provision of technical assistance.
82. In planting new cocoa or oil palm plantations, AVDP will not support the clearing of forest areas for tree crop plantations. Rather degraded secondary bush areas will be used for such plantings increasing the climate resilience and carbon sequestration of the areas of bush to be replaced by AVDP supported plantings. The tree crop plantations to be developed in the project are a potential path for coupling climate change mitigation and economic development by providing C sequestration and supplying non-wood products, particularly palm oil to meet domestic and international market requirements at the same time. Although the C potential for oil palm plantations not used for biofuels is low (published values on oil palm aboveground C in biomass range from 25 tC/ha to over 50 tC/ha towards the end of the plantation's economical life span

- after 25 years, compared to cocoa (65 tC/ha), both crops will make a significant contribution since most of the land to be planted are degraded secondary bush and fallow agricultural land. With the increased income to be generated from the plantations, the resilience of the livelihoods systems will also be increased.
83. As for rice, tree crop based farmer organizations will be strengthened with institutional capacity building. This activity will build the production and marketing capacity of tree crop FOs and FBOs, ABCs and cooperatives by supporting: (a) provision of quality inputs; (b) FFS training during the initial 4 year life of infant plantations on improved farming techniques, group dynamics, management and good governance, enterprise planning and management, small business management, participatory M&E, and functional literacy; (c) orientation towards value chain linked agriculture production by linking FBOs to the SCADeP systems where appropriate-AVDP will provide support to small holder producers and SCADeP will provide parallel funding and support to the agribusiness processors and aggregators to which AVDP beneficiaries will be linked; (d) dissemination of climate smart technologies; and (e) with support from the AF, training of lead farmers through the FFS to monitor correct fertiliser and pesticide application and disposal, to reduce greenhouse gas (GHG) emissions. This will be the main vehicle for targeting smallholder tree crop farmers, rural youth and women with the development of participatory production and business plans, improved agricultural production, and advocacy on land tenure.
84. The subcomponent will be implemented in two concurrent phases of three years each, depending on the age and maturity of FBOs/ABCs etc. Phase 1 will include farmer engagement and training, input and seedling procurement, nursery operations, planting of cocoa and oil palm, crop maintenance and protection, and intercropping or parallel cropping for vegetables and other appropriate crops. Phase 2 will still include maintenance and protection of farms, but will shift emphasis to harvesting, processing and marketing. AVDP will train the farmers using the FFS methodology, and link them to markets, initially through interim arrangements involving ABCs/ SCADeP Agribusinesses and Aggregators/ Cooperatives in aggregation, processing, storage and group selling. As part of a strengthened exit strategy, AVDP will identify and broker processing and marketing agreements with the private sector. In view of the need to provide market outlets for palm oil producers, the need is likely to arise for the promotion of small-scale oil presses in various strategic locations where large private sector SCADeP supported processors and aggregators do not exist, to which the small scale AVDP supported FBOs could be linked for provision of inputs and market outlets (the outgrower model).
85. The service providers for the implementation of this subcomponent will range from selected ABCs/Cooperatives, to the SLARI Clonal Seed Orchard Station in Pendembu to supply high yield and climate resilient cocoa planting material, Njala University (NU) to supply high yield and climate resilient oil palm planting materials using the same successful private sector chain used in the SCP-GAFSP, the District MAF Offices to provide overall supervision of project activities and deliver FFS training, field service providers re-hired subject to a contract performance review from the existing providers under SCP-GAFSP/RCPRP, and private sector marketing partners specialising in cocoa and oil palm, to establish durable and equitable long-term partnerships involving pre-financing, training, processing, price transparency and marketing in order to prepare for the project's exit strategy.
86. The KFTCRC Pendembu Clonal Seed Garden which has supplied cocoa seeds for the SCP-GAFSP and RCPRP is old (over 40 years old), and the seeds are not the climate resilient, disease tolerant hybrids almost universally used in establishment of new cocoa plantations worldwide. AVDP will support KFTCRC to rejuvenate its seed garden, in close collaboration with, and using the same process as the new TCEP project in Liberia. The new garden will contain a minimum of 3 pod bearing parental clones, with about 8 pollen parents for mass hand pollination to produce pods of hybrids for planting in beneficiary managed community nurseries,

- from which the hybrid seedlings will be supplied to farmers. Details on support to KFTCRC are in the PIM.
87. The investments will be financed using the matching grants scheme outlined in the PIM. However, given that cocoa and oil palm beneficiaries will not see results before the 4th year of implementation, the project will advance the investment costs (seedlings including pre-nursery and nursery costs, fertilizer and agro chemicals, farm tools and equipment) to the beneficiaries who will repay over a 4-year period starting in the 4th year.
 88. AF is expected to: (a) support FAO's work in forest conservation to map and monitor tree crop plantations at the baseline and at completion stages of the AVDP; (b) finance a climate change risk assessment for cocoa to minimise the risk to tree crop investments; and (c) support the Kenema Forestry and Tree Crop Resource Centre (KFTCRC) SLARI to establish a clonal cocoa seed garden, distribute hybrid cocoa seedlings, and develop best practice guidance to mitigate climate risk for cocoa farmers through manuals and extension training.
 89. Collaboration and parallel financing is envisaged from SCADeP for agribusiness cocoa and oil palm processors and aggregators to which AVDP FBOs in some locations will be linked as outgrowers.
 90. **Component 2: Agricultural Market Development.** The expected outcome of this component is the improved performance and organization of the selected value chains for the increased smallholder production and productivity. The component consists of three subcomponents: (i) Market access; and (ii) Climate-resilient rural infrastructure.
 91. **Subcomponent 2.1 – Market Access** aims to enhance value chain organization and performance through improved access to input and output markets to improve production planning and linkage of the smallholder farmers to profitable markets. This subcomponent therefore supports the strengthening of business skills along the value chain and the organisation of multi-stakeholder platforms.
 92. **Strengthened business skills.** The AVDP will provide training and mentoring to Farmer Field Schools, Farmer-based organizations, Agribusiness Centers and SMEs (input dealers, aggregators, farm service providers, small processors) over the course of the project. It will also finance Training of Trainers intended for local NGOs, consulting firms and relevant government personnel. The project will introduce simple participatory cost/benefit analysis on demonstration plots established through support to FFS in order to calculate demo and control plot investment costs versus returns after harvest in order to demonstrate the costs and benefits of use of improved inputs. The project will train MAF personnel and lead farmers to conduct this exercise.
 93. The project will hire an international NGO specialized in business development training to assess both the needs of beneficiary institutions and those of potential local service providers including relevant AVDP staff who will be trained to provide the training and mentoring to beneficiaries. The International NGO will assist the AVDP to identify and modify existing appropriate training modules that meet the needs of the target group. The AVDP will engage local service providers to offer training in basic bookkeeping, budgeting and business planning and management to FBOs, ABCs and SMEs and will follow up training with mentoring through regularly scheduled visits. AVDP district level agribusiness assistants will be responsible for local oversight of this activity and will monitor uptake of the training.
 94. **Development and operation of multi stakeholder platforms:** This activity aims to address the major deficiencies in the way that players in each of the commodity systems operate. The activities to be supported by AVDP include: (a) a mapping of existing FBOs/ABCs/cooperatives to properly identify their roles, linkages and challenges as value chain players; (b) capacity building interventions to address the identified needs of the value chain player groups; and (c) facilitating linkages and deal making between AVDP beneficiary organizations, input suppliers,

- aggregators and large scale processors and commodity buyers. The platform will facilitate discussion concerning issues of supply, market realities, pricing challenges, transportation problems, and contracting, and is an important vehicle for knowledge sharing, business networking and policy dialogue. The platform will provide a vehicle to inform value chain actors of services offered under the ADVP and training opportunities for those SMEs who may not have been contacted through other project outreach activities.
95. One of the key motivations to participate in the AVDP platforms will be to expand market linkages. Platform meetings will provide an opportunity for buyers to detail anticipated required quantities, product specifications and make contact with potential suppliers.²⁰ In addition to platform linkages, the AVDP will collaborate closely with the SCADeP project and will serve as an interface between SCADeP agribusiness and aggregator grant recipients and AVDP-assisted ABCs and FOs to facilitate product sales.
 96. During the first year of the project the AVDP will engage an expert in value chain commodity platforms who will travel to Sierra Leone to undertake a survey of expectations from potential platform members, define platform scope and functionalities and develop an interim guidance note on platform facilitation with relevant AVDP staff. On a second and third visit, the consultant will facilitate the first rounds of platform meetings in one province for the three selected crops. These pilot rounds will form the projects final approach to the multi-stakeholder platforms and the guidance note will be finalised.
 97. The project will launch a multi-stakeholder platform for each crop (cocoa, rice, oil plum) in each of the country's four provinces. It is anticipated that platforms will have 35-40 members each, representing FBOs, ABCs, input suppliers, farming services providers, aggregators, processors, exporters, financial institutions, officers from other projects and GoSL representatives. Provisionally, the platforms will meet three times a year.
 98. The chair may initially be an AVDP staff, but the position will be handed over to the representatives of the varying parts of the value chain as they gain traction. AVDP will support selected players from each node in the commodity value chain to undertake study visits to see examples of best practice performing platforms within Sierra Leone or regionally such as in Ghana. The commodity value chains under AVDP are short with only three or four "player types" in any given chain, and the inclusion of RFIs will be important. In Figures M1.10 to M1.12 in Annex 6 present a series of suggested configuration for a typical platform for each commodity.
 99. **Subcomponent 2.2 Climate resilient rural infrastructure and information systems:** The outcome of this subcomponent is improved access to markets, processing and storage facilities. The major activities will be the construction/rehabilitation of warehouses, feeder roads and farm tracks as well as strengthening the adaptive Capacity of meteorological institutions and expanded use of Automatic Weather Stations (AWS).
 100. **Infrastructure.** Twenty warehouses identified on a demand-driven basis under Component 1 will be rehabilitated using private contractors, and handed over to the respective FBO/cooperative for utilisation and maintenance. Climate resilient roads (75 km) and farm tracks (150 km) will be provided on a demand-driven basis, complying with stipulated selection criteria. Based on the lesson learned that the provision of continuous physical access from one end to another is key in a value chain context, "hot spots" along trunk roads will be addressed through spot improvement (provision of structures). The survey and design for roads will be undertaken by a private consultancy firm, and will include an Environmental and Social Impact Assessment (ESIA), and the customization of standard designs of feeder roads developed by the Sierra Leone Road Authority (SLRA). AVDP will implement Class F3 (4.5m wide) feeder roads and farm tracks (3 m wide, including side drains, no shoulder) for which SLRA has no

²⁰ An SMS-based bulletin board could be developed to post bids and offers of platform members subject to further market research.

standard designs. All designs developed by the private consultancy firm will be subject to approval by SLRA prior to implementation. Road works will be executed by private contractors through the equipment-based approach, but with local community participation in provision of local materials and unskilled labour. Each rehabilitated/constructed road/farm track will be under a liability period of 12 months after the completion of works, and will be officially handed over to the district (feeder roads) or cooperative (farm tracks) for management and maintenance.

101. For routine and periodic maintenance of roads, AVDP will: (a) form and train road gangs for each road and provide them tools to be used for regular routine maintenance activities; (b) initiate a dialogue with other donors, SLRA, and the districts, to address key challenges for sustainable feeder road maintenance in the country; (c) support each district and targeted cooperative to develop Road Maintenance Plans and support the cooperatives to implement the Farm Tracks Maintenance Plan for one year; and (d) maintain (two routine and one periodic) all rehabilitated roads and constructed farm tracks to ensure they are in good physical conditions before the project ends. A comprehensive map of the road and farm tracks network will be developed by the project as an input to the SLRA national road mapping process.
102. Considering the long-term maintenance of the rural roads in the project area, project staff will work with the Government and other development partners to develop a specific programme to ensure that arrangements and financing mechanisms to facilitate continuous maintenance of roads and tracks after project completion will be in place. A suitable partner would be the World Bank, particularly through the SCADeP, project that is financing a study on alternative funding sources to the current road maintenance fund.
103. Under this sub-component, the Adaption Fund will support fisheries, the development of irrigation infrastructure for agriculture, and livestock watering – all of which will be designed and developed to be resilient to climate change. The AF will also support, under this component, the procurement of potable water supply facilities in project areas, water quality testing, and expertise to build latrines in villages. The range of AF activities to be supported under this sub-component will include:
 - (a) The construction of drills/wells and ramps for improved livestock and domestic water supply and market garden development;
 - (b) The construction of water reservoirs with solar pumps;
 - (c) The supply and installation of hand pumps for household irrigation;
 - (d) The rehabilitation and extension of drinking water supply facilities and the protection of catchment areas;
 - (e) The construction of simplified networks, HOP boreholes, and standalone water points in surrounding rural villages;
 - (f) The capacity building of smallholders and communities on the construction, maintenance and safety of water infrastructures;
 - (g) The construction of public and individual sanitation facilities; and,
 - (h) Logistic support to municipal councils
104. **Adaptive Capacity of meteorological institutions.** The Adaptation Fund will complement AVDP by supporting the capacity building of meteorological institutions. These capacity building activities will enable farmers to better plan their harvests and provide an Early Warning System (EWS) for disease and pest outbreaks as well as landslide risks. This activity will also support the installation of a remote data collecting base station in the Freetown headquarters; procure and install weather forecasting software; procure spare parts; use trained engineers to repair

stations to make them fully operational; design and implement a mobile phone based EWS; and, to build additional Automatic Weather Stations (AWS).

105. **Climate information networks and infrastructures for agriculture improved.** AF funds under this activity will be used to complete the 8 Automatic Weather Stations (AWS) already constructed. Meteorological and MAF staff will receive online training from an accredited university on the importance of weather forecasting for farmer agricultural productivity in planting, disease and pest management as well as developing low-cost mobile phone text message based early warning systems. The array of activities to be undertaken include:
- Acquisition of 50 rain gauges and 20 automatic weather stations.
 - Development and financing of a weather-station maintenance program.
 - Training of meteorological agency staff, and communities, on the maintenance of meteorological stations, in the three intervention sites.
 - Upgrade of data collection and communication equipment and devices, data storage and management systems, computers and software for remote sensing, software and customized tools for GIS, modelling and forecasting.
 - Consolidation of hazard and risk maps, analysis and completion of historical data, identification of climate variability indicators for rainfall and temperature and consolidation of all available data.
106. **Component 3: Project Coordination and Management.** The expected outcomes of this component are: efficiently and effectively managed project achieving results; and existing regulations/policies/strategies proposed to policy makers for approval, ratification or amendment. The component is divided into two subcomponents: (a) Project coordination and management; and (b) Financing Mechanisms for Target Groups.
107. **Subcomponent 3.1: Project coordination and management:** The implementation of AVDP will be anchored within the NPCU and MAF at the district level. At the NPCU level, the project will provide for staff (many of whom are expected to be drawn from the merged NPCU and SCP-GASFP), vehicles, office equipment and supplies, and operational costs. Staffing levels at NPCU will be complemented with technical assistance as needed, including for thematic studies. At the district level, support will be provided for operational costs, including for the supervision of project activities, alignment of AVDP activities with similar activities by other development agencies through the District Agricultural Coordination Committee, and monitoring of project activities and report rendition. The project will also provide for short training and workshops (one per staff per year) to enhance the implementation capacity of the various cadres of staff at the national and district levels.
108. Project management will be anchored in principles of results-based management. Lessons learned will serve as feedback to the political level and be the basis for policy engagement. Policy engagement in the interests of the smallholder farmers and the rural poor will therefore be undertaken through: (a) organizing periodic stakeholder discussions involving all public and private value chain stakeholders around specific policy issues; (b) using provincial level commodity platforms as a nexus to discuss and share policy related concerns with government; (c) supporting relevant analytical work related to agricultural policies and strategies; and (d) supporting the capacity building of selected government agencies involved in policy formulation for agricultural development (e.g. MAF, MoFED and Ministry of Trade and Industry). AVDP will propose to policy makers for approval/ratification/amendment at least two regulations, policies or strategies, in partnership with other key stakeholders in the agricultural sector. During the first year of implementation, an action plan will be developed for the contribution of IFAD to sustain and improve MAF M&E capacities at central and district levels. This can include the

- inputs provided through the AVANTI initiative and include adjustments to project budgetary allocations to M&E functions as appropriate.
109. The following areas of policy focus have been identified from the results and lessons of IFAD experience in Sierra Leone as well as the interactions of the design team with various stakeholders: (a) agricultural inputs distribution and subsidies; (b) seed supply systems; (c) capitalization of financial institutions and interest rates; (d) secondary road maintenance; and (e) incomplete decentralization of human and material resources to the districts. AVDP will partner with the Food and Nutrition Security Impact Resilience, Sustainability and Transformation (FIRST) FAO-EU Partnership Programme Policy Assistance Facility which aims at establishing coherent policy and programme frameworks, the World Bank which is working on tariffs for imported rice as well as on foundation and certified seed production, and the MAF which recently prepared a National Fertilizer Policy and desires to conduct a gender audit to enable it develop a gender policy for the Ministry, SLeCAD, SLIEPA, and other partners to pursue the policy dialogue.
 110. During the first year of implementation of the project, the competitiveness objectives of the project will be formulated. This will include a definition of what the project intends to achieve in terms of enhancing competitiveness of each of the targeted commercial crops in both domestic and international markets; and what indicators will be used to measure competitiveness improvements over time. The competitiveness objectives of the project will further drive the policy engagement with the Government.
 111. **Financing mechanisms for target groups:** The rationale for AVDP's financing mechanisms is to leverage financing for profitable, productivity-raising investments that would otherwise not be undertaken due to imperfections in the financial markets. They are intended to address three key constraints on financing for agricultural value chains and rural enterprises in Sierra Leone that have been identified: (i) persistent high real interest rates that make term loans unaffordable; (ii) high collateral requirements of banks; and (iii) high risks, in particular for agricultural asset loans. A matching grant fund will be used to defray the costs associated with the acquisition of agricultural production or processing equipment used by AVDP beneficiary groups (ABCs or FBOs) or service providers and SMEs in the rice and tree crop value chains.
 112. Financing mechanisms have been structured such that the conditions for matching grant or direct project support (for tree crop seedlings) will not negatively impact RFIs but rather will increase demand for RFI market rate loans and will foster banking relationships between project beneficiaries, SMEs and rural financial institutions. Required beneficiary or SME contributions will ensure a high level of ownership. The AVDP will work hand in glove with the IFAD-financed RFCIP II Project to implement the AVDP financing mechanisms.
 113. The AVDP focuses on three crops: rice which can be double or triple cropped and cacao and oil palm which require significant investments at plantation establishment but do not begin to generate returns before the third and fourth year respectively. Thus each crop has specific cash flow scenarios and requires different financing schemes. As a result, the AVDP will have different financial support mechanisms for rice and tree crops. For rice inputs, the AVDP will transition over a two year period from advancing inputs to beneficiary FBOs as per the SCP and RCPRP model, to ceding financing of the input supply function to community banks and financial services associations recapitalized and strengthened through the RFCIP II. Inputs will be purchased from private input suppliers who will have greater access to finance through these rural financial institutions and will have been strengthened through support from the WB SCADeP project. For financing of production, processing equipment and infrastructure such as warehouses, drying facilities or solar powered generators, the project will provide a one-time only matching grant of 60% of the acquisition cost for equipment and 80% of the cost of infrastructure, contingent on loan approval and beneficiary contribution for the remaining portion of the financing. Indicative ceiling amounts for grants would be \$60,000 for infrastructure grants destined to selected ABCs allowing for an investment of \$75,000 and \$25,000 for equipment

- acquisition for ABCs and SMEs, permitting an investment of \$41,666. More details can be found in the PIM.
114. Because of the long lag time for tree crops between plantation establishment and returns on investment, funding requires medium term loans that cannot be met by RFIs in the immediate future. Intercropping will not generate sufficient income to meet annual loan instalments. As a result, the AVDP will continue to source and advance improved seedlings and tools to FBO nurseries. FBOs will repay 80% of the costs over a two-year period starting after first harvest. Reimbursements will be deposited in a dedicated RFI account and will be used to maintain farm tracks in the vicinity of the FBO. At the ABC level, the AVDP will use the matching grant fund to defray the cost of equipment and infrastructure needed for processing and marketing of tree crops, applying the same conditions (60% for equipment and consumables, 80% for infrastructure, contingent on beneficiary contribution for the remaining costs). Please refer to the financing schedule found in the PIM for details.
115. Indicative criteria for MGF eligibility would include:
- An Agribusiness Center, FBO, service provider or SME that is a receiving AVDP support or is used as a AVDP service provider or vendor;
 - Is able to contribute at least 10% of the investment cost as an equity contribution;
 - Is able to meet the financial institution's creditworthiness criteria and gain approval for a complementary loan;
 - Is primarily involved in rice cultivation or processing or oil palm and cacao production and processing;
 - Is not be in default of any existing formal or institutional loan;
 - Has received business development training by the AVDP and has a basic accounting system in place which records costs and revenues.
116. As part of project start-up activities and periodically during project implementation, the AVDP will organize workshops for financial institutions and prospective borrowers to inform them of the objectives and eligibility requirements of the MGF.
117. The AVDP will establish a Grant Evaluation Committee composed of MAF and AVDP officers who will meet monthly to approve grants which have gone through the financial institution's due diligence procedures and have been accepted for loans. The financing institution will address grievances and complaints from borrowers as part of their normal loan administration procedures.
118. The project's field-based agribusiness assistants and RFI loan officers will jointly supervise grants and associated loans. Prior to disbursement of the loan and grant, a baseline of the client /recipient will be established in order to later assess the impact of the investment on yield, output and profitability.

C. Theory of change

119. Rice and tree crop producers in Sierra Leone currently face a number of limitations to enhance productivity and increases incomes. These limitations include: (i) Lack of quality inputs such as certified seeds and sufficient fertilizer; (ii) Limited access to extension services; (ii) Low investments and limited working capital; (iv) Unfavourable farm to market linkages; and finally (v) climate change is putting pressure on production.
120. The project will address these challenges through the provision of technical assistance by the FFS as well as the strengthening of farmer organisations to better plan production and purchase of inputs. Availability of certified seeds will be enhanced through the set-up of seed multiplication plots that will be linked to private sector processors. The project will provide matching grants to facilitate that beneficiaries invest in productive infrastructure to enhance productivity. The matching grants scheme will also enhance the financial inclusion, as most

producer groups will need credit for their investments.²¹ Multi-stakeholder platforms will better integrate the value chains by bringing the different stakeholders – including representatives of the smallholder farmers – to the table to find solutions to current obstacles, build trust and facilitate business deals. Rehabilitated feeder roads will further facilitate market linkages. Additionally, the project will seek to climate proof the productive investments and ensure relevant capacity building. The overall approach of AVDP will be market centered and demand driven. The main thrust will be on establishing win-win partnerships between producers and their organisations, private sector agribusinesses and RFIs

121. The project is expected to result in increased volume and value of the three target crops produced in the context of climate change resilience, increased financial inclusion, value addition and access to markets, leading to increased income and jobs for the project beneficiaries.

D. Alignment, ownership and partnerships

a. Country ownership and alignment with national priorities

122. During the three project design missions, the design teams worked closely with senior MAF officials and staff from the RFCIP II and SCP/GAFSP projects to discuss and integrate GoSL priorities better understand opportunities and constraints and ground truth approaches through field trips, presentations and interviews. Each mission debriefed government officials and project staff at the beginning and conclusion of the trip.
123. The AVDP is aligned with the government's National Agricultural Transformation 2023 Programme that is currently in development. The ADVP addresses two of the three priority intervention areas that are rice self-sufficiency and crop diversification, notably for oil palm and cacao. The project aligns with five of the seven new strategic priorities: (Priority 2) increasing investment in rice production, processing and marketing, (Priority 3) Make youth and women catalysts for agribusiness development and growth, (Priority 4) Invest in catalytic technologies such as agricultural mechanization, irrigation and water management, (Priority 6) Strengthen sustainable biodiversity management and conservation including forest and tree crops, Priority 7) Increase the production of other crops to ensure diversification such as vegetables.

b. Alignment with IFAD corporate priorities

124. The project is aligned with the IFAD11 priorities on a range of parameters. First off all, it addresses gender, youth, nutrition and climate change and therefore supports the IFAD11 mainstreaming agenda. Second, the project has managed to attract co-finance from the Adaptation Fund and therefore will contribute to the corporate co-financing targets. Third, the project is designed to have a relatively frontloaded disbursement profile underpinned by substantive investments in equipment and irrigation systems as well as road rehabilitation and maintenance in the first years, which will all contribute to an increasing corporate disbursement ratio. Fourth, the project covers two PBAS cycles and is therefore aligned with the notion of delivering bigger, better and smarter. Fifth, referring to IFAD agenda for stronger partnerships at country-level, the project builds on close coordination with other development partners and synergies will be proactively pursued during implementation, particularly with SCADeP and WAATP.

c. Partnerships

125. The Adaptation Fund is strongly supporting climate resilience of smallholder farmers and other value chain actors in many AVDP activities. The World Food Programme (WFP) and Food and Agriculture Organization (FAO) have a long history of working with GoSL and engagement with previous IFAD funded projects. FAO engagement will be sought in institutional strengthening of

²¹ Community banks are being strengthened through the ongoing Rural Finance and Community Improvement Programme – Phase II (RFCIP 2) which received additional financing of US\$9 million in April 2018.

FBOs and government agencies, production technology transfer Farmer Field School expansion and deepening and FBO based business and production planning. WFP engagement will be sought for farmer based supply contracts for its Food for Work initiatives, and nutrition and food security interventions. Closer engagement will be pursued with the World Bank (discussions having been held between the design team and the Smallholder Commercialization and Agribusiness Development Project (SCADeP) and the West Africa Agricultural Transformation Project (WAATP) regarding collaboration on out grower schemes, seed supply and up scaling new technologies. The AVDP will collaborate the World Bank, African Development Bank (AfDB), and Islamic Development Bank (IsDB) to seek to align approaches, engage in policy dialogue with Government and examine possibilities of co-financing. Partnership possibilities with bilateral agencies engaged in agriculture sector (JICA, GIZ, EU) will also be actively explored. A range of public and private sector service providers and implementation partners will be engaged by AVDP to facilitate project implementation at different stages of the value chains and build the capacity of the project target groups towards agriculture as a business. The modalities for the engagement of the service providers are specified in the description of the subcomponents.

E. Benefits, costs and financing

Project costs

126. The total combined AVDP investment and incremental recurrent costs, including physical and price contingencies, are estimated at US\$ 60.3 million. Table 1 presents a breakdown of the costs by components and subcomponents. The detailed cost tables and additional summary tables are presented in Appendix 1. Component 1: 'Climate Resilient and Smart Agricultural Production' is the main investment component representing US\$ 37.7 million of the total project costs (63 per cent of total costs), while Component 2: 'Agricultural Market Development' accounts for US\$ 11 million (22 per cent of total costs) and US\$ 11.1 million for the Project Coordination and Management component (15 per cent of total project costs).

Table 3. Project Components by Year-Total Including Contingencies (USD'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Project Components by Year – Totals Including Contingencies	Totals Including Contingencies (SLL Million)						Totals Including Contingencies (US\$ '000)							
	2020	2021	2022	2023	2024	2025	Total	2020	2021	2022	2023	2024	2025	Total
	A. Climate Resilient and Smart Agricultural Production													
Support to smallholder (family farm) rice production and productivity:	6,005	49,620	66,453	44,380	28,079	12,296	206,833	551	5,811	7,744	5,068	2,815	580	22,569
Support to tree crops production and productivity	8,249	28,337	65,734	18,743	410	410	119,881	1,058	3,377	8,427	2,403	53	53	15,369
Subtotal	14,253	75,957	132,187	63,122	28,488	12,706	326,713	1,608	9,187	16,172	7,471	2,868	633	37,938
B. Agricultural Market Development														
Market Access	7,896	13,871	13,827	11,488	11,378	13,255	71,715	724	1,114	972	707	613	625	4,755
Climate resilient rural infrastructure and information systems	481	9,519	20,729	49,073	48,019	15,384	143,185	44	764	1,457	3,020	2,587	725	8,598
Subtotal	8,377	23,390	34,556	60,561	59,397	28,620	214,900	768	1,878	2,429	3,727	3,200	1,350	13,353
C. Project Coordination and Management														
Project coordination and management	18,765	18,538	21,195	24,679	24,456	30,951	138,585	1,724	1,492	1,494	1,524	1,318	1,480	9,012
Subtotal	18,765	18,538	21,195	24,679	24,456	30,951	138,585	1,724	1,492	1,494	1,524	1,318	1,480	9,012
Total PROJECT COSTS	41,396	117,885	187,938	148,362	112,342	72,276	680,199	4,100	12,557	20,095	12,722	7,386	3,443	60,302

Project Financing, co-financing strategy and Plan

127. AVDP will be co-financed by IFAD loan, IFAD grant, GoSL, the Adaption Fund (AF), private sector and the direct beneficiaries' contribution. IFAD has shown commitment to contribute about US\$ 40.3 million, spread over two PBAS cycles, which accounts for 66.9 per cent of total project costs. The AF will contribute US\$ 9.2 million representing 15.2 per cent of total costs and Private Sector US\$ 1.4 million representing 2.3 per cent of the total project costs respectively. Beneficiaries are also expected to make in-kind contribution of about US\$ 1.4

million or 2.2 per cent of total costs. The Government will finance the taxes and duties (US\$ 8.1 million, representing 13.4 per cent of total costs). Table 2 shows the summary financing arrangements. Additionally, it is estimated that investments under the World Bank-financed SCADeP in agro industries, which would have strong synergies with the AVDP, will amount to US\$ 12 million, whereas the strengthening of the rice seed sector under WAATP, which similarly complements to AVDP, amounts to approximately US\$ 10 million.

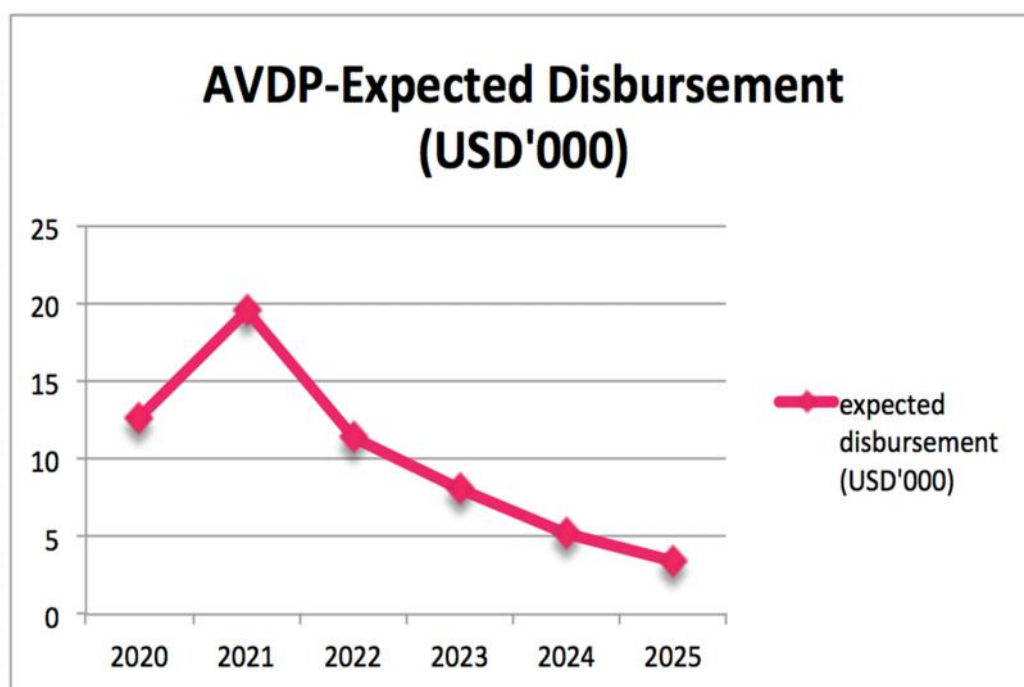
Table 4. Components by Financiers (USD'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Components by Financiers (US\$ '000)	Government		IFAD II cycle		IFAD I Cycle		Adaptation Fund		Private sector		Beneficiaries		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Climate Resilient and Smart Agricultural Production														
Support to smallholder (family farm) rice production and productivity:	3,385	15.0	11,676	51.7	4,741	21.0	2,246	10.0	-	-	522	2.3	22,569	37.4
Support to tree crops production and productivity	2,305	15.0	7,107	46.2	895	5.8	4,235	27.6	-	-	828	5.4	15,369	25.5
Subtotal	5,691	15.0	18,782	49.5	5,635	14.9	6,480	17.1	-	-	1,350	3.6	37,938	62.9
B. Agricultural Market Development														
Market Access	694	14.6	1,562	32.8	1,618	34.0	-	-	881	18.5	-	-	4,755	7.9
Climate resilient rural infrastructure and information systems	1,232	14.3	4,456	51.8	-	-	2,367	27.5	543	6.3	-	-	8,598	14.3
Subtotal	1,926	14.4	6,018	45.1	1,618	12.1	2,367	17.7	1,424	10.7	-	-	13,353	22.1
C. Project Coordination and Management														
Project coordination and management	467	5.2	3,700	41.1	4,536	50.3	308	3.4	-	-	-	-	9,012	14.9
Total PROJECT COSTS	8,084	13.4	28,500	47.3	11,789	19.6	9,156	15.2	1,424	2.4	1,350	2.2	60,302	100.0

Disbursement profile and plan

128. The below graph forecast the expected disbursement per year. This will allow continuously tracking progress during supervisor and following up mission.

Graph 1. AVDP-Expected Disbursement (USD'000)



Summary benefits and economic analysis

129. The Project is expected to lead to increase in IVS rice, cocoa and oil palm production, marketing and exports (i.e. cocoa and oil palm) as a result of: (a) revitalization of plantations; (b) IVS rice production expansion (c) new plantation and/or replanting of new trees on existing plantations; (d) higher yields at smallholder farmers level thanks to improved production practices, promoted through dedicated extension system and access to improved variety seeds. Benefit from Component 2, construction and rehabilitation of 250 km of roads will procure access to markets, reduce the time and cost to reach the local market and limit the post-harvest losses due to bad transportation conditions. Particular attention will be given to support climate change resilience, by favouring environmental friendly technological investments.
130. **Financial analysis.** Five financial models were developed: (i) IVS Rice (1ha) with vegetables side rotational cropping (0.15 ha); (ii) IVS Rice/double cropping (1ha) with vegetables side rotational cropping; (iii) Cocoa gradual replanting (1ha) with vegetables side rotational cropping (0.15 ha), cassava (0.25 ha) and plantain (0.25ha); (iv) Cocoa new planting (1ha) with vegetables side rotational cropping (0.15 ha), cassava (0.25 ha) and plantain (0.25ha) and (v) Oil palm new plantation (1 ha) with upland rice (1ha). The analysis compares a “without project” and “with project” situation for indicative one hectare of land. “Without project” scenario has been calculated based on the prevailing traditional average production, where applicable. The analysis compares “without project” and “with project” situation for one hectare (10000m²) of land. The “without project” scenario has been calculated on the prevailing traditional production, except for the oil palm production where due to the non-adequate access to data, it has been taken the average cocoa farmer income of the “without project” scenario.
131. Overall, the financial models are based on information collected by the ongoing IFAD project and the design team in September 2018. The financial crop/tree models capture: (i) increase in rice, cocoa and oil palm yield; (ii) increase in quality; and (iii) increases in prices for higher quality. The yield assumptions are based on information from other projects in Sierra Leone and

the region. Detailed description and analysis of the models and their profitability are presented in Appendix 2.

132. **Economic analysis.** The economic analysis shows that the project has the capacity to generate an economic rate of return (ERR) of 25% over 20-year period, with a net present value of SLL 116,244 billion (approximately USD 13,4 million). Given the many un-quantifiable benefits, the actual ERR will likely be higher than this.
133. **Sensitivity Analysis.** In order to test the robustness of the above results, sensitivity analysis was carried out and the results are presented below. The sensitivity analysis investigates the effect of fluctuations in Project costs, benefits and delays in implementation on the NPV and ERR. The results shows that the ERR drops to 22% with an increase in in costs of 20% and 20% with increase in costs to 50% still making the project economically viable.

Sustainability

134. Sustainability is a key concept in the project formulation as this aims at ensuring the sustainability of activities and benefits after the completion of the project. The project aims at strengthening farmer organisations to the extent that they are able to collectively plan the production, purchase inputs and sell their produce through stable private sector engagement. In coordination with the RFCIP, the project also seeks to ensure that FBOs are accessing rural finance for inputs on a sustainable basis. Additionally, the productive investments will be climate proofed through the financing of the Adaptation Fund. Finally, through policy engagement that is planned as part of Component 3, the project will contribute to keep the Government's focus on the rural poor and facilitate Government support to the target group after project completion.

III – Risks

A. Project risks and mitigation measures

135. The following main risks have been identified, which could pose risks to the successful implementation of AVDP outcomes and impacts (also see Risk Framework).
136. **Corruption and poor governance.** Governance issues could compromise the expected impact on communities and increase programme costs, the risk is classified as high. Elite capture of outputs, especially physical assets, which are intended for well-defined target groups, is another problem associated with bad governance. These governance risks will be mitigated by complementing the initiatives of the Government through: (i) increasing transparency and publicity on the distribution of outputs; (ii) providing training to implementers at all levels on financial management, procurement, M&E and reporting procedures; (iii) implementing a clear targeting strategy, (iv) continuing and improving the grievance mechanism for beneficiaries. A Good Governance Framework has been developed for the SCP-GAFSP and will be modified for AVDP (see Annex 7).
137. **Macroeconomic** risk is judged as high due to the risk of persistent domestic imbalances. The government faces huge fiscal constraints, and fiscal space is limited. Achievement of the PDO could be undermined by the tight fiscal conditions, if current fiscal trends continue. To mitigate this risk at the country level, the COSOP identified improving domestic resource mobilization and improved efficiency of public spending as key priorities to alleviate fiscal constraints. The upcoming COSOP will identify priority areas of interventions to address the aforementioned constraints.
138. **Institutional capacity for implementation and sustainability risks** are judged medium. Failure in project coordination is a risk, especially among and within nonstate actors and private agribusiness. Private stakeholders consistently state that institutions that provide critical support services to private sector investors remain weak, and coordination among them is

fragmented. The project will mitigate this risk by ensuring that the PIU has clear mechanisms for effective coordination during project implementation.

139. Weak capacity of government institutions to effectively implement project activities and coordinate development interventions. The increased Government spending and the massive incoming donor funding over the past years have put a severe strain on management and at the technical level. The AVDP funding provides means for capacity building at all levels.
140. Insufficient application of targeting procedures and gender mainstreaming. A gender sensitive targeting strategy and criteria for beneficiaries and areas selection were developed. However, experience shows that there is a risk that the target groups eligible to benefit from the interventions of the project will not be reached to the extent possible and necessary. Specific targeted activities will be developed for youths and women, and M&E will pay attention to this aspect. M&E will be strengthened to produce gender and age disaggregated data.
141. **These risks are considered to have medium probability** and adequate mitigating measures have been proposed. The Project Steering Committee and the Presidential Task Force will play an important role in monitoring these risks and will be instrumental in ensuring that any issues that could jeopardize the project's success are addressed by the relevant stakeholders.

B. Environment and social category

142. In line with IFAD's Environmental and Social Assessment Procedures an Environmental and Social Review Note has been prepared (see Annex 3). AVDP is not expected to have overall negative environmental impacts. However, since small commercial agriculture activities may generate unexpected cumulative impacts, a careful design of an appropriate monitoring system is critical. The major concerns are associated with the increased use of fertilisers and pesticides that might result from wider distribution, and with their impacts on biodiversity as well as human health. Training on proper use and disposal, adoption of principles of the International Code of Conduct on the Distribution and Use of Pesticides of FAO, as well as the design of an environmental monitoring system in partnership with the Sierra Leone Environmental Protection Agency (SLEPA) are considered sufficient mitigation measures. Based on the above information, the Project has been classified as Category B according to IFAD classification standards.
143. AVDP presents another opportunity to transform the Sierra Leonean agricultural sector into a sustainable and climate-smart production system that increases at the same time productivity and resilience (adaptation) while reducing deforestation and the encroachment of agriculture into natural ecosystems. Opportunities for improvement exist in several areas (i.e. combating deforestation and land degradation; improved quality of food products; improved management of forests and biodiversity; improved mangrove management) and actions in these domains are proposed in the ESRN. In addition, environmental-related concerns and/or opportunities for improvement exist and more attention will be paid during the design on environmental issues through the Environmental and Social Assessment.

C. Climate risk classification

144. Climate change risk to Sierra Leone is classified as medium. Sierra Leone is one of the most vulnerable countries to climate change in West Africa and among the Least Developed Countries, least able to adapt to the adverse effects of climate change²². According to the Sierra Leone's Second National Communication to the UNFCCC, climate change will lead to significant outcomes including: decreased agricultural productivity, degradation of the coastline and damage to coastal structures, a shift from tropical rain forest to dry forest, food and nutrition insecurity, water stress and severe economic impacts that will undermine decades of development gains (Sierra Leone Climate Action Report, 2015).

²² Maplecroft, 2017, Climate Change Vulnerability Index 2017

145. The impacts of climate change are felt by local stakeholders mainly in terms of unusual weather patterns such as changed rainfall patterns with rain in the dry season and dry periods in the rainy season, and also more intense rainfall resulting in severe floods and landslides. This affects cropping patterns (need for adaptive research on different varieties) and water availability (need for more training in water uses and management).

IV – Implementation

A. Organizational framework

Project coordination

146. The existing IFAD NPCU will implement AVDP in partnership with the District Government/District MAF, partner private sector entities and FBOs/Cooperatives. This responsibility includes project planning, financial management, contracting implementing partners for specific activities and tasks, M&E, communication and knowledge management (C/KM), supervision of project activities at the district level, facilitating linkage with governmental, private sector and development institutions, and integrating project experience into policy dialogue. The NPCU will have approximately 25 technical and support staff at its headquarters and will be complemented by a robust presence at provincial level with the out-posting of 4 tree crop officers, 4 IVS officers, 2 agribusiness specialists and 4 Community Mobilizers/Targeting Specialists. A matching grant (MG) evaluation committee will be established to approve grant applications. Staff implementing AVDP will have opportunity for training to enhance their performance. At the district level, the DAO of MAF will be responsible for coordinating the implementation of project activities. Figure M1.2 in Annex 3 shows the organogram for AVDP.
147. **Financial management.** In accordance with IFAD guidelines, a Financial Management Assessment (FMA) has been undertaken as part of project design. The country risk is rated as High risk. In order to mitigate the high inherent risk, the Financial Management arrangements currently in place in the NPCU complimented with the some country's national FM systems that meet IFAD's minimum requirements will be used to manage the IFAD financing. Overall, the initial FM risk is rated as Medium.
148. The proposed project financial management arrangements will include the following: (i) The NPCU will appoint a qualified financial controller, a project accountant an assistant accountant to take care of the day to day management of project funds; (ii) The NPCU will maintain its accounting records in accordance with IPSAS-cash basis of accounting and all project transactions, will be recorded the an accounting software (TOMPRO) currently in use in the NCPU; (iii) Extensive internal controls will be maintained throughout the project life. These will be detailed in the Financial Procedures Manual. IFAD's anticorruption policy and whistle blowing procedures will be mainstreamed in the manual; (iv) The NPCU will prepare and submit to IFAD quarterly interim financial reports and annual financial statements in agreed format agreed with IFAD; (v) The project will be included in the annual audit plan of the Internal audit department of MAF.
149. **Audit.** The project will be audited annually by the Audit Service Sierra Leone (ASSL), in accordance with INTOSAI/ISSAI standards and IFAD guidelines with project audits. The audit report, including the management letter will be submitted to IFAD within six months of the end of the fiscal year.
150. **Disbursement arrangements.** The IFAD financing shall be disbursed against duly certified withdrawal applications in accordance with the IFAD disbursement procedures.

151. **Taxation.** The GoSL will cover all taxes under the project. Consequently, IFAD funds cannot be used to pay VAT, duties or other taxes imposed on the project.
152. **Procurement.** A procurement assessment was undertaken as part of the design mission. According to the assessment the legal and regulatory framework of public procurement in Sierra Leone – which includes the Act, Regulations, Manual, Standard Bidding Documents and other instruments – will be used for all procurement activities in AVDP, with the exception of International Competitive Bidding (ICB) for which the World Bank guidelines and framework will apply. In addition, the procurement plan to be used by AVDP will be based on the version in the IFAD Procurement Handbook and not the one in the NPPA.
153. The following are the proposed procurement procedures for AVDP:
- (a) Procurement planning shall be congruent with Module E of the IFAD Procurement Handbook, be part of the annual work planning process, and the AWPB shall be content-consistent with the Procurement Plan (PP). The PP format to be used shall be consistent with the templates shown in the Handbook, with the inclusion of an initial column that has the AWPB reference. The initial plan shall be for 18 months and thereafter for 12 months. The PP shall be in Microsoft Excel format;
 - (b) Packaging of procurement of goods (for like items) and for works (for similar items or for geographical reasons) should be implemented;
 - (c) All bidding documents for the procurement of goods, works and services shall be prepared by the Procurement Unit. For the procurement of goods and works under ICB and consulting services under Quality and Cost-Based Selection (QCBS), the project shall use the templates provided by the World Bank, with appropriate edits. For National Competitive Bidding (NCB) and Shopping procurements, the standard bidding documents (SBDs) provided by NPPA suffice. For all other bidding documents for bespoke procurements, the project shall liaise with IFAD to identify appropriate bidding document templates;
 - (d) TOMMARCHE currently in use in the NPCU is recommended as the Procurement Management Information System (PMIS). Once IFAD establishes a NOTUS (No Objection Tracking System), this can be customized and configured for the AVDP too;
 - (e) AVDP shall follow Module C of the IFAD Procurement Handbook which provides a list of documents/record to be filed, the filing method and an overview of correspondence and communication;

The procurement thresholds and prior review thresholds will be specified in the Letter to the Borrower and the procurement procedures manual.

B. Governance

154. The MAF National Steering Committee (NSC) will provide oversight, direction and advice for project implementation, and in particular, approve the AWPB of the project as well as its periodic progress reports. The NSC will include representation of key stakeholders including, the ministries for Finance, Economic Development and Planning, Trade and Industry, Local Government, Community Development, Social Welfare, Gender and Children Affairs, Lands, Country Planning and Environment, EPA, Youth and Sports, Directorate of Feeder Roads of SLRA, the Chief Agricultural Officer/Technical Head of MAF, two members of Farmers Associations (one for staple crops and one for tree crops), and two private sector representatives (one for staple crops, especially rice, and the other for tree crops). The National Programme Coordinator of NPCU shall be the Secretary of the NSC for AVDP.

C. M&E, learning, KM; and strategic communications approaches

Planning

155. The project will on an annual basis develop an Annual Work Plan and Budget (AWPB) that will be approved by the NSC and subsequently presented to IFAD for No objection. The AWPB will provide the basis for any work that the project will undertake. The AWPB will be developed in consultation with beneficiaries and other stakeholders and build on the progress of the project.

Monitoring and evaluation

156. The Project's logical framework will be the main document for supporting results-based and objectives-oriented implementation. The AVDP M&E system will build on the system developed in the SCP-GAFSP including its M&E manual. The M&E system will be in line with GoSL requirements as well as with IFAD's **Operational Results Management System (ORMS)** and will generate gender and age disaggregated data on project outputs, outcomes and impacts. Performance monitoring of IPs and external evaluations form part of the system. The AVDP logical framework includes IFAD Core Indicators (RIMS).
157. **Monitoring.** The monitoring of the AVDP will be integrated in the existing SCP-GAFSP M&E framework. MAF is currently supported in monitoring projects through the FAO Technical Assistance Project which provides support to the MAF Planning Evaluation Monitoring and Statistics Division (PEMSD) to improve data collection, processing and analysis. AVDP will benefit from this project through the improvement of the underlying information base available for planning and economic analysis.
158. The project M&E Unit will include and regularly assess a number of gender, youth and other group specific indicators in the Programme's M&E System, at output, outcome and impact level, in particular capturing the improvement of access to the outputs, their use by the target groups and their satisfaction with these outputs.
159. At project completion an impact assessment will take place building on the baseline study conducted at project start-up. Funds have been allocated to both baseline and impact assessment.

Learning and knowledge management

160. Knowledge management and learning is key to meeting project objectives, as reliable information is the basis of results-based management. Priority will be given to areas where AVDP interventions are recognized as exemplary and are expected to have greatest impact though also failures constitute an important basis for learning. Best practices and proven concepts will be fed into the MAF and regional knowledge management systems. Lessons learned will also be feed into the continuous improvement of manuals, concepts and strategies, and disseminated to the various target groups, including the public, using appropriate means of communication.

Strategic communication and reputation management approaches

161. The Project's communication specialist will manage the knowledge sharing and communication strategy to promote knowledge dissemination. Various types of media such as print media, radio, TV, video and others, depending on the target audience and type of messages. The main focus of the strategic communication will be to adequately inform national decision makers of the best practices so as to upscale these in future operations.

R. Implementation plans

162. IFAD will supervise the project directly and the IFAD Country Office in Freetown will provide continuous back support and guidance. A baseline study will be carried out in the first year of project implementation to establish future monitoring and impact assessment benchmarks. A

Mid-Term review will be carried out jointly with the government to evaluate project progress, identify areas for further improvement and revise project approach, activities and budgets on the basis of MTR findings.

Appendix 1: Project cost and Financing

1. This section describes the assumptions underlying the derivation of project costs, estimated project costs and financing plan. The project costs are based on parameters collected during the final design mission in September 2018. The key parameters are presented below:

2. **Project Duration.** The implementation period of the Agriculture Value Chain Development Project is estimated at 6 years with the start date in 2020.

3. **Price contingencies.** Price contingencies aim to cover expected price increase between project preparation and project start up as well as throughout the project implementation period. The local annual average inflation rate has been applied to the project period at 16.5% and international at 2%.

4. **Physical contingencies** aim to cover uncertainties related to units' costs. They are assumed at 5%, and they are applied only in production and infrastructure investments.

5. **Taxes.** The levels of taxes in the unit costs were estimated to include Governmental duties and taxes. Most costs items include VAT, which account for 15%. As per IFAD rules and regulations, local VAT and import taxes are considered as a contribution to project costs by the Government of Armenia (see financing tables). The Value Added Tax (VAT) applies to virtually all expenditure categories except international technical assistance, and staff allowances. An average amount of 15% VAT is included for all equipment, training and workshops, studies (realized by a service provider) funded with IFAD funds.

Exchange Rate. The base rate of exchange for this analysis has been set at SLL 7800 to USD 1, the prevailing rate in September 2018. The programme costs are presented in SLL and USD.

A. Total Cost

6. Total Project Cost including physical and price contingencies are estimated at USD 60.3 million over a 6-year period. Component 1 on 'Climate Resilient and Smart Agricultural Production' represents 63% of the total project costs, while Component 2 on 'Agricultural Market Development' is representing 22% of total project costs. Component 3 covers the costs for 'Project Management Unit' and represents 15% of the total project costs.

B. Project Financing

7. **The Financing Plan** covers (i) an IFAD I cycle of USD 11.789 million; (ii) IFAD II cycle of USD 28.500 million; (iii) contribution from Government of USD 8.084 million, which will be used to co-finance project duties and VAT; (iv) beneficiaries (in-kind and cash) contributions estimated at USD 1.350 million; (v) Adaptation Fund grant of USD 9.156 million; and (vi) Private Sector of USD 1.424 million.

8. Additionally, it is estimated that the AVDP will benefit from an estimated US\$ 10 million in parallel value chain investments under the World Bank-financed Smallholder Commercialization and Agribusiness Development Project (SCADeP) and an estimated US\$ 12 million for the rice seed value chain under the Bank's West African Agricultural Transformation Project (WAATP).

Table 1: Program Costs by Component (USD/SLL'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Project Components by Year -- Totals Including Contingencies	Totals Including Contingencies (SLL Million)							Totals Including Contingencies (US\$ '000)						
	2020	2021	2022	2023	2024	2025	Total	2020	2021	2022	2023	2024	2025	Total
	A. Climate Resilient and Smart Agricultural Production													
Support to smallholder (family farm) rice production and productivity:	6,005	49,620	66,453	44,380	28,079	12,296	206,833	551	5,811	7,744	5,068	2,815	580	22,569
Support to tree crops production and productivity	8,249	26,337	65,734	18,743	410	410	119,881	1,058	3,377	8,427	2,403	53	53	15,369
Subtotal	14,253	75,957	132,187	63,122	28,488	12,706	326,713	1,608	9,187	16,172	7,471	2,868	633	37,938
B. Agricultural Market Development														
Market Access	7,896	13,871	13,827	11,488	11,378	13,255	71,715	724	1,114	972	707	613	625	4,755
Climate resilient rural infrastructure and information systems	481	9,519	20,729	49,073	48,019	15,364	143,185	44	764	1,457	3,020	2,587	725	8,598
Subtotal	8,377	23,390	34,556	60,561	59,397	28,620	214,900	768	1,878	2,429	3,727	3,200	1,350	13,353
C. Project Coordination and Management														
Project coordination and management	18,765	18,538	21,195	24,679	24,456	30,951	138,585	1,724	1,492	1,494	1,524	1,318	1,460	9,012
Subtotal	18,765	18,538	21,195	24,679	24,456	30,951	138,585	1,724	1,492	1,494	1,524	1,318	1,460	9,012
Total PROJECT COSTS	41,396	117,885	187,938	148,362	112,342	72,276	680,199	4,100	12,557	20,095	12,722	7,386	3,443	60,302

10. **Proposed Program Financing.** A total of USD 60.302 million is expected to be mobilized for AVDP over the six-year implementation period. The overall project is expected to be financed according to the following allocation: (a) 19.6 % from IFAD I Cycle; (b) 47.3% from IFAD II Cycle, c) 13.4% from Government (taxes and duties); (d) 2.2% from Beneficiaries (*cash & in-kind*); (e) 15.2% from Adaptation Fund and (f) 2.4% from Private sector.

Table 2: Project Components by Financiers (USD'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Components by Financiers (US\$ '000)	Government		IFAD II cycle		IFAD I Cycle		Adaptation Fund		Private sector		Beneficiaries		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
	A. Climate Resilient and Smart Agricultural Production													
Support to smallholder (family farm) rice production and productivity:	3,385	15.0	11,676	51.7	4,741	21.0	2,246	10.0	-	-	522	2.3	22,569	37.4
Support to tree crops production and productivity	2,305	15.0	7,107	46.2	895	5.8	4,235	27.6	-	-	828	5.4	15,369	25.5
Subtotal	5,691	15.0	18,782	49.5	5,635	14.9	6,480	17.1	-	-	1,350	3.6	37,938	62.9
B. Agricultural Market Development														
Market Access	694	14.6	1,562	32.8	1,618	34.0	-	-	881	18.5	-	-	4,755	7.9
Climate resilient rural infrastructure and information systems	1,232	14.3	4,456	51.8	-	-	2,367	27.5	543	6.3	-	-	8,598	14.3
Subtotal	1,926	14.4	6,018	45.1	1,618	12.1	2,367	17.7	1,424	10.7	-	-	13,353	22.1
C. Project Coordination and Management														
Project coordination and management	467	5.2	3,700	41.1	4,536	50.3	308	3.4	-	-	-	-	9,012	14.9
Total PROJECT COSTS	8,084	13.4	28,500	47.3	11,789	19.6	9,156	15.2	1,424	2.4	1,350	2.2	60,302	100.0

Table 3. Expenditure Accounts by Financiers (USD'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Expenditure Accounts by Financiers (US\$ '000)	Government		IFAD II cycle		IFAD I Cycle		Adaptation Fund		Private sector		Beneficiaries		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs														
A. Civil Works	1,416	15.0	4,178	44.3	1,018	10.8	2,338	24.8	488	5.2	-	-	9,438	15.7
B. Goods, Equipment and Vehicles	114	15.0	-	-	647	85.0	-	-	-	-	-	-	762	1.3
C. Technical assistance	1,470	14.3	3,237	31.4	2,084	20.2	2,582	25.0	936	9.1	-	-	10,310	17.1
D. Grants and subsidies	4,917	15.0	17,662	53.9	4,617	14.1	4,235	12.9	-	-	1,350	4.1	32,781	54.4
Total Investment Costs	7,917	14.9	25,077	47.1	8,367	15.7	9,156	17.2	1,424	2.7	1,350	2.5	53,290	88.4
II. Recurrent Costs														
A. Salaries and allowances	-	-	2,874	50.0	2,874	50.0	-	-	-	-	-	-	5,748	9.5
B. Operating costs	167	13.2	548	43.4	548	43.4	-	-	-	-	-	-	1,264	2.1
Total Recurrent Costs	167	2.4	3,422	48.8	3,422	48.8	-	-	-	-	-	-	7,012	11.6
Total PROJECT COSTS	8,084	13.4	28,500	47.3	11,789	19.6	9,156	15.2	1,424	2.4	1,350	2.2	60,302	100.0

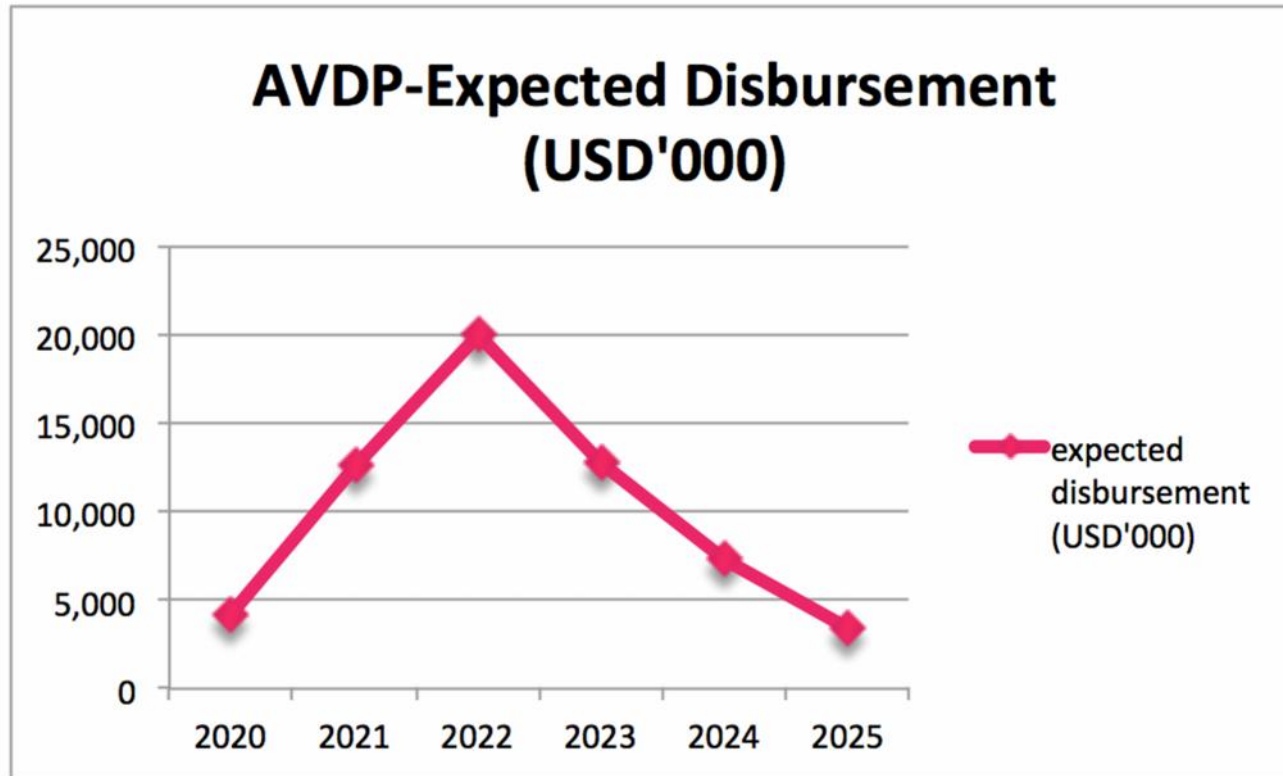
Table 4: Expenditure accounts by components – Totals including contingencies (USD'000)

Republic of Sierra Leone						
Agriculture Value Chain Development Project Expenditure Accounts by Components - Total (US\$ '000)	Climate Resilient and Smart Agricultural Production		Agricultural Market Development	Climate resilient rural infrastructure and information systems	Project Coordination and Management	
	Support to smallholder (family farm) rice production and productivity:	Support to tree crops production and productivity	Market Access		Project coordination and management	Total
I. Investment Costs						
A. Civil Works	1,556	-	-	7,881	-	9,438
B. Goods, Equipment and Vehicles	-	-	-	-	762	762
C. Technical assistance	3,421	180	4,755	716	1,238	10,310
D. Grants and subsidies	17,592	15,189	-	-	-	32,781
Total Investment Costs	22,569	15,369	4,755	8,598	2,000	53,290
II. Recurrent Costs						
A. Salaries and allowances	-	-	-	-	5,748	5,748
B. Operating costs	-	-	-	-	1,264	1,264
Total Recurrent Costs	-	-	-	-	7,012	7,012
Total PROJECT COSTS	22,569	15,369	4,755	8,598	9,012	60,302
Taxes	3,385	2,305	694	1,232	467	8,084
Foreign Exchange	6,739	3,502	-	1,775	340	12,356

11. To enable easy monitoring of progress, the below graph forecast the expected disbursement per year. This will allow continuously tracking progress

during supervisor and following up mission.

Graph 1. AVDP-Expected Disbursement (USD'000)



Appendix 2: Economic and financial analysis

7. **Introduction.** AVDP's objective is to increase land productivity, resilient agricultural production, and growth opportunities for smallholders and agribusinesses, and create a more enabling environment for them. The AVDP mission is to contribute to rural economic development and poverty reduction by improving livelihood, generating revenue and enhancing the living standards of target households. AVDP will unlock new rural business opportunities by better connecting and integrating farms, farmers' organization and agribusinesses to commercial markets. It will create new avenues for self, salaried and wage employments for beneficiaries.
8. **Project target group** and main beneficiaries are rural households at the national state level. AVDP will support PPP (Public, Private, Partnerships) based business models that increase the income of the target households by developing profitable marketing linkages between them and sustainable agribusinesses.
9. AVDP direct beneficiaries will be rural population, men, women and youth. The project is estimated to target 204 000 direct beneficiaries equivalent to 34 000 households over a period of 6 years, providing support to the target groups and support greater participation in targeted value chains.

Estimated Project Benefits:

10. AVDP would deliver several kinds of benefits to Sierra Leone and to the direct beneficiaries and beneficiary districts of the Project. These benefits would include:
 - (i) *Support to 5000 HH through IVS rice production covering area of 4000 ha*
 - (ii) *Support to 5000 HH through cocoa replanting and new plantation (coverage 5000ha) and support to 4000 HH through oil palm plantation (coverage 4000 ha)*
 - (iii) *Capacity building of the rice legacy farmers (5000 HH) and oil palm legacy farmers (4000 HH)*
 - (iv) *Training on access to potable water, latrines and sanitations facilities (10 000 HH)*
 - (v) *Estimated generated employment for 2000 youths (short term labour, as contractors, as supervisors)*
 - (vi) *Rehabilitation/maintenance of 50 km farm tracks and constructions/routine maintenance of 150km of feeder roads through period of 6 years*
 - (vii) *Provide support with assets/infrastructure to 500 FOs (equivalent to 93 ABCs) and additional support to inherited legacy farmers for 333 FOs (equivalent to 60 ABCs).*
 - (viii) *Improved incomes and quality of life of the targeted households (with special target on 40% youth and 40% women), and economic benefits for targeted country through increased agricultural production, processing crops and export activities.*
 - (ix) *Cultivating high value of IVS rice with improved variety seeds (Nerica) grown on 4 000 ha, enabling to reach double or triple cropping per year.*
 - (x) *Construction of 30 earth dams and 20 bore holes irrigation scheme in order to enhance production/productivity*
 - (xi) *Strengthening the effectiveness of the Project Management Unit as an organization that can implement development projects in the rural areas on behalf of the government and donors.*
 - (xii) *Expansion of the rice crop to be supported under project will reduce the high rice import burden on the country*
 - (xiii) *Increased revenue for some 14 000 households as direct beneficiaries who would develop or upgrade their rice production and strengthen plant/replant tree crop production which can be intercropped or side rotationally cropped with other horticultural crops (i.e. plantains, vegetables etc.)*

Table 1. Number of supported FOs/ABCs by the Project

Crop/Tree type	No. of FOs per ABC	No. of HH per FO	Total No. of HH per 1 ABC	No of. ABCs supported with Assets/Infrastructure	No of FOs
Rice	6	25	150	33	200
Oil Palm	5	30	150	27	133
Cocoa	5	30	150	33	167
Rice/Legacy	6	25	150	33	200
Cocoa/Legacy	5	30	150	27	133
Total				153	833

Table 2. Number of Targeted Households

Targeted Households					
Crop/Tree Type	No of HH	No. of FFS/Legacy Farmers	Roads construction or rehabilitation	Access to potable water, latrines and sanitations facilities	Total
Rice	5.000	5.000			
Cocoa	5.000	-	2.000	9.000	34.000
Oil Palm	4.000	4.000			
Total	14.000	9.000			

- Environmental benefits that are directly linked to the uptake of improved irrigation methods at the farm level are: (i) improved irrigation water productivity (more crops per drop); and (ii) increased resilience to climate change. The upgrade of farming practices and financing farm development would be supported by the AVDP component 1 and 2.
- The AVDP will support Agribusiness Services Center with investments in assets and infrastructure. The machinery support will include assets such as tipping trailer, disc plough, disc ridger, rotary tiller, puddler, rice reaper, power tiller, rice hauler, destoner, thresher and harvester. It has been estimated direct assets/infrastructure support to 33 ABCs dealing with rice crop, 33 ABC dealing with cocoa and 27 ABCs dealing with oil palm production.

Financial Analysis

- Five financial models were developed: (i) IVS Rice (1ha) with vegetables side rotational cropping (0.15 ha); (ii) IVS Rice/double cropping (1ha) with vegetables side rotational cropping; (iii) Cocoa gradual replanting (1ha) with vegetables side rotational cropping (0.15 ha), cassava (0.25 ha) and plantain (0.25ha); (iv) Cocoa new planting (1ha) with vegetables side rotational cropping (0.15 ha), cassava (0.25 ha) and plantain (0.25ha) and (v) Oil palm new plantation (1 ha). The analysis compares a “without project” and “with project” situation for indicative one hectare of land. “Without project” scenario has been calculated based on the prevailing traditional average production, where applicable.
- Key Assumptions.** Incremental net income as shown in Table 6 is the difference between current (WOP scenario) and assumed farmer income and yield revenues received due to the project intervention. Incremental net income of all staple and cash crops/trees varies from year to year due to the described investments. The net incremental flows demonstrate high profitability for all production varieties.

15. Project profitability for IRR crops/trees is between 27% and 67% where noted the highest IRR is for IVS Rice/double cropping. The IRR for infrastructure/roads is estimated at value of 40%.

Table 3. Financial Analysis

F I N A N C I A L A N A L Y S I S		PRODUCTION					Infrastructure (SLL)
		IVS Rice (1 ha) (SLL)		Tree crop model'net incremental benefits (1 ha) (SLL)			
		IVS Rice (Nerica)*	IVS Rice/double cropping scheme*	Cocoa Gradual Replanting **	Cocoa New Planting**	Oil Palm New Plantation***	Roads
	PY1	-23.975.255	-19.308.380	-2.832.883	-9.423.554	-7.850.342	
	PY2	6.082.745	11.297.120	-2.655.100	-2.596.877	-1.442.361	1.461.459
	PY3	7.542.745	13.852.120	-1.389.213	1.536.363	4.662.639	-251.895
	PY4	7.542.745	13.852.120	2.511.260	4.358.917	4.083.657	-10.675.346
	PY5	7.542.745	13.852.120	5.079.692	6.588.360	5.193.657	-7.789.758
	PY6	8.272.745	15.129.620	6.754.484	10.474.180	6.303.657	3.743.766
	PY7	8.272.745	15.129.620	7.977.536	13.155.361	10.743.657	9.397.345
	PY8	8.272.745	15.129.620	8.748.849	13.080.072	11.298.657	9.397.345
	PY9..	8.272.745	15.129.620	9.200.589	13.155.361	15.183.657	9.397.345
	PY20/PY10⁺	8.302.745	15.182.120	9.200.589	13.531.811	15.183.657	9.397.345
NPV (SLL)		3.553.806	26.807.828	11.694.085	16.211.847	17.852.817	7.846.520
NPV (USD)		456	3.437	1.499	2.078	2.289	1.005.964
FIRR (@22%)		27%	67%	48%	42%	49%	40%
B/C		1,2	1,7	1,3	2,0	1,9	1,1

* plus side rotational cropping of vegetables 0,15 ha

+ for Rice is final PY 10 and other culture is PY20

** plus side rotational cropping of vegetables 0,15ha , plaintain 0,30 ha and cassava 0,30 ha

*** plus upland rice/1 ha

Profitability Financial Analysis

8. Below Table 4 provides Financial Analysis of the staple and cash crops/trees budget where reflected average yields per hectare, production and investment costs including labour for 1st year, average production and investment costs, including labour, average revenue per year and average incremental income (year 5) and overall average incremental income.

The highest average yield of 5 250 t/ha has been reached at the IVS rice double crop.

The average revenue per year was higher for IVS rice/double cropping (~19,9 million SLL/ha), following by oil palm new plantation (~ 12,5 million SLL/ha). The similar income has been noticed for cocoa gradual planting (~11,9 million SLL/ha), following by cocoa new plantation (~ 9,9 million SLL/ha) and IVS rice production(~9,9 million SLL/ha).

The average incremental income is between 4,6 million SLL per ha and 10,9 million SLL per ha in one year period. The highest value is for IVS Rice/double cropping at value of 10,9 million SLL per ha.

The production, investment cost, including labour (year 1) is the highest for IVS rice/one cropping and IVS rice/double cropping due to the following initial costs investment activities: land clearance, water control structures, leveling and finishing, head structure, cost of equipment's, seeds, fertilizers and administrative costs for SPs.

Table 4. Financial Analysis of Crops/Trees Budget (2018)

Model	Average Yield kg/ha*	Production & investment cost, including labour (year 1) SLL/ha	Average Production & investment cost, including labour SLL/ha	Average Revenue per year SLL/ha	Average Incremental income SLL/ha	Incremental income, (year 5) SLL/ha
IVS Rice	3.000	32.225.500	5.917.300	9.887.000	4.612.945	7.542.745
IVS Rice/double cropping	5.250	34.398.625	8.155.675	19.950.000	10.924.570	13.852.120
Cocoa Gradual Planting	847	2.628.976	1.253.067	11.895.140	6.730.085	5.079.692
Cocoa New Plantation	1.003	8.748.679	2.986.558	9.945.850	9.958.905	6.588.360
Oil Palm New Plantation	1.070	26.837.141	2.576.343	12.502.105	9.150.355	5.228.757

9. Table 5 provides Financial Profitability Indicators for crop/tree type and production, net present value/hectare, B/C ratio and return to family labour. The highest profitability for crop/tree is for IVS rice/double cropping with NPV of 26,8 million SLL/ha. The oil palm new plantation is the second highest profitable tree, with NPV of 17,9 million SLL/ha. According to B/C ratio cocoa new plantation pops out as the most profitable tree assuming project period of 20 years. The internal rate of return is highest for IVS rice/double cropping (67%), following by cocoa gradual plantation (48%) and at value of 42% for oil palm new plantation and cocoa new plantation. As expected, return to family labour is the highest for cocoa new plantation (~6,6 million SLL/ha) due to the high international demand for cocoa.

Table 5. Financial Profitability Indicators

Model	Net present value SLL/ha	Internal Rate of Return (%)	B/C Ratio	Return to family labour (SLL/day)
IVS Rice	3.553.806	27%	1,2	140.090
IVS Rice/double cropping	26.807.828	67%	1,7	146.461
Cocoa Gradual Planting	11.694.085	48%	1,3	2.531.260
Cocoa New Plantation	16.211.847	42%	2,0	6.588.380
Oil Palm New Plantation	17.852.817	42%	1,9	278.347

10. Calculations of the overall benefits from the investments in the project used following assumptions:

- i) Incremental benefits are estimated by comparison of the without project (WOP) and the with-project (WP) gross margins per hectare of a representative selection of the crops/trees.

- ii) *Project will support households on total area of 14 000 ha through direct investments packages for IVS rice, cocoa new plantation/replanting and oil palm new plantation. Below Table 6 shows total yield for the project period (rice 10 years and trees 20 years) in two scenarios (WoP and WP). Total yield in 10 years period for IVS rice is estimated at 247.500 mt under modest assumption that up to 25% farmers will do double cropping in a year. The WoP yield is estimated at 26.000 mt. Total yield for cocoa WP within 20 years is estimated to be 67.078 mt compared to WoP of 35.000 mt. Oil Palm WP yield over 20 years is expected to be 856.000 mt,*
- iii) *The project profitability analysis covers 16 districts at the national level.*

Table. 6. WoP and WP Total Yield Project Scenario

Crop/Tree	ha	HH	Total yield/WoP/mt	Total yield/WP/mt
IVS Rice	3.000	3.750	19.500	90.000
IVS Rice/double cropping	1.000	1.250	6.500	157.500
Cocoa	5.000	5.000	35.000	67.078
Oil Palm	4.000	4.000	-	856.000
Total				1.170.578

11. Project intervention will yield additional socio-economic benefits that are difficult to measure in quantifiable terms; therefore they are not included in the above analysis. However, they certainly amount to substantial socio-economic values.

12. Road Model: Project will finance 250 km of the rural roads at the targeted provinces (i.e.100 km of feeder roads and 150 km of farm tracks)

According to the scenario assumptions: (i) for each km of road impacted perimeter by the road is 3km, that means that for every km of road in total 20 km² are impacted by the road construction. Total area with road benefits in hectares is 2014 per 1 km of road. Since 250 km are planned to be constructed/rehabilitated total area with road benefits is 402.743 ha. (ii) 35% of the influenced area is assumed to be cultivated with average yield to be transported via new/rehabilitated roads. (iii) Approximately 35% of costs will be reduced due to the new/improved roads.

The average benefit due to the new/improved roads is estimated to be USD 0,773 million per year with repayment period between 7 and 8 years.

Economic analysis

13. Objective. The objectives of the economic analysis are: (i) to examine the overall Project viability, and (ii) to assess the Project's impact and the overall economic rate of return; and (iii) to perform sensitivity analyses to assess the benefits from a broad welfare perspective.

14. Sources. The data used in this analysis have been collected from various sources, including the Project Coordination Unit, other donor agencies and NGOs, local agricultural practitioners and analyst estimates. Additional data were collected through interviews with agro-processing experts. In particular, information was collected on labour and input requirements for various operations, investment costs, prevailing rural wages, crop yields, farm gate and market prices of agriculture products.

15. Key Assumptions. The physical inputs and productions established in the financial analysis provided the basis to determine the viability of the program investment in terms of opportunity costs and quantifiable benefits to the economy as a whole. The estimate of the likely economic returns from project interventions are based on the following assumptions: (i) Project life has been assumed at 20 years for cocoa and oil palm production and 10 years for IVS rice production activities; (ii) Project inputs and outputs traded are valued at their respective 2018 market prices, and goods are expected to move freely within the Project area in response to market demand; (iii) an economic discount rate of 16.5% has been used.

16. Exchange Rate. The official currency exchanges of the Sierra Leonean Leone (SLL) into foreign currencies are free. The exchange rate of SLL 7800 = USD 1 (average actual rate for September 2018) has been used throughout the present analysis.

17. Prices. Input and output prices are 2018 constant prices based on information collected from farmers, entrepreneurs, business proposals submitted/funded for/by on-going IFAD projects, the National Bureau of Statistics of Sierra Leone. Price estimates for tradable commodities have been based on the World Bank's Global Commodity Price Projections. All local costs were converted into their approximate economic values using a Standard Conversion Factor (SCF) of 1.11.

18. Cost of Labour. The standard salary for agricultural rural labour in the project areas is from SLL 20 000 to 25 000 per day (depending on work type and location). Given the lack of precise information on rural employment in the project area and consequently on the real opportunity cost of agricultural labour, a Shadow Wage Rate Factor (SWRF) of 0.95 has been used in the economic analysis to reflect the low opportunity costs of rural labour in the project area. Labour is assumed to be provided partly by the family and partly as hired temporary or seasonal labour. A list of financial and economic prices used in the analysis could be found at the Table 8.

19. Benefits. The analysis covers all recognizable quantifiable benefits generated by the Project. The incremental benefit includes increase in agricultural production due to the expansion of crop/tree plantation.

20. Costs. Costs included cover the Project base costs (as extracted from the COSTAB tables) with their physical contingencies but without taxes and price contingencies. Costs from Costab include all investment, operational, recurrent costs related to the activity and crop models (over the 20 years for trees and 10 years for rice cultivation).

21. Project Estimated Return. The analysis shows that the Project has the capacity to generate an economic rate of return (ERR) of 32% over 20-year period, in addition to many benefits that could not be quantified. Thus, the actual ERR will likely be higher than the 33% reported. The base case net present value of the Project's net benefit stream, discounted at 16.5%, is SLL 203,404 billion (USD 23,456 million).

22. Project Phasing. Table 7 shows the phasing and adoption rate of producers assuming 85% of the new beneficiaries will adopt the measures and 100% adoption rate has been assumed for inherited legacy farmers.

Table 7. Beneficiaries, Adoption Rate and Phasing

BENEFICIARIES, ADOPTION RATES AND PHASING								
	PY1	PY2	PY3	PY4	PY5	PY6	Total	Adoption rates
IVS Rice	909	1,136	1,136	568	0	0	3,750	
<i>Adjusted (adoption rate)</i>	773	966	966	483	0	0	3,188	85%
IVS rice/double cropping	303	379	379	189	0	0	1,250	
<i>Adjusted (adoption rate)</i>	258	322	322	161	0	0	1,063	85%
Cocoa Gradual Replanting	758	1,364	379	0	0	0	2,500	
<i>Adjusted (adoption rate)</i>	644	1,159	322	0	0	0	2,125	85%
Cocoa New Planting	758	1,364	379	0	0	0	2,500	
<i>Adjusted (adoption rate)</i>	644	1,159	322	0	0	0	2,125	85%
Oil Palm New Plantation	889	2,222	889	0	0	0	4,000	
<i>Adjusted (adoption rate)</i>	756	1,889	756	0	0	0	3,400	85%
Oil Palm/ Legacy Farmers	4,000	0	0	0	0	0	4,000	
<i>Adjusted (adoption rate)</i>	4,000	0	0	0	0	0	4,000	100%
IVS Rice/ Legacy Farmers	5,000	0	0	0	0	0	5,000	
<i>Adjusted (adoption rate)</i>	5,000	0	0	0	0	0	5,000	100%
Training on access to potable water, latrines and sanitation facilities	2,250	2,250	2,250	2,250	0	-	9,000	
<i>Adjusted (adoption rate)</i>	1,913	1,913	1,913	1,913	0	-	7,650	85%
Roads construction/rehab. Employment	0	444	667	667	222	0	2,000	
<i>Adjusted (adoption rate)</i>	0	378	567	567	189	0	1,700	85%
Nr of Targeted Beneficiaries							34,000	
Adopting Beneficiaries							30,250	

23. Economic Pricing: The economic analyses include the investment and incremental recurrent costs of Project components. The Project financial costs have been converted to economic values by removal of price contingencies, taxes and duties. In order to avoid double counting, the final aggregation considered only those costs that were not included in the financial models. Economic pricing was undertaken using the following assumptions: (a) the opportunity cost of labour is between SLL 19,060 /day and 23,825 /day (depending on work type), or equivalent to 95% of financial cost of labour, which is justified given rural unemployment; (b) the shadow exchange rate (SER) has been calculated at 1 USD = 8 672 SLL and (c) the standard conversion factor for the exchange rate has been calculated at 1.11; (d) the conversion factors for outputs and inputs have been calculated starting from FOB and CIF prices when data were available; when data were not available CFs were calculated starting from the financial price, deducting any duty or tax and multiplying it by the SCF; overall all CF vary between 0.94 (for imported inputs) and 1.113 (for exported inputs).

Table 8. Main Assumptions and Shadow Prices

MAIN ASSUMPTIONS & SHADOW PRICES					
FINANCIAL	Output (kg)	End Yield/ha	Price (SLL)	Input prices	Price (SLL)
	Rice (Nerica)		4.000,00	Rice improved seeds	2.800
	Cocoa, I grade		12.500,00	Fertilizer	7.000
	Oil Palm		1.110,00	Rural wage-family \p.d.	20.000
				Rural wage-hired \p.d.	25.000
				Feeder Road/km	15.600.000
				Farm track/km	78.000.000
				IVS Rice development/ha	29.328.000
				Cocoa Investment Package/ha	7.329.543
				Oil Palm Investment Package/ha	8.984.324
ECONOMIC	Official Exchange rate (OER)	7.800	Discount rate (opportunity cost of capital)		22%
	Shadow Exchange rate (SER)	8.672	Social Discount rate		16,5%
	Standard Conversion Factor	1,11	Output conversion factor		1,13
	Labour Conversion factor	0,95	Input Conversion factor		0,94

24. Furthermore, it has been assumed that after the 10th year, the incremental net benefits of each model will be the same as for the incremental net benefits obtained after the fifth year of the Project, when the cost of replacing/maintaining of some specific equipment is considered for most of the models.

Table 9. Conversion Factors

Standard Conversion Factor (SCF) for imported chemicals	0,94	SCF
Standard Conversion Factor (SCF) for exported agric/ products	1,13	SCF
Shadow Wage Rate Factor (SWRF)	0,95	SWRF

Table 10 provides information on total project costs (divided by component) and beneficiaries (divided by category).

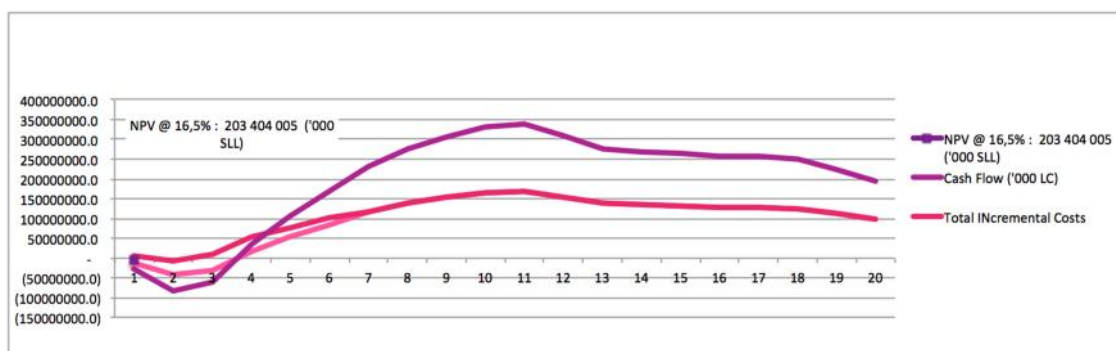
PROJECT COSTS AND INDICATORS FOR LOGFRAME				
TOTAL PROJECT COSTS (in million EUR)		60,3		
Beneficiaries	204.000 people	34.000 Households		
Cost per beneficiary	296 USD x person	1.774 USD x HH	Adoption rates	85%
Components and Cost (EUR million)		Outcomes and Indicators		
Comp 1.A. Climate Resilient and Smart Agricultural Production	37,9	up to 34 000 HH or 204 000 beneficiaries receiving services promoted or supported by project (40% women; 40% youth)	23 000 rural producers that are part of rural producer's organization	2 000 youth jobs created through road construction and
Comp.2.B. Agricultural Market Development	13,4	93 ABCs with improved capacity for service provision and 833 FOs supported	14 000 HH having access to production input or technological packages	support to 12 multi-stakeholders platforms
C.2. Project Coordination and Mangement Unit	9		23 000 HH trained in production practice and/or technologies	
Total	60,3	10 000 HH with improved access to potable water and sanitation	13 000 ha of land brought under climate-resilient management	250 km of kilometers of road constructed, rehabilitated or upgraded

Table 11. Economic Analysis

		NET INCREMENTAL BENEFITS						Net Incremental Costs	Cash Flow	
		IVS Rice*	IVS Rice/double cropping*	Cocoa Gradual Replanting **	Cocoa New Planting**	Oil Palm New Plantation***	Roads	Total Net Inc. Benefits	Economic Investment + O&M Costs	Net Incremental benefits
E C O N O M I C A N A L Y S I S	PY1	(6.763.825)	(1.652.260)	(676.528)	(1.476.325)	(2.356.129)	-	(12.925.067)	19.649.534	(32.574.600)
	PY2	(21.388.356)	(4.352.785)	(2.988.081)	(5.397.356)	(8.561.894)	1.398.336	(41.290.135)	34.258.124	(75.548.259)
	PY3	(12.861.951)	961.117	(4.837.950)	(5.417.661)	(7.322.376)	(161.627)	(29.640.447)	39.593.910	(69.234.357)
	PY4	13.896.008	11.176.831	(3.067.169)	747.833	5.879.417	(9.906.337)	18.726.582	34.408.147	(15.681.565)
	PY5	21.413.739	14.512.712	2.386.796	6.321.256	16.116.283	(7.194.794)	53.555.993	24.463.275	29.092.718
	PY6	23.349.449	15.690.471	9.142.564	11.171.018	20.965.260	3.643.086	83.961.848	16.917.902	67.043.946
	PY7	29.063.669	17.925.709	14.766.333	17.369.981	28.057.556	8.955.669	116.138.918	-	116.138.918
	PY8	30.253.462	18.619.755	19.256.571	22.848.605	37.431.798	8.955.669	137.365.860	-	137.365.860
	PY9	30.517.860	18.773.987	22.819.221	25.884.866	46.379.938	8.955.669	153.331.541	-	153.331.541
	PY10	30.659.172	18.856.419	24.974.605	27.062.861	54.475.874	8.955.669	164.984.601	-	164.984.601
	PY11	27.735.928	17.054.003	26.006.194	27.928.486	60.973.928	8.955.669	168.654.210	-	168.654.210
	PY12	16.962.138	10.429.127	26.413.743	28.409.408	63.424.014	8.955.669	154.594.099	-	154.594.099
	PY13	6.165.565	3.790.960	26.590.456	28.469.545	64.276.218	8.955.669	138.248.413	-	138.248.413
	PY14	3.082.782	1.895.480	26.644.579	28.505.627	65.021.896	8.955.669	134.106.034	-	134.106.034
	PY15	1.543.669	949.069	26.644.579	28.535.695	65.021.896	8.955.669	131.650.578	-	131.650.578
	PY16			26.644.579	28.535.695	65.021.896	8.955.669	129.157.839	-	129.157.839
	PY17			26.644.579	28.535.695	65.021.896	8.955.669	129.157.839	-	129.157.839
	PY18			26.644.579	28.535.695	61.613.081	8.955.669	125.749.024	-	125.749.024
	PY19			26.644.579	28.535.695	48.830.024	8.955.669	112.965.967	-	112.965.967
	PY20			26.644.579	28.535.695	33.490.355	8.955.669	97.626.299	-	97.626.299
		NPV@ 16,5% ('000 SLL)				203.404.005,31	<i>* plus side rotational cropping of vegetables 0,15 ha</i>			
		NPV@ 16,5% ('000 USD)				23.455,68	<i>** plus side rotational cropping of vegetables 0,15ha , plaintain 0,30 ha and cassava 0,30 ha</i>			
		EIRR				32%	<i>*** plus upland rice/1 ha</i>			

Chart below depicts and compares over time project's net benefits and incremental costs alongside project cash flow. The data is based on total flows (benefit, cost and cash flow) from table 11. Economic Analysis

Chart 2. Time dynamics for total net's benefits, incremental costs and cash flow



26. Sensitivity Analysis. In order to test the robustness of the above results, a sensitivity analysis has been carried out, the outcomes of which are presented in Table 12 below. The sensitivity analysis investigates the effect of fluctuations in Project costs, benefits and delays in implementation on the NPV and EIRR. It shows the economic impacts that a decrease in project benefits - of up to -20% - will have on the project's viability. Similarly, it shows how the economic viability of the project will be affected with an increase - of up to +20% - in project costs and with one and/or two years delay in project implementation. A sensitivity analysis shows that the EIRR drops to 22% with an increase in project costs of 20%. The increase of costs of 10% yields a high EIRR of value of 24%, and a delay of project aggregate benefits by 1 to 2 years still yields a high EIRR. Finally, the analysis shows that the economic viability of the project remains attractive by preserving positive NPV and EIRR in each case.

Table 12. Sensitivity Analysis

SENSITIVITY ANALYSIS (SA)					
		Δ%	Link with the risk matrix	IRR	NPV ('000 SLL)
Base scenario				32%	203.404.005,31
Project benefits		-10%	Combination of risks affecting output prices, yields and adoption rates	23%	172.664.168,89
Project benefits		-20%		22%	141.924.332,48
Project benefits		-50%		16%	49.704.823,23
Project costs		10%	Increase of construction material prices	24%	193.004.569,42
Project costs		20%		22%	182.605.133,54
Project costs		50%		20%	151.406.825,89
1 year lag in ben.			Risks affecting adoption rates and low implementation capacity	22%	155.915.758,17
2 years lag in ben.				20%	114.532.485,93

Appendix 3: Social Environment and Climate Assessment

A. Major landscape characteristics and issues (social, natural resources, and climate)

Socio-cultural context

1. Poverty remains widespread in Sierra Leone where the impacts of the decade long civil war are still felt 15 years on in the form of devastated social and physical infrastructure. In 2016 the country ranked 179 out of 188 (0.420) in UNDP's Human Development Index (HDI), poverty is widespread with 81.4% of the working population living on less than US\$ 3.10 per day and 65% of people aged 15+ are employed. Sierra Leone also has a 48% literacy rate for people aged 15 and older. Overall the country has one of the highest inequality levels globally, gender inequality is also rated as one of the world's worst.²³
2. Sierra Leone's land sector is described as chaotic and increasingly unsustainable, with the main problems including inequitable access to and a shortage of, accessible land. The absence of a registration system, cadastral mapping and information, overlapping jurisdictions for statutory and customary law undermine rights and access to land. Customary practices for land ownership and inheritance discriminate against women and the lack of defined women's rights to land under communal ownership mean that women are not consulted in management, purchase or selling of land. Women are also not sufficiently represented in institutions that deal with land and the international conventions dealing with women's rights have not been translated into law or national policies. Violent conflict relating to land is not uncommon, but conflicts and competition over land also extend to between line ministries, local authorities and chiefdom institutions.²⁴

Natural resources and NRM

3. Sierra Leone is a relatively small country. It has a land mass of about 72,000 km² and is located within the Upper Guinean Rainforest eco-region. The climate of Sierra Leone is described as wet tropical, marked by distinct wet and dry seasons. Sierra Leone has nine major river systems from north to south including the Great Scarcies, Little Scarcies, Rokel, Jong, Sewa, Moa and Mano Rivers. The country is divided into four main relief regions: coastline, interior lowland plains, interior plateau and mountains, each of which can be subdivided into a number of ecosystems. The coastline or coastal plains is relatively gentle and comprises estuarine swamps, terraces, alluvial plains and beach ridges. The interior lowland plains extend from the coastal terraces in the west to the east of Sierra Leone, occupying approximately 43% of the land area. At the edge of the lowland plains are the interior plateaus, made up of granite that runs from the northeast of the country to the southeast. The integrity of all these natural ecosystems and also the various agro-ecosystems are vital to ensure the ecosystem services upon which the population of Sierra Leone depend.²⁵
4. Biodiversity loss is one of the major problems undermining sustainable development in Sierra Leone. Total forest cover in Sierra Leone amounts to 38% of total land area although only 5% is original forest cover. Annual deforestation between 1990 and 2010 has been at a rate of 20,000ha per year²⁶. Agriculture comprises 48% of GDP and sustainable management of biodiversity has important implications for food security and poverty reduction. The main direct causes of land degradation in Sierra Leone are logging, firewood collection, mining, charcoal production, tree crop plantation, settlement expansion and the slash and burn practice used in shifting cultivation. The primary indirect causes are extreme poverty, corruption, low public awareness and weak institutions.
5. Forestry protection in Sierra Leone is very weak and facing constant threats posed by corruption, weak governance structures both at the legislative level as well as on the ground monitoring and sanctioning of illegal logging and general lack of awareness among farmers. MAFFS reported

²³<http://hdr.undp.org/en/countries/profiles/SLE>

²⁴Republic of Sierra Leone (2015) National Land Policy.

²⁵EU (2006) Sierra Leone - Country Environment Profile.

²⁶FAO(2010). Global Forest Resource Assessment. Country Report Sierra Leone. FRA 2010/189.

during the design mission, that protected areas and the 1km buffers are under constant threat from slash and burn practices and plantations. Slash and burn is a standard practice carried out by extremely poor farmers to clear land typically around 2ha for the cultivation of rice, vegetables, firewood and charcoal production.

Climate

6. The country is characterised predominantly by a hot and humid climate with distinct wet and dry seasons. The wet season from May to October sees an average of 3000mm of precipitation with coastal areas receiving as much as 5000mm. The dry season is characterised by dusty, hot harmattan winds and drought conditions, with temperatures ranging between 25-27° and 22-25° during the wet season.²⁷ Seasonal rainfall in West Africa varies considerably on inter-annual and inter-decadal timescales, due in part to variations in the movements and intensity of the Inter Tropical Climatic Zone (ITCZ). Current mean annual rainfall however has decreased to its lowest levels since the 1960s.²⁸
7. Sierra Leone is the third country worldwide least able to adapt to the adverse effects of climate change²⁹ after Bangladesh and Guinea-Bissau. Influencing factors include their high dependence on rain-fed agriculture and natural resource-based livelihoods. Farmers, while unaware of the meaning of climate change, have been found to already consciously adapt their farming practices. They have reported experiencing changes in rainfall patterns with rain in the dry season and dry periods in the rainy season. Climatic changes have manifested in more intense rainfall patterns with more frequent severe floods and seasonal droughts, late onset of rains, rising temperatures, particularly in the dry season, stronger winds including reports of local tornadoes, more intense thunderstorms and more frequent landslides.
8. Climate predictions estimate that maximum temperatures in Sierra Leone will increase inland by up to 2.6°C by 2060.³⁰ The country is predicted to see a reduction in climate suitability for cocoa production by up to 20% in the more suitable southern districts and up to 40% in the drier north-eastern upland districts by 2050.³¹ High yield cocoa production is a temperature sensitive commodity and IFAD investments will face productivity challenges should the project support rehabilitating old or extending new plantations in areas that are on the fringes of suitable growing climate.

Key issues identified for the project

- Maximum temperature increases pose an increased risk to high yielding cocoa crop production.
- Despite FFS training, farmers continue to apply too much fertilizer, at the wrong time, increasing waste and GHG emissions, and reducing productivity.
- Deforestation is a serious and chronic problem for Sierra Leone.
- The construction of feeder roads has been found to have overlooked their environmental impacts by obstructing IVS drainage areas and causing waterlogging of rice fields.
- Land tenure rights for the rural poor are weak to non-existent. Farmers are frequently displaced by landowners after land improvement interventions have taken place.
- Gender inequality in Sierra Leone is a serious issue; women have no land rights and are underrepresented in land decision-making institutions.

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

²⁷Republic of Sierra Leone (2012). Second National Communication on Climate change.<http://unfccc.int/resource/docs/natc/slenc2.pdf>

²⁸UNDP Climate change Country Profiles (undated) http://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Sierra_Leone/Sierra_Leone.hires.report.pdf

²⁹http://reliefweb.int/sites/reliefweb.int/files/resources/Climate_Change_Vulnerability_Index_%202014_Map.pdf

³⁰http://sdwebx.worldbank.org/climateportalb/home.cfm?page=country_profile&CCode=SLE&ThisTab=RiskOverview

³¹Götz Schroth et.al. (2016). Vulnerability to climate change of cocoa in West Africa: Patterns, opportunities and limits to adaptation. *Science of the Total Environment* 556. 231–241.

Potential social impacts

9. It has been broadly reported that there are gender segregations within the agricultural sector in Sierra Leone where men and women traditionally perform different farming activities. Women tend to be generally engaged in crop farming and poultry, while men dominate livestock, hunting, forestry and fishing. Within this gender division of labour, women have reportedly focused on crops such as cassava groundnut, maize, potato and vegetables and those mostly grown by men are coffee, cacao, rice and oil palm. Women also play a significant role in the processing and distribution of fish products by handling, preserving, processing, storing and transporting fish. According to the 2015 census, there is a greater percentage of female farmers in Sierra Leone (61%) compared with male farmers (53%) working in agriculture.³²
10. The AVDP target groups are smallholder farmers through FBOs, ABCs including cooperatives, it will partner with financial institutions, small scale rural entrepreneurs and women and rural youth (18 – 35 years). Female-headed households with recognised land access entitlement will comprise 40% of the targeted beneficiaries and youth consisting of 20% with granted inheritance rights. The project will include female led tree crop farms and will emphasise the integration of vegetable growing during the end of the IVS rice-cropping season, as these are typically women managed.
11. The project will focus on the rehabilitation of both IVS and tree crops while also expanding existing tree crop farms and using existing storage facilities, therefore it poses no risk of encroaching on culturally sensitive sites. The rehabilitation of roads will also be coordinated with local communities and take the existence of culturally important sites into account. SECAP's Free Prior and Informed Consent (FPIC) will be applied by the project prior to any project activities on community land.
12. The project will be careful that labour demand from any AVDP activities does not result in the employment of children in violation of national and international laws and agreements. It will also be careful to ensure that project activities will not result in health hazards for farm owners, their families or workers including in the use of agrochemicals.³³

Potential environmental impacts

13. Expanding tree crop plantations because of project activities could result in direct deforestation through tree crop farms expanding into forest land, or indirect deforestation where new tree crops displace other vegetable crops in the same farm, which in turn cause deforestation. In partnership with the Adaptation Fund and FAO, the project will build in safeguards through carrying out regular mapping of plot sites and monitoring of land use and forest cover by third party contractors. The maps generated will be compared with FAO's new database on protected forests to ensure that IFAD activities will not cause direct or indirect deforestation of designated protected forests.
14. The rehabilitation of feeder roads are essential to sustain the market linkages of the core commodity value chains supported by the AVDP, but also to community and local economies at large. Lessons have been learned from the RCPRP project that greater attention needs to be paid to the environmental impact of such large-scale infrastructure projects to avoid obstructing IVS drainage areas which cause water logging of otherwise arable land. The AF will support the carrying out of Environmental Social Impact Assessments that will be conducted in accordance with EPA procedures to ensure planned activities such as culverts are included in the design and implementation of the feeder roads. The EPA will also be invited and supported to conduct supervision of construction to ensure ESIA compliance.
15. One of the potential environmental impacts is that of incorrect agrochemical use. Fertiliser use is limited in Sierra Leone but for rice farmers it is made available by MAF through a one bag for two bushels of rice basis. Farmers receive FFS training in agrochemical use although interviews with

³²Government of Sierra Leone (2015). Population and Housing Census. https://www.statistics.sl/wp-content/uploads/2017/01/final-results_-2015_population_and_housing_census.pdf

³³The project will apply the appropriate methods of pesticide management of the International Code for the Distribution and Use of Pesticides of the FAO. The project will ensure that pesticides provided within the frame of the project do not include those classified as extremely dangerous (class Ia) or very dangerous (class Ib) as per WHO and SECAP guidelines.

District Agricultural Officers (DAOs) revealed that farmers are still over-applying fertilisers and applying them at the wrong time, for example on already green rice instead of growing shoots in the mistaken belief that this will further improve rice productivity, instead of damaging it. Based on the experience with the Tree Crops Extension Project (TCEP) in Liberia and with the support of the AF, the AVDP will partner with MAF through a MoU to train a lead farmer per community to educate and monitor his or her community members on the correct application of fertilisers to reduce crop damage and fertiliser waste, reduce indirect GHG emissions and improve productivity.

16. To reduce farmer vulnerability to rain-fed agriculture and hereby climate change, the AF will support the upscaling of GEF supported earth dam pilots under the RCPRP. This will aim to provide a perennial source of water hereby typically supporting 120 farmers per dam to double or triple crop rice in 10ha each of land in the more arid upland regions. The construction of the new dams will be based on the lessons learned from the pilot, which included structural problems of overflow due to a miscalculation of water quantities and causing flood damage. Other problems have included dams running dry during the dry season or dams being located too far from the IVS. These are all problems that have been identified and could have been avoided. The lessons learned will be incorporated into the new AVDP design through the usage of improved materials and improved site selection and design, previously constructed dams will also be repaired.

Climate change

17. Projected climatic changes as described under paragraphs 6-8 signify that Sierra Leone will suffer increasingly reduced climatic suitability for cocoa crops over the next 30 years. Maximum temperatures will increase and while overall precipitation is not projected to change significantly, the annual rainfall pattern and intensity will. This could result in increased risk of droughts during the wet season and rain during the dry season. Increased intensity when coupled with land clearing means a greater risk of surface runoff and topsoil erosion, increased risk of river damage to road infrastructure and increased risks of landslides.

Adaptation to Climate change

18. The identified climate change risks, if not mitigated against or adapted to will likely reduce the impact of the proposed investments by the Government of Sierra Leone and IFAD through reduced yields, and potential damage to soil fertility and infrastructure.
19. The AVDP project activities will build climate resilience and environmental management plans into the project also with the co-financing of the Adaptation Fund. The activities are:
 - Tree crop GPS mapping and monitoring at baseline, MTR and completion to monitor encroachment into protected areas.
 - Planting of high yielding new tree crops will consider local environmental impacts from agrochemical inputs, soil exhaustion, reduction of soil moisture capacity and excessive de-shading of natural forest trees and use climate resilient planting materials and intercropping.
 - Climate risk mapping at baseline.
 - Supporting SLARI in: Establishing a clonal cocoa seed garden, distributing one million cocoa seedlings, developing best practice guidance to adapt to climate risk for cocoa farmers through manuals, extension training and sending staff for training in best practices for climate change adaptation.
 - Climate vulnerability and participatory mapping analyses for earth dam site location.
 - Construction of 30 earth dams nationwide targeting seasonal IVS to reduce climate vulnerability.
 - Setting up of Dam Management Committees (DMC) established for monitoring and maintenance.
 - Procurement of climate resilient nerica rice, support farmers with technical assistance and agricultural inputs, support field extension workers, provision of agricultural equipment, training for local rice producers on best adaptation practices.
 - Support the training of village leaders in monitoring correct agrochemical use for reduced GHG emissions and increased productivity.
 - Environmental best practices and CC awareness training by EPA to all members of the value chain platforms.

- Carry out ESIA's of feeder roads as per EPA requirements including studies, hydrological surveys, the construction of culverts and bridge strengthening.
- Rural finance research exploring the viability of crop and weather index insurance; exploring the viability of green rural finance to support renewable technologies like solar, water harvesting, solar cook stoves, efficient biomass burners and cooking gas from bio-digesters.

Adaptation Fund only funded activities

20. The AF will also implement additional independently financed activities to assist Sierra Leone to meet the costs of adaptation activities and increase resilience at the community and national levels. The activities are:

- Use the University of Njala's FAO sponsored curriculum to train trainers in climate smart agriculture and pilot 64 2ha. plots of land.
- Train Barefoot Women³⁴ as solar technicians and install solar electrification in rural villages.
- MoU with MAFFS to plant sustainable Acacia forestry plots for charcoal and furniture, raise awareness against slash and burn, pilot low cost-efficient charcoal kilns.
- Support alternative forestry livelihoods: honey bee and snail farming, aquaculture in earth dams and small ruminants.
- Complete the GEF project to support the Meteorological Department by developing a governance management plan to successfully and sustainably operate the automatic weather stations that have already been built, provide capacity building training, install a base station and weather forecasting software, support the development of an Early Warning System service to farmers. If successful construct more weather stations.
- Support EPA in a climate change awareness raising programme.

21. By taking climate mitigation and adaptation measures the project will be reducing the exposure of project interventions to the deleterious effects of climate change.

C. Environmental and social risk category

Anticipated negative environmental impacts.	Proposed mitigation measures.
The construction of feeder roads has been found to have overlooked their environmental impacts and obstructed IVS drainage areas, causing waterlogging of rice fields.	ESIA's will be conducted in accordance with EPA procedures to ensure planned activities such as culverts are included in the design and implementation of the feeder roads. The EPA will also be invited and supported to conduct supervision of construction to ensure EIA compliance.
Expanding tree crop plantations as a result of project activities could result in direct or indirect deforestation.	The project will build in safeguards through carrying out regular mapping of plot sites and monitoring of land use and forest cover by third party contractors.
The focus on high yielding cocoa will risk greater environmental trade-offs.	Special attention will be paid to local environmental impacts from agrochemical inputs, soil exhaustion, reduction of soil moisture capacity and excessive de-shading of natural forest trees. Rather than the pursuit of maximum yields, the AVDP will temper this approach with climate resilient planting materials and intercropping.
IVS rice farmers are still over-applying fertilisers and applying them at the wrong time hereby increasing waste and negative environmental impacts.	A lead farmer per community will be trained to educate and monitor his or her community members on how to correctly apply fertilisers to reduce crop damage and fertiliser waste, reduce indirect GHG emissions and improve productivity.
Earth dam structural problems include: overflow due to bad design causing flood damage; dams running dry during the dry season; dams being located too far from the IVS.	Through a lessons learned exercise, problems have been identified and will be incorporated into the new AVDP design through the usage of improved materials and improved site selection and design processes. Previously constructed dams that require corrective adjustments will be prioritised.

³⁴Barefoot Women Solar Engineers is a local NGO that trains illiterate women as solar PV engineers to set up small businesses to install and repair solar electrification in their villages.

<p>Gender inequality in Sierra Leone is one of the worst globally. Women have no land rights and tree crops are typically managed by men. There is a risk of gender and youth exclusion.</p>	<ul style="list-style-type: none"> • Female-headed households with recognised access entitlement to farm tree crops as primary farmers should comprise 30 per cent of the selected beneficiaries. • 10% of the female quota should be for vulnerable women without recourse to necessary land security needed for tree crop farming • Youth inclusion should be 20 per cent of the selected community beneficiaries and they should be granted inheritance rights to be recognised as primary tree crops farmers. Their roles should be as primary farmers, not as assistants or as paid casual labour, and the youth farmers should be designated by their families as the farm owners.
<p>Increased labour demand could result in the inappropriate use of child labour.</p>	<p>The youth target group is 18-35 years. Children younger than 18 will be excluded from taking part in project activities.</p>
<p>Farmers are frequently displaced by landowners after land becomes profitable.</p>	<p>All farmers will need to be able to demonstrate land ownership rights.</p>

22. The potential environmental and social risks posed by the AVDP project are limited and constrained to feeder road rehabilitation, rice production, small-scale irrigation and drainage, fertiliser usage and agricultural rehabilitation of cocoa and oil palm. The project will not have any negative impacts such as the involuntary taking or restriction on the use of land resulting in physical or economic displacement or negatively affect indigenous peoples or sites of historic, religious or cultural significance. The project is rated as a 'category B' project, which means that no formal Environmental and Social Impact Assessment (ESIA) will be required. Further analysis and environmental management plans will however be mainstreamed throughout project design and implementation and be largely covered by the Adaptation Fund funded activities.

D. Climate risk category

23. In line with the SECAP guidelines on Climate Risk Assessment, the project has been classified as a high-risk category. This classification is based on the fact that Sierra Leone is classified as one of the Least Developed Countries (LDC) least able to adapt to climate change. The project target group is totally dependent on climate-sensitive natural resources such rain-fed agriculture and it is vulnerable to the increase in unpredictable rainfall patterns and increases in temperature, all of which is also predicted to reduce climate suitability of high yield cocoa varieties by up to 40%.³⁵ Funding from the climate change Adaptation Fund will be sought to address some the causes of the elevated vulnerability to climate change.

24. Safeguards against the outlined climate vulnerabilities will be built into the AVDP project including through the activities of the AF. These will notably be the provision of climate resilient NERICA rice, a climate vulnerability mapping exercise to identify locations for the construction of up to 40 earth dams and help an estimated 5,000 farmers harvest sufficient water to double or triple crop rice and cultivate vegetables. Nationwide climate risk mapping will help in the identification of climate safe areas for cocoa production, SLARI staff will receive training in best practices for climate change adaptation. Farmers will receive training in correct fertiliser use to reduce unnecessary waste and indirect GHG emissions. ESIA's will be conducted on the potential environmental impact of the feeder roads and the likely impact climate change will have. To this end culverts will be built and bridges reinforced against increased river erosion and the EPA will be invited to monitor ESIA compliance. The EPA will also be invited to carry out climate change awareness raising activities for all actors of the value chain Platforms. Research will be carried out to explore the viability of weather and crop insurance programmes as well as green rural finance.

E. Recommended features of project design and implementation

³⁵Götz Schroth et.al. (2016). Vulnerability to climate change of cocoa in West Africa: Patterns, opportunities and limits to adaptation. Science of the Total Environment 556, 231–241

Mitigation measures

25. The AVDP will be co-financed by the Adaptation Fund to mainstream environmental management and to reduce the expected impacts of an increasingly variable climate. Together they will:
- Map and monitor tree-crop plantations at baseline, MTR and at completion stages of the AVDP.
 - Finance a climate change risk assessment for cocoa to minimise the risk to tree crop investments from temperature increases.
 - Support the Kenema Forestry and Tree Crop Resource Centre (KFTCRC) SLARI to establish a clonal cocoa seed garden; produce grafted seedlings of high yield variety of cocoa with capacity to distribute one million cocoa seedlings; to develop best practice guidance materials to reduce climate risk for cocoa farmers through manuals and extension training and send staff for training in best practices for climate change adaptation.
 - Reduce the negative environmental impact from pursuing high-yielding cocoa by following environmental safeguards on impacts from agrochemical inputs, soil exhaustion, reduction of soil moisture capacity and excessive de-shading of natural forest trees, promoting intercropping and climate resilient planting materials.
 - Procure climate resilient nerica rice.
 - Carry out a climate vulnerability mapping exercise to identify climate vulnerable communities and IVSs and construct up to 40 earth dams.
 - Train farmers to minimise agrochemical use and increase production of rice.
 - Partner with the EPA to train players along the value chains on environmental best practices and raise climate change awareness.
 - Carry out an ESIA of feeder road construction plans, carry out climate risk analyses and build culverts to drain excess IVS water and reinforce bridges for increase river flow.
 - Carry out research to explore the potential of the greening of rural finance and climate insurance in Sierra Leone.

Multiple benefits approach

26. Several of the project activities have multiple benefits that will be implemented:
- Reduced de-shading of tree crops will protect them from climate extremes and will also enable the farmers to diversify their crops through intercropping with vegetables, hereby increasing food security and nutrition whilst increasing women participation.
 - Opportunities for green growth will be explored through research papers on crop and weather index insurance as well as the potential of greening rural finance.
 - Biodiversity will be maintained through the mapping of existing and planned tree crop farms. The maps will be compared with FAOs new protected forests database.

Incentives for adoption

27. Several elements of the project lend themselves to incentivise farmers for the adoption of best practices. Notably the project will, through a participatory process, support local communities with the construction of earth dams. This will encourage farmers to engage in productive IVS agriculture in the farming of climate resilient rice, but also vegetables. Farmers will be motivated to participate in the FFS training where they will be educated in farming best practices, including correct agrochemical use. The earth dams will be constructed through the innovative approach used under the RCPRP to create Service Providers (SPs) who in turn work with IVS associations on a systematic basis and with Youth Contractors (YCs) selected by the associations. IVS farmers will also be supported with technical assistance, agricultural inputs, demonstration sites for training through FFS.

Participatory processes

28. Participatory processes will be mainstreamed throughout project implementation. It will form the basis of all interactions with the beneficiaries, which are essential to effectively support the target groups as well as to foster social inclusion. With a participatory approach, community groups can

devise checks and balances that work in the absence of literacy. In addition, the programme shall take measures to avoid or reduce elite capturing of activities and funding

29. Earth dam construction will be based on a climate change vulnerability mapping exercise which in turn will happen through an on the ground participatory process as well as with GPS mapping. The selection of farms and roads to be rehabilitated will also be made in full participation with communities and other stakeholders (FBOs, ABCs, cooperatives, local government) in line with the FPIC principles.

F. Analysis of alternatives

30. The traditional approach to cocoa tree crop farming in Sierra Leone has been by default organic farming, this has been primarily due to a lack of agrochemical availability. Based on the analysis of the approach thus far, the outcome has been to focus on high-yielding cocoa varieties. This has environmental implications of increased agrochemical use, the exhaustion of already poor soils and the excessive de-shading of natural forest trees. On the basis of this analysis the project decided to use climate resilient planting materials and intercropping instead of pursuing maximum yields.
31. Under the RCPRP project, farmers were encouraged to abandon the destructive shifting agriculture practice typically employed in the uplands. The abandonment of slash and burn was encouraged through the promotion of climate resilient rice growing in the IVSs. Slash and burn is practiced by the extremely poor farmers and involves blanket burning to clear forestland to grow rice, vegetables, produce firewood and charcoal. The AVDP design mission has discovered however that farmers working the IVS will still continue their upland agricultural activities for typically 40% of the time during the dry season. To discourage this, the project will introduce vegetable growing for the tail end of the growing season to discourage the continued environmentally destructive practices.

G. Institutional analysis

Institutional framework

32. Project activities will include mitigation actions for several identified environmental, social and climatic risks. Although the activities will be largely financed by the AF, the institutional responsibilities for their implementation will remain with the AVDP project staff at the NPCU and their respective national partners. Partnerships will be sought with MAFFS, EPA, SLRA, SLARI, Service Providers and engagement with farmers through FBOs, ABCs.

Capacity building and additional funding

33. Environmental best practices and climate change capacity building financed by the AF will form an important pillar of building climate resilience into the AVDP. SLARI staff will be supported through the provision of training in best practices for climate change adaptation with Ghana Cocoa Board (Cocobod) and the Cocoa Research Institute of Ghana (CRIG); climate resilient rice farmers will be trained through the FFS to minimize agrochemical waste and improve production; all value chain players participating in the Platforms shall have the possibility to receive environmental best practices and climate change awareness training provided by the EPA; farmers agreeing to the construction of earth dams will receive FFS training in agricultural and hydrological best practices.

H. Monitoring and evaluation

34. The indicators related to building climate resilience into the AVDP have been included in the logical framework and the activities related to environment and climate will be monitored throughout project implementation, at mid-term review and at project completion stages.³⁶
35. During these missions particular attention will be paid to the following indicators:
- Number of hectares of land brought under climate-resilient management.
 - Percentage of persons/households reporting adoption of environmentally sustainable and climate-resilient technologies and practices.
36. Strong synergies with the M&E framework of the project will be further ensured through the mapping and collecting of GPS coordinates of all tree crop farms. Supervision missions as well as MTR and PCR missions will ensure that these activities are being/have been undertaken and appropriately filed for ease of access. Particularly, it will be verified that the FAOs forest database has been consulted with GPS coordinates to ensure protected forests have not been encroached upon.
37. Based on the lessons learned exercise from the GEF IACCAPFS Terminal Evaluation Report, the NPCU will ensure sufficient resources and procedures are in place to fulfill the Adaptation Fund's M&E requirements. This will include a systematic collection and central recording of all AF beneficiaries and the project units will have a functioning and cataloged cabinet filing system. It will be ensured that the M&E will not focus solely on output level results but that sufficient emphasis will be placed on the outcome level, to enable the timely identification of underperforming activities.

I. Budgetary resources and schedule

38. The Adaptation Fund will build climate resilience and environmental management plans into the AVDP project with a projected budget of US\$10.0 million. The in-depth climate risk analyses required by SECAP will be met by the tree crop mapping activity, the nationwide climate risk mapping for cocoa suitability and the climate vulnerability mapping for the location of earth dams.

J. Consultations with beneficiaries, civil society and public at large

39. The list of stakeholders that has been met by the design team is in the annex of the design document. Meetings were held with farmers, FBOs, ABC, district officers for MAFFS, EPA, University professors at the University of Njala, ministerial representatives in Freetown, as well as key UN agencies.

Guiding questions for climate risk screening.

Question	Yes	No	Additional explanation of 'Yes' response
Is the target group of the project dependent on climate-sensitive natural resources (such as drought-prone crops, rainwater-fed agricultural plots, migratory fish stocks)?	X		The target group is dependent on rain-fed farming and specifically tree crops that are sensitive to extreme temperatures. Staple crop farming in the uplands is vulnerable to changing rainfall patterns.
Has the project area been subject to extreme weather events in the past, such as flooding, drought, tropical storms, or heat waves?	X		Sierra Leone is acknowledged to be vulnerable to heat waves, flooding and altered rainfall patterns.
Could changes in temperature, rainfall, or extreme weather affect the project impact, sustainability or cost over its lifetime?	X		The IPCC predicts that without adaptation, tropical regions will experience negative impacts in the production of wheat, rice and maize

³⁶ Separate indicators for the Adaptation Fund project will also need to be monitored by the NPCU staff and supervision missions.

			due to temperature increases. Cocoa suitable climate is projected to gradually reduce.
Will climate variability likely affect agricultural productivity within the project (crops/ livestock/fisheries) or incidence of pests and diseases?	X		Drier wet seasons, wetter dry seasons and more intense rainfall will increase the challenges faced by the farmers to plan their cropping seasons.
Would weather-related risks or climatic extremes adversely impact upon key stages of identified value chains in the project (from production to markets)?	X		Drying, storage and transport of products to market could suffer from the changes in the dry season, unless better use is made of already available storage.
Does the project have potential to integrate climate resilience measures without extensive additional costs (such as applying improved building codes; expanding capacity building programmes; or including climate risk issues in policy processes)	X		The proposed adaptation measures are generally low-cost and build on synergies with other benefits such as intercropping and shading.
Would the project benefit from a more detailed climate risk and vulnerability analysis to identify the most vulnerable rural population, improve targeting and identify additional complementary investment actions to manage climate risks?	X		Yes, there are currently no known climate change vulnerability assessments for Sierra Leone available to the project.

Appendix 4: First Annual Work Plan and Budget

1. The AVDP has front loaded many substantive activities during the first 18 months of program implementation in order to accommodate the lag time between initial investment and returns notably for tree crop plantation establishment. It is thus critical that the AVDP hits the ground running to meet the project's ambitious program of work. It is also critical that the AVDP establish close working relations with the SCADeP and WAATP programs given the interlocking nature of the three projects.
2. At project start-up, AVDP will recruit personnel and establish the project office, based on guidance from the MAF. During the first six months, start-up workshops will be organized in Freetown and the provinces to present the project to key stakeholders and receive feedback on the proposed activities and timing. A baseline study will be implemented under the direction of the AVDP M&E Team to establish reference points from which to assess project progress.
3. For Inland Valley Swamp development, the first tranche of earthen dams will be constructed, some 1000 hectares of IVS will be developed and solar powered boreholes will be piloted and tested during the early part of the project. All major investments in the SLARI Clonal Garden for improved cacao seedlings will occur during this period in order to produce and distribute high yielding seedlings as early as possible to project beneficiaries. One thousand hectares of both cacao and oil palm plantations will be established during the first 1.5 years. Support for Farmer Field Schools will be initiated in the early stages of the project to ensure continuity of training. The first tranche of ABC business plans will be elaborated and submitted to RFIs and the AVDP Matching Grant Fund for approval and disbursement.
4. An international subject matter expert will lay groundwork for the establishment of provincial level multi-stakeholder commodity platforms through field assessments and subsequent development of a guidance note. The consultant will facilitate the first round of platform meetings and will mentor and train the AVDP's Agribusiness Expert. Although the targets are ambitious, the AVDP will use many of the same service providers and contracting methods as in past IFAD projects thus there will be a minimal learning curve.

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Annual Work Plan & Budget of the Agricultural Value Chain Development Project (AVDP) for 2020 and 1st semester 2021															
Description of activity by Category	Description of activity by Component/subcomponent	Unit	Quantity 2020	Quantity 2021 (half)	Total Quantity 2020-2021	Cumulative Expenditure (000'USD) for 2020-2021			Expenditure by financing source for 2020-2021 (000'USD)					Narrative on status, rationale, challenges, solutions	
						Plan	Actual	%	IFAD Cycle I	IFAD Cycle II	Adaptation Fund	SL Govt.	Private Sector		Ben. (cash and in-kind)
I. Climate Resilient and Smart Agricultural Production															
Subcomponent 1.1. "Support to Smallholder (family rice) Production and Productivity"															
TECHNICAL_ASSISTANCE	A. Support to MAF to run Farmer Field School (FFS) and provide other technical support	contracts	1	0.5	1.5	787.50		0%		244.83	542.67				
CIVIL_WORKS_EA	B. Bore holes irrigation scheme	unit	12	4	16.0	672.00		0%		336.00	336.00				
CIVIL_WORKS_EA	C. Construction of the Earth Dams	unit	15	8	22.5	524.81		0%			524.81				
TECHNICAL_ASSISTANCE	D. Business Development Plans /b	contracts	8	5	13.0	41.30		0%		41.30					
GRA&SUB_EA	E. Development of new IVS (rice) /c	hectares	1	1	2.0	6909.00		0%	5367.60	1541.40					
GRA&SUB_EA	F. Productive ABC Infrastructure /d	unit	8	5	13.0	208.85		0%		167.08			41.77		
GRA&SUB_EA	G. ABCs Assets Investment /e							0%							
GRA&SUB_EA	1. Tipping trailer	unit	8	5	13.0	117.25		0%		70.35			46.90		
GRA&SUB_EA	2. Disc Plough	unit	8	5	13.0	34.67		0%		20.80			13.87		
GRA&SUB_EA	3. Disc ridger	unit	8	5	13.0	30.17		0%		18.10			12.07		
GRA&SUB_EA	4. Rotary tiller	unit	8	5	13.0	51.34		0%		30.80			20.54		
GRA&SUB_EA	5. Puddler	unit	8	5	13.0	23.96		0%		14.37			9.58		
GRA&SUB_EA	6. Rice reaper	unit	8	5	13.0	12.04		0%		7.22			4.82		
GRA&SUB_EA	7. Power tiller	unit	8	5	13.0	71.03		0%		42.62			28.41		
GRA&SUB_EA	8. Rice hauler	unit	8	5	13.0	53.10		0%		31.86			21.24		
GRA&SUB_EA	9. Destoner	unit	8	5	13.0	37.13		0%		22.28			14.85		
GRA&SUB_EA	10. Thresher	unit	8	5	13.0	33.44		0%		20.07			13.38		
GRA&SUB_EA	11. Harvester	unit	8	5	13.0	35.94		0%		21.56			14.38		
Total of subcomponent 1.1						9643.52			5367.60	2630.64	1403.47		241.80		
Subcomponent 1.2. "Support to Tree Crops Production and Productivity"															
GRA&SUB_EA	A. Establishment of Cocoa Clonal Garden at SLARI	contracts	1	-	1.0	945.00		0%		378.00	567.00				
GRA&SUB_EA	B. Support to Cocoa Clonal Garden Operation /a	contracts	1	0.5	1.5	78.75		0%		31.50	47.25				
TECHNICAL_ASSISTANCE	C. Business Development Plans /b	contracts	20	15.0	35.0	105.00		0%		105.00					
GRA&SUB_EA	D. Development of Cocoa farms	hectares	1	1.5	2.5	2879.63		0%		1151.85	1727.78				
GRA&SUB_EA	E. Productive ABC Infrastructure (cocoa)	unit	10	9.0	19.0	299.25		0%		239.40			59.85		
GRA&SUB_EA	F. Productive ABC Assets (cocoa)	unit	10	9.0	19.0	558.60		0%		335.16			223.44		
GRA&SUB_EA	G. Productive ABC Infrastructure (oil palm)	unit	6	7.5	13.5	212.63		0%		170.10			42.53		
GRA&SUB_EA	H. Development of Oil Palm farms	hectares	1	1.5	2.5	2960.21		0%		2368.17			592.04		
GRA&SUB_EA	I. Productive ABC Assets (oil palm)	unit	6	7.5	13.5	496.13		0%		297.68			198.45		
Total of subcomponent 1.2						8535.19				5076.86	2342.03		1116.31		
Total of Component 1.						18178.70			5 367.60	7 707.50	3 745.50		1 358.10		

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Description of activity by Category	Description of activity by Component/subcomponent	Unit	Quantity 2020	Quantity 2021 (half)	Total Quantity 2020-2021	Cumulative Expenditure (000'USD) for 2020-2021			Expenditure by financing source for 2020-2021 (000'USD)					Narrative on status, rationale, challenges, solutions		
						Plan	Actual	%	IFAD Cycle I	IFAD Cycle II	Adaptation Fund	SL Govt.	Private Sector		Ben. (cash and in-kind)	
Subcomponent 2.1. "Market Access"						2.Agricultural Market Development										
A. Platform Facilitation and Initiation																
TECHNICAL_ASSISTANCE	Piloting Commodity Platform /a	contracts	1	-	1	78.81		0%		78.81						
TECHNICAL_ASSISTANCE	Development of guidance note on Platform facilitation	contracts	1	-	1	26.27		0%		26.27						
TECHNICAL_ASSISTANCE	Identification of commodity players in each district of the project – through criteria selection	Study	6	5	11	58.32		0%		44.32		14.00				
TECHNICAL_ASSISTANCE	Provincial Platform organisation events /b	contracts	-	18	18	144.70		0%		47.75		96.95				
B. Capacity Building of Players in VC Development																
TECHNICAL_ASSISTANCE	Training programme identified and contracted players	workshops	1	-	1	21.02		0%		21.02						
TECHNICAL_ASSISTANCE	Training on Needs Assessment	contracts	1	-	1	52.54		0%		52.54						
TECHNICAL_ASSISTANCE	Development of a training programme (climate and gender facilitators)	contracts	1	-	1	31.52		0%		31.52						
TECHNICAL_ASSISTANCE	GALS Training	contracts	16	8	24	380.81		0%		380.81						
TECHNICAL_ASSISTANCE	Business Development Training /c	contracts	38	45	83	441.00		0%		441.00						
TECHNICAL_ASSISTANCE	Study tour (in country) for lesson learning/best practices /d	no.	2	1	3	15.87		0%		15.87						
TECHNICAL_ASSISTANCE	Study tour (external /regional) for lesson learning/best practices /e	Study	1	1.5	2.5	30.15		0%		30.15						
Total of subcomponent 2.1.						1281.00				1170.06		110.94				
Subcomponent 2.2. "Climate Resilient Rural Infrastructure and Information systems"																
A. Value chain support infrastructure development																
CIVIL_WORKS_EA	1. Warehouse rehabilitation /a	unit		5	5	84.41		0%		61.05	16.26	7.12				
CIVIL_WORKS_EA	2. Feeder roads							0%								
TECHNICAL_ASSISTANCE	Studies and surveys for rehabilitation /b	km				0.00		0%								
CIVIL_WORKS_EA	Rehabilitation works /c	km				0.00		0%								
CIVIL_WORKS_EA	Construction of bridges (for rehabilitation)	ks				0.00		0%								
CIVIL_WORKS_EA	Routine maintenance /d	km				0.00		0%								
CIVIL_WORKS_EA	Periodic maintenance /e	km				0.00		0%								
CIVIL_WORKS_EA	3. Farm tracks							0%								
TECHNICAL_ASSISTANCE	Studies and surveys for construction /f	km		25	25	28.14		0%		20.35	5.42	2.37				
CIVIL_WORKS_EA	Construction works /g	km				0.00		0%		0.00	0.00	0.00				
CIVIL_WORKS_EA	Routine maintenance	km				0.00		0%		0.00	0.00	0.00				
CIVIL_WORKS_EA	Supervision (SLRA) /h	km				0.00		0%		0.00	0.00	0.00				
CIVIL_WORKS_EA	4. Support to districts for development of Feeder Road Maintenance Plans	unit		4	4	45.02		0%		32.56	8.67	3.79				
CIVIL_WORKS_EA	5. Support to FBOs							0%								
CIVIL_WORKS_EA	Road gangs formation (distribution of maintenance tools) /i	no.		10	10	22.51		0%		16.28	4.34	1.90				
CIVIL_WORKS_EA	Development of Farm Tracks Maintenance Plans /j	no.		4	4	66.64		0%		48.20	12.84	5.62				
CIVIL_WORKS_EA	6. New line : Water control , security and management measures							0%								
CIVIL_WORKS_EA	Construction and rehabilitation of drinking water supply and sanitation	contracts		1	1	140.68		0%			140.68					
TECHNICAL_ASSISTANCE	Capacity building for potable water management	training&semi nars		1	1	40.19		0%			40.19					
Total of subcomponent 2.2.						427.58				178.43	228.40	20.80				
Total of Component 2						1708.58				1348.49	228.40	131.74				

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						Plan	Actual	%	IFAD Cycle I	IFAD Cycle II	Adaptation Fund	SL Govt.	Private Sector	
3. Project management Coordination Unit														
GOODS&EQUIP&VEH_EA	A. Operational vehicles /a	no.	6		6	252.19		0%		252.19				
TECHNICAL_ASSISTANCE	Baseline survey	contracts	1		1	105.08		0%		105.08				
TECHNICAL_ASSISTANCE	Terminal survey	contracts	-		0	0.00		0%		0.00				
GOODS&EQUIP&VEH_EA	Routine Monitoring (M&E Unit)	cost/year	1	0.5	1.5	79.34		0%		79.34				
GOODS&EQUIP&VEH_EA	Operational Costs of ODK and tablet purchase	items	8	8	16	25.47		0%		25.47				
GOODS&EQUIP&VEH_EA	configuring of the accounting and procurement software	contracts	1		1	31.52		0%		31.52				
TECHNICAL_ASSISTANCE	Implementation of AVMP Action Plan on Monitoring & Evaluation Plan	Study	1	0.5	1.5	92.21		0%		92.21				
TECHNICAL_ASSISTANCE	Special studies	studies	2	3	5	212.68		0%		106.34	106.34			
TECHNICAL_ASSISTANCE	Other short case studies	studies	2	1	3	15.00		0%			15.00			
SALARIES_AND_ALLOWANCES	National Programme Coordinator	months	12	6	18	52.36		0%		52.36				
SALARIES_AND_ALLOWANCES	Programme Technical Director (Deputy NPC)	months	12	6	18	43.62		0%		43.62				
SALARIES_AND_ALLOWANCES	Grant Officer	months	12	6	18	34.90		0%		34.90				
SALARIES_AND_ALLOWANCES	Head Procurement	months	6	3	9	17.45		0%		17.45				
SALARIES_AND_ALLOWANCES	Procurement Officer AVDP	months	12	6	18	34.90		0%		34.90				
SALARIES_AND_ALLOWANCES	Procurement assistant	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	Head HR/Administration	months	12	6	18	34.90		0%		34.90				
SALARIES_AND_ALLOWANCES	Asst. Admin Logistics	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	IT Officer	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	Asst. HR/Archives - Records	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	Receptionist	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	Drivers	months	36	18	54	78.55		0%		78.55				
SALARIES_AND_ALLOWANCES	Head Financial Control	months	6	3	9	23.56		0%		23.56				
SALARIES_AND_ALLOWANCES	Financial Accountant AVDP	months	12	6	18	34.56		0%		34.56				
SALARIES_AND_ALLOWANCES	Asst. Financial Accountant	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	Admin. & Account Assistant - regional	months	12	6	18	26.18		0%		26.18				
SALARIES_AND_ALLOWANCES	Head of M&E	months	12	6	18	34.90		0%		34.90				
SALARIES_AND_ALLOWANCES	Targeting, Youth and Gender Officer	months	12	6	18	46.65		0%		46.65				
SALARIES_AND_ALLOWANCES	Community Mobilizers/targeting assistants	months	48	24	72	125.67		0%		125.67				
SALARIES_AND_ALLOWANCES	Tree Crops manager head of component 1.2	months	12	6	18	46.65		0%		46.65				
SALARIES_AND_ALLOWANCES	Environmental Engineer Head of subcomponent 2.2	months	12	6	18	46.65		0%		46.65				
SALARIES_AND_ALLOWANCES	IVS manager head of subcomponent 1.1	months	12	6	18	46.65		0%		46.65				
SALARIES_AND_ALLOWANCES	Agribusiness Specialist head of subcomponent 2.1	months	12	6	18	46.65		0%		46.65				
SALARIES_AND_ALLOWANCES	Tree crop officers [one for each province] /b	months	48	24	72	125.67		0%		125.67				
SALARIES_AND_ALLOWANCES	IVS officers [one for each province] /c	months	60	30	90	157.08		0%		157.08				
SALARIES_AND_ALLOWANCES	Agribusiness Specialist /d	months	24	12	36	68.55		0%		68.55				
SALARIES_AND_ALLOWANCES	M&E Assistant	months	24	12	36	52.36		0%		52.36				
SALARIES_AND_ALLOWANCES	KM Assistant	months	12	6	18	26.18		0%		26.18				
OPERATING_COSTS	Operation costs - hospitality etc	cost/year	1	1	2	15.87		0%		15.87				
OPERATING_COSTS	Utility	cost/year	1	1	2	47.60		0%		47.60				
OPERATING_COSTS	Rent	cost/year	1	1	2	23.80		0%		23.80				
OPERATING_COSTS	Office supplies	cost/year	1	1	2	23.80		0%		23.80				
OPERATING_COSTS	Insurance	cost/year	1	1	2	15.87		0%		15.87				
OPERATING_COSTS	Travel	cost/year	1	1	2	79.34		0%		79.34				
OPERATING_COSTS	Staff training - local	no. of staff	75	37.5	112.5	23.80		0%		23.80				
OPERATING_COSTS	Staff training - overseas	no. of staff	3	1.5	4.5	35.70		0%		35.70				
OPERATING_COSTS	M&E operational costs at district level	cost/year	1	1	2	9.52		0%		9.52				
OPERATING_COSTS	Communication costs for KM printing/distribution	cost/year	1	1	2	19.04		0%		19.04				
Total of Component 3						2469.56				2348.22	121.34			
GRAND TOTAL OF THE PROJECT						22356.85			5367.60	11404.21	4095.24	131.74	1358.10	

Appendix 5: Financial Management

A. Financial management assessment (FMA) of the Project

1. **Methodology.** In accordance with IFAD guidelines, a Financial Management Assessment (FMA) has been undertaken as part of project design. The objective of FMA is to provide assurances that the Project will be implemented in an environment with sufficiently strong financial management systems and controls in place to properly manage, control and report on programme finances. The FMA involves assessing: (i) the inherent risk at country level; and (ii) the project specific risk.

2. **Country context and inherent risk.** In accordance with IFAD guidelines, a Financial Management Assessment (FMA) has been undertaken as part of project design. The country risk is rated as **High risk**. The corruption perception index published by Transparency International, has remained relatively constant around 30 (out of 100) during the past four years and in 2017 the country ranked as 130 out of 180. The most recent Public Expenditure and Financial Accountability (PEFA) Assessment was published in 2018, covering the years 2014-2017. According to the assessment, Sierra Leone has maintained its progress with regards to Public Financial management and despite the challenges faced by the country over the recent years. In particular, the report highlighted the following developments: i) progress in rolling out of the Integrated Financial Management Information System (IFMIS), ii) Linking all treasury managed accounts under a treasury single account (although the implementation is slow), iii) adaptation of cash based IPSAS by the accountant general and iv) building of the capacity of the PFM officers. In addition, the role of the Audit Service of Sierra Leone (ASSL) with regards to oversight is commended although the follow-up on the reports is often inadequate and comes late. Nevertheless, the report noted the some severe weaknesses the following areas:
 - i) fiscal discipline: high variances between original budgets and actual out turns for revenue and expenditure partly due to frequent overrides to the control procedures, payment arrears due to shortage of cash, flouting of laws and regulations with regards to procurement, payroll and fixed assets etc..
 - ii) Strategic allocation of resources: no adherence to budgets, mismatch between financial and physical progress, etc..
 - iii) Efficient delivery of services: accounting systems are not sufficiently developed to provide detailed information, weak procurement controls, unpredictable flow of funds, insufficient segregation of duties, etc..

In order to mitigate the high inherent risk, the Financial Management arrangements currently in place in the NPCU complimented with the some country's national FM systems that meet IFAD's minimum requirements will be used to manage IFAD funding. These arrangement is already in place for the ongoing IFAD projects and have been assessed largely as adequate.

3. **Anticorruption and Good Governance Framework.** In accordance with its Policy on Preventing Fraud and Corruption in its Activities and Operations (Anticorruption Policy), adopted by the Executive Board in December 2005, IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or **coercive** practices in projects financed through its loans and grants. 'Zero tolerance' means that IFAD will pursue all allegations falling under the scope of this Policy and, if allegations are substantiated, appropriate sanctions will be applied on the parties or entities involved. Among the remedies available to IFAD under the General Conditions for Agricultural Development Financing, are the suspension and cancellation of a loan and/or grant. IFAD may suspend, in whole or in part, the right of the Borrower/Recipient

to request withdrawals of funds after giving notice to the Borrower/Recipient that credible allegations of coercive, collusive, corrupt or fraudulent practices in connection with the Project have come to the attention of IFAD, and the Borrower/Recipient has failed to take timely and appropriate action to address the matters to the satisfaction of IFAD. IFAD may cancel, in whole or in part, the remaining amounts in the Loan and/or Grant Accounts, after consultation with the Borrower/Recipient, if IFAD thereafter determines that coercive, collusive, corrupt or fraudulent practices were engaged in by representatives of the Borrower/Recipient or any Project Party, and no timely and appropriate action was taken to remedy the situation. All payments made relating to any coercive, collusive, corrupt or fraudulent practice by any representative of the Borrower/Recipient or any Project Party, shall be considered ineligible for IFAD financing and shall be refunded to IFAD.

4. Under the General Conditions for Agricultural Development Financing, by notice to the Borrower/Recipient, the Fund may require that all bidding documents and contracts for procurement of goods, works and services financed by the Financing include provisions requiring bidders, suppliers, contractors, sub-contractors and consultants to: (i) allow full inspection by the Fund of all bid documentation and related records; (ii) maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and (iii) cooperate with agents or representatives of the Fund carrying out an audit or investigation.
5. IFAD takes all possible actions to protect from reprisals individuals who, in good faith, report coercive, collusive, corrupt or fraudulent practices in its project or grant activities. The primary responsibility for enforcing the Anticorruption Policy lies with the Borrower, and the first defence for controls shall be exercised by Project staff, Implementing Partners and Counterparts. Pursuant to this, the Borrower shall have the responsibility to incorporate pertinent provisions of the Anticorruption Policy in its contracts with project staff, cooperating/implementing partners, suppliers/consultants or any other third party entities. Given IFAD's zero tolerance described in the above paragraph, it is important that the project staff and all stakeholders of the project are familiar with IFAD's Anticorruption Policy as well as the national anticorruption policies and whistle blowing procedures.
6. **Lending terms.** The IFAD loan is expected to be granted as a 50% grant and 50% as a highly concessional loan subject to a service charge of 0.75% and with a repayment period of 40 years including a 10 years grace period starting from the IFAD Executive Board approval.
7. **Taxation.** The GoSL will cover all taxes under the project. Consequently, IFAD funds cannot be used to pay VAT, duties or other taxes imposed on the project. However, as per IFAD procedures, taxes paid by the ultimate recipient of an expenditure (e.g. income taxes paid by a project employee or withholding taxes on the profits of a contractor) are not considered to be taxes paid by the Project.

B. Project Risks Control

8. **Project specific Financial Management Assessment.** As required by IFAD Financial Management assessment guidelines, the summarised scoring at design is as shown in the table below.

Table 1: Summary of FM Risks and mitigating measures

Type of risk	Initial Risk Assessment	Proposed mitigation	Final Risk Assessment
Inherent Risk			
a) TI CPI : 30 b) Public Financial Management systems require further improvements.	High		High
Control Risks			
Organisation and staffing			
<ul style="list-style-type: none"> NPCU and its finance staff have previous experience in IFAD projects and procedures. The performance has been deemed adequate. 	M	<ul style="list-style-type: none"> A qualified FC and project accountant to be appointed subject to IFAD non objection. This will be a disbursement condition. All FM staff to receive training in IFAD FM procedures, policies and systems including IFAD anticorruption policy and whistleblowing mechanism. 	M
Budgeting			
<ul style="list-style-type: none"> Budget approval, budget format, submission timelines and budget controls need some fine-tuning. 	M	<ul style="list-style-type: none"> The consolidated AWPB to be submitted for IFAD non-objection 2 months before the beginning of the fiscal year. Proper budget controls to be ensured in the accounting software to enable generation of reports on actual vs budgeted expenditures. 	M
Funds flow and disbursement arrangements			
<ul style="list-style-type: none"> Complex and possibly cumbersome flow of funds including transfers to implementing partners 	H	<ul style="list-style-type: none"> Separate USD designated accounts and SLL project accounts for each financing source to be opened in a bank. The NPCU will be authorized to operate the accounts. 	M
Internal controls			
<ul style="list-style-type: none"> The internal control system in place within the NPCU have been deemed acceptable to IFAD. However, the controls activities taking place in the field will need to be further strengthened. 	H	<ul style="list-style-type: none"> A comprehensive financial procedures manual, is to be formulated adopted. The manual will need to include separate section on the matching grants and implementing partners. Due diligence of implementing partners to be requested before signing the agreement with them. 	M
Accounting systems, policies and procedures			
<ul style="list-style-type: none"> The accounting system requires updating. 	M	<ul style="list-style-type: none"> IPSAS cash accounting standards to be followed. Reconfigure the accounting system to: a) include a new project and to generate automatically the required financial reports and WA forms and to capture farming inputs in the passion of the project. the project transactions will be also recorded in the IFMIS by MOFED officials, based on financial reports generated by the NPCU from the TOMPRO system 	L

Type of risk	Initial Risk Assessment	Proposed mitigation	Final Risk Assessment
Reporting and monitoring <ul style="list-style-type: none"> Financial report formats required from the implementing partners need to be developed. 	M	<ul style="list-style-type: none"> Reporting templates to be established and the Accounting system to be customized to produce these reports automatically. NPCU to produce quarterly Interim Financial Statements and annual financial statements. 	M
Internal Audit <ul style="list-style-type: none"> There is no internal audit Unit at NPCU level. 	H	<ul style="list-style-type: none"> Project will be part of the audit plan of the internal audit function of MAFFS, The ToRs will focus on sub-project activities and field visits. Internal Audit report to be shared with the NPCU and for comments and then with IFAD and MAFFS 	M
External audit <ul style="list-style-type: none"> No annual audit function in place. 	H	<ul style="list-style-type: none"> ASSL to conduct annual financial audits in accordance with INTOSAI standards. IFAD non objection required for the Audit TORs.. The TORs for Project external auditor should be expanded to include field visits. 	L
Fiduciary risk at design stage	M	Mitigation actions listed above.	M

Final risk rating. Due to the mitigation measures already in place in the NPCU, the initial risk rating is considered to be medium.

NB: H/M/L = High, medium and low risk as per the Guideline Note on undertaking Financial Management Assessment at design.

C. Proposed financial management arrangements

- 9. Proposed financial management arrangements.** The proposed FM-arrangements including budgeting, accounting, internal controls, flow of funds, financial reporting, and audit arrangements will mainly follow the FM arrangements already in place in the NPCU and used for the ongoing IFAD projects with some adjustments. The proposed FM arrangements are described below and will be outlined in detail in the Project's Financial Procedures Manual.
- 10. Staffing.** NPCU currently has a pool of experienced Financial Controllers, project accountant and assistant accountants working for the ongoing projects. As a result they have experience in implementing IFAD projects and IFAD's Financial management requirements and procedures. For the proposed project, the NPCU will appoint a qualified Financial controller, a project accountant and an assistant accountant. As part of the project start up the FM staff will be trained in IFAD FM procedures and systems.
- 11. Budgeting and Budget control.** The government fiscal year runs from 1st January to 31st December. Based on inputs from the stakeholder the NPCU will prepare a consolidated Annual Work Plan and Budget (AWPB) in a format acceptable to IFAD and submit it to the Project steering committee for approval and to IFAD for its non-objection at least two months before the beginning of the relevant fiscal year. The format of the AWPB will indicate at least the following: expenditure items by activity, by component, by expenditure category, and by implementing entity, physical indicators by activity as well as funding requirements by

financier on a quarterly basis. The AWPB must also include a procurement plan. The AWPB and its revisions will be promptly recorded in the project accounting software to allow for proper budget controls and generation of variance reports. Any incurred expenditures as part of the project will have to be part of the approved AWPB to be considered eligible for IFAD financing.

12. Accounting systems, policies and procedures. As per current practice, the NPCU will maintain its accounting records in accordance with IPSAS-cash basis of accounting. All project transactions, will be recorded the an accounting software (TOMPRO) currently in place in the NCPU. It is important that the software is reconfigured as part of the project start-up to include the new project, and to generate all required financial reports and WA forms automatically. In particular the following actions will need to be completed as part of the start-up:

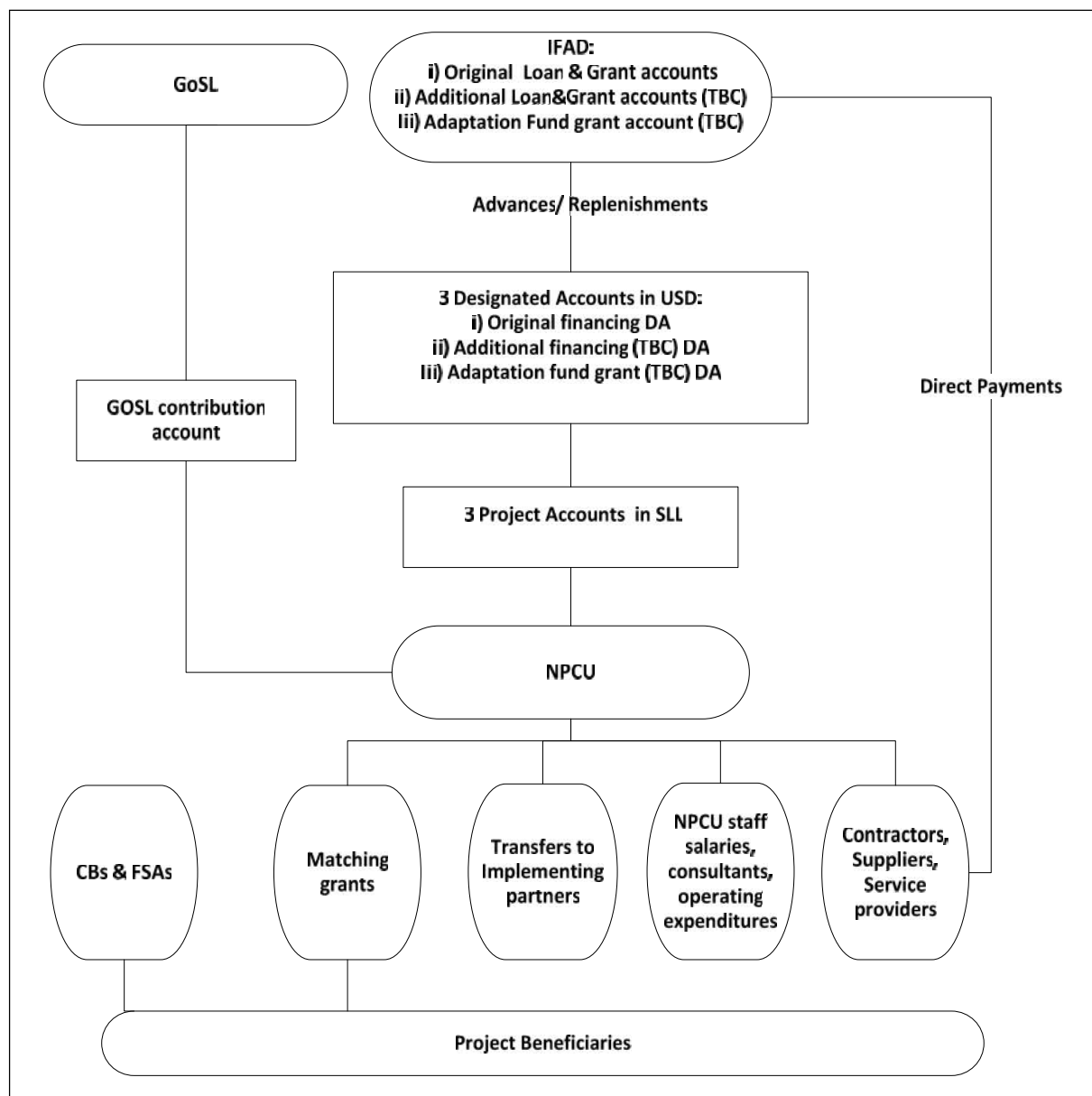
- i. All accounting policies and procedures, related to the Project are to be clearly documented in the financial management manual (part of the PIM).
- ii. The chart of account developed based on the cost tables, the flow of funds chart and accounts structure and the IFAD financing agreement.
- iii. The system must also be able record approved budgets and budget revisions, monitor commitments as well as include a fixed assets module.
- iv. Government cash contribution, and beneficiaries contributions will be recorded separately in the accounting system. Tax exemptions to reflect counterpart contributions will also be recorded in the accounting system based on exemption certificates issued under each contract.

In addition to the standalone software, the project transactions will be recorded in the government accounting software (IFMIS) by the MOFED officials, based on financial reports generated by the NPCU from the TOMPRO system.

13. Internal Controls. In order to ensure: (a) efficiency; (b) reliability of financial reports; and (c) compliance with applicable laws and regulations including the conditions set forth in the financing agreement, the NPCU will ensure that adequate internal controls are maintained at all times, including:

- i. Adequate policies and procedures including an updated financial procedures manual, and accounting manual which are to be revised once a year;
- ii. Sufficient segregation of duties;
- iii. Monitoring of fixed assets including tagging of all assets, maintaining of a fixed asset register and annual inventory exercises;
- iv. Periodic monitoring and review including comparison of physical and financial progress;
- v. Proper authorization and access levels are maintained through the project parties;
- vi. All project sites are clearly identified and mapped including GPS-coordinates (as appropriate) to facilitate supervision and that this information is shared with other donors (e.g. World Bank etc.) supervising projects in the same sector;
- vii. All trainings will be duly documented including a list of participants.
- viii. All distributed goods, agricultural inputs etc., reconciled against procured goods and supported by distribution lists of sufficient detail.
- ix. All implementing partners FM-capacity will be properly assessed before the awarding of the contract and their financial performance will be continuously assessed

- 14. Records management.** The NPCU will maintain adequate filing and ensure proper back up of all project records on a server and a separate hard drive. In accordance with IFAD General Conditions, the borrower has to maintain the original records for a minimum of 10 years after the project completion
- 15. Financial reporting.** The NPCU will prepare and submit to IFAD the following financial reports generated by the accounting software as follows:
- Quarterly consolidated interim financial reports (IFRs).
 - Annual consolidated Financial Statements within three months after the end of the fiscal year.
- The financial reports will include at least the following information: (i) sources and uses of funds by financing source and expenditure category; (ii) incurred expenditures by component and financing source, (iii) actual expenditures vs budgeted expenditures by financing source by component and category, (iv) designated account reconciliations, (v) Statement of Expenditures - Withdrawal Application Statement, and (vi) a fixed asset register. The financial reports will include cash contributions from all financing sources. In-kind contributions will be estimated and disclosed in the notes.
- 16. Internal Audit.** There is no internal audit Unit at the NPCU level. However, the projects will be included in the annual audit plan of the Internal audit department of MAFFS. In order to avoid the risk of over- auditing, during implementation and based on IFAD recommendations, the IA should focus on activities undertaken in the field including: delivery of trainings, identification of civil works sites, performance of contractors, distribution of equipment, performance of implementing partners, matching grants, etc. and the related internal controls and segregation of duties. The internal audit reports will be shared with the NPCU for management's response before being finalized and submitted to MAFFS and IFAD.
- 17. External Audit.** The Audit Service Sierra Leone (ASSL), is by law responsible for the audit of all government finances and projects. ASSL has been auditing the IFAD projects for the past three years and the performance has been assessed as satisfactory. Accordingly, the ASSL will also include the proposed project in its audit plan and conduct an annual financial audit of the project financial statements in accordance with INTOSAI/ISSAI standards and IFAD guidelines with project audits. The terms of reference for the audit will be agreed with IFAD on annual basis. The auditors will also prepare a Management Letter giving observations and comments on the internal control systems of the NPCU as well as the implementing partners, and providing recommendations for improvements in accounting, records management, systems, controls, compliance with financial covenants in the Financing Agreement and compliance with previous year's auditors' recommendations. The audit report, including the management letter covering the audit observations on internal controls, will be submitted to IFAD within six months of the end of the fiscal year.
- 18. Flow of Funds.** The borrower will open in a bank three separate Designated Accounts denominated in USD to the benefit of the project as follows i) one for the original financing (original IFAD loan and grant), ii) one for the additional financing (additional IFAD loan and grant) and iii) one for the adaptation fund grant. These funds will not be mingled with other funds. From the designated accounts the funds will flow to separate three separate project accounts denominated in local currency to finance eligible expenditures under the project. In addition, there will be separate government counterpart account. The NPCU will be authorized to operate the accounts. The Flow of funds is illustrated in the graph below.



Disbursement arrangements

19. Overview. The IFAD financing shall be disbursed against duly certified withdrawal applications in accordance with the IFAD disbursement procedures.

20. IFAD disbursement procedures. In accordance with the IFAD disbursement procedures between the date of entry into force of the Financing Agreement and the Financing Closing Date, the PMU may request withdrawals from the Loan Account and/or Grant Account of amounts paid or to be paid for eligible expenditures. Accordingly, three standard disbursement procedures may be used for withdrawal of financing:

- Advance withdrawal;
- Direct payment;
- Reimbursement.

- 21. Authorized allocation of the Designated account.** The Designated Accounts for the IFAD financing will be operated and replenished following the Imprest Account arrangements. After the IFAD financing has entered into force and the conditions for first disbursement have been duly complied with and upon request by the borrower, IFAD will make an initial deposit to the Designated Accounts equal to the requirements of six months implementation (Authorized Allocation). The authorized allocation will be outlined in the Letter to the Borrower and is expected to be as follows:
- USD 2 million under the IFAD loan and grant
 - USD 3 million under the additional loan and grant
 - USD 1.5 million under the adaptation fund grant;
- 22. Start-up Funds.** The project is estimated to receive USD 200,000 from the loan to incur expenditures related to the project start up before the satisfaction of the conditions precedent to withdrawal, The start-up funds will be used to for: (i) Recruitment of key staff as necessary, (ii) finalizing the Project implementation manual including the Financial procedures, accounting and procurement manual, (iii) Preparation of the first AWPB & procurement plan, (iv) organization of a Start-up workshop, (v) Configure the accounting software to include the new project, and (vi) finalization of the Agreement/MoUs templates with the implementing partners, etc..
- 23. General Conditions for first withdrawal.** The following conditions related to financial management are to be met before the first withdrawal can be realized:
- Key Staff including the project coordinator, the financial controller and the procurement specialist have been duly appointed;
 - A Project Implementation Manual including the Financial Administration and Accounting manual, has been approved by IFAD; and
 - The IFAD no-objection on the first AWPB and procurement plan for the first 18 months of the project has been obtained.
 - IFAD has received from the Minister of Finance, – a letter designating the name(s) of official(s) authorized to sign withdrawal applications, which includes their authenticated specimen signature(s);
 - IFAD has received documentation evidencing the opening of (i) designated accounts to receive IFAD Loan and grant proceeds; and (ii) the operating accounts to receive funds from the designated account with advice of the persons/titles authorized to operate these accounts;
- 24. Withdrawal applications.** The NPCU will compile and consolidate, on a timely basis, eligible project expenditures for activities. From these expenditures the PMU will prepare withdrawal applications (WAs) for eligible project expenditures for submission to IFAD for reimbursement or replenishment. All WAs will be signed by the authorized signatories.
- 25. Minimum withdrawal amounts.** In order to minimize transaction costs, the minimum withdrawal amounts are set as follows:
- Withdrawal Applications requesting replenishments of the Designated Account should at least cover a minimum amount of thirty per cent (30%) of the initial advance.
 - Direct Payment method should only be used for payments of USD 100,000 and above while expenditures below USD 100,000 should be financed from the Designated Account if possible and claimed through the replenishment of the Designated Account.
- 26. Statement of Expenditure (SOE).** The SOE thresholds shall be determined in the light of the associated risk for each expenditure category and will be duly documented in the Letter to the

Borrower. The initial estimate is that the SOE threshold will be USD 75,000 for all expenditures under all categories. The project will retain the relevant support documents and make them readily available for inspection and review by supervision missions and the auditors. These thresholds may be revised from time to time based on project performance and risk assessment.

FM Supervision and Implementation support

27. FM supervision strategy. The IFAD supervision strategy for this Project will include monitoring of the financial progress through quarterly financial reports and internal and external audit reports received. In addition an FM specialist will take part in annual supervision missions.

28. Supervision and implementation support plan. In light of the risk assessment residual (medium FM risk), in the first two years of implementation the supervision plan of project will especially focus on the following actions:

- Detailed review of adequacy of the staffing arrangements at the FM unit of the NPCU, including the TOR's and performance of the financial staff and identification of training needs;
- Detailed review of the accounting software and financial reports produced by the accounting software and the use of budget controls;
- Review of overall flow of funds (and resolving any bottlenecks) and a detailed review of the operation of the designated and project accounts (including monthly reconciliations).
- Detailed review of the fixed asset register and verification of a) inventory reports and b) assets through spot checks;
- Detailed review of the use of the Statement of Expenditure (SOE) procedure and the adequacy of supporting documentation for all expenditure items incurred by the NPCU and by the implementing partners;
- Detailed review of records management, filing and information back up;
- Follow-up on contracting the project (independent) external auditors and the ToRs; and
- Follow-up on work performed by the internal audit function.

The supervision process will be complemented by desk review of progress and financial reports, the programme's annual financial statements, internal audit reports, and annual audits.

Implementation readiness – planned actions

Action	By Whom	When	Conditionality
Agree on the Start-up funds (if any)	IFAD and the Borrower	As part of design	Negotiations
Project implementation manual, Financial procedures manual, and procurement manual to be formally adopted	NPCU	Start up	Disbursement condition.
Opening of Designated Account, and operational account	Borrower/ NPCU/MAFFS	Start up	Disbursement condition
Format of the Quarterly/semi-annual Financial Reports and Annual Financial Statements to be agreed.	IFAD & NPCU	Start up	N/A
Finalise project draft LTB	IFAD	As part of design	Negotiations
Prepare first AWPB & procurement plan.	NCPU	By start-up	Disbursement condition
Appointment of auditor under ToR and conditions	NPCU/ASSL	Not later than 3	Financing agreement

acceptable to IFAD		months after entry into force	
Customize the accounting software	NPCU	Start up	N/A
Finalize matching grant and IP sub agreements templates	NCPU	Start-up	Specific disbursement condition

Appendix 6: Project Implementation Manual

Appendix 6: AVDP Project Implementation Manual

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Summary

1. This first draft Project Implementation Report (PIM) provides guidelines for the implementation of the IFAD-assisted Agriculture Value Chain Development Project (AVDP) in Sierra Leone. It is mainly an adaptation of the guidelines and manuals used for the implementation of previous IFAD projects, the major departures being the emphasis on the use of a market-driven value chain development approach and the casting of the PIM in a new IFAD project design report (PDR) template.
2. The **targeting** strategy for AVDP emphasizes the inclusion of the rural poor, and especially women and youth, in all the stages of implementation. Affirmative provisions are made to promote the strong participation of all the economically active poor in project implementation, including: using groups as an entry point of project interventions to strengthen the capacity of the more vulnerable rural poor and to enhance the collateral they can bring to access credit from RFIs; specification of quota to be met for women and youth during the selection of beneficiaries of the project as well as the composition of the decision making committees of the groups; and gender mainstreaming in all project interventions. Geographic targeting is also a prominent feature of the targeting strategy in view of the impact of climate change especially on tree crop production. Although 13 districts have been identified for oil palm production and seven of these districts for cocoa, final site selection for tree crops planting will be based on climate suitability assessments.
3. The **implementation arrangements** for AVDP will build on the current thrust for a country programme approach to the coordination and management of all IFAD-assisted projects in Sierra Leone. Accordingly, the MAF remains the lead implementing agency and the National Steering Committee (NSC) chaired by the Minister of MAF shall provide oversight, direction and advice for project implementation, and in particular, approve the annual work plan and budget (AWPB) of the project as well its periodic progress reports. The NSC will be broadened to include representation of the key public sector stakeholders as well as farmers associations and the private sector. The National Programme Coordination Unit (NPCU) will be responsible for the day-to-day coordination of project activities. At the district level, the District Agricultural Officer (DAO) of MAF will be responsible for coordinating the implementation of project activities, and will be supported by a dedicated M&E Assistant as the focal point for the collation of data and reporting on project-specific activities at the district level. A range of public and private sector service providers and implementation partners will

be engaged by AVDP to facilitate project implementation and build the capacity of the project target groups.

4. The goal of AVDP is livelihoods and climate change resilience of rural farming households in Sierra Leone improved, while the project development objective (PDO) is to promote agriculture as a business for enhanced incomes and reduced rural poverty, among 34,000 rural households. This PIM has provided a number of key indicators to measure project performance by the midterm review (MTR) and completion.
5. AVDP is organized into three mutually reinforcing components: (a) Climate Resilient and Smart Agricultural Production – whose expected outcome is volume and value of produce increased, and is divided into two subcomponents: (i) support to smallholder (family farm) rice production and productivity, (ii) support to tree crops production and productivity (b) Agricultural Market Development– whose expected outcome is value chain organization and performance improved, and consists of two subcomponents: (i) market access; (ii) climate resilient rural infrastructure and information systems; and (c) Project Coordination and Management – whose expected outcome is an efficiently and effectively managed project. The component is divided into two subcomponents: (i) project coordination and management; and (ii) financing mechanisms for target groups.

Introduction

6. This Project Implementation Manual (PIM) provides guidelines for the implementation of the IFAD-assisted AVDP in Sierra Leone. It provides detailed descriptions of the structures and steps required in the implementation of the project. The PIM also provides guidance on the project coordination, financial management, procurement, audit, planning monitoring and evaluation, knowledge management and communication. The PIM is a living document and will be revised from time to time on the basis of emerging project implementation experience. Each revision will be appropriately marked with the date of approval of the version.
7. In view of the fact that AVDP is building on the achievements of earlier IFAD-assisted projects in Sierra Leone, notably RCPRP, SCP-GAFSP and RFCIP, this PIM draws considerably from the PIMs and related manuals of these projects, and the recently agreed country programme coordination architecture led by the National Programme Coordination Unit (NPCU). The two major areas of departure of this PIM are: (a) the emphasis on the use of a value chain development approach, in combination with a greater role for the market and the private sector, as compared with the development approach that was at the core of the above-mentioned interventions; and (b) the use of a new IFAD template for the PDR for organizing the contents of both the PDR and the PIM.

III. Module 1: Project Details

8. AVDP will be implemented nationwide over a six-year period. A value chain development approach will drive the implementation process, supported by: the application of a robust targeting strategy to ensure the inclusion of the rural poor in both the implementation of project activities and the sharing of the benefits and priority attention to enhancing climate resilience among the project beneficiaries.

A. Targeting strategy

Background – population, rural poverty, gender and youth

9. **Population:** The population of Sierra Leone was 7,092,113 in 2015, of which 4,187,016 (59%) live in rural areas, and 2,905,097 (41%) in urban areas.³⁷ The population was recorded to have grown at 3.2% between 2004 and 2015. Tables M1.1 and M1.2 show the distribution of the population by age, sex and district. About 55% (697,706) of the total households in Sierra Leone (1,265,468) live in the rural areas while 567,762 (44.87%) were in urban areas. Most of the rural households depend on agriculture for their livelihoods. About 85% of the rural households were engaged in agriculture compared with 23% of the urban households. About 27% of all the households engaged in agriculture are headed by females.

³⁷Statistics Sierra Leone, 2015 Population and Housing Census, December 2016

10. **Poverty:** Sierra Leone was hit by an unprecedented outbreak of Ebola Viral Disease (EVD) for 18 months, between May 2014 and November 2015. Thousands of people were affected by the disease, which also had a devastating impact on the country's economy. In 2016, it was estimated that there are 50,885 people living with HIV in Sierra Leone³⁸, over half of whom are female over the age of 15. Females from 15 to 19 years of age are the most vulnerable. In the aftermath of a decade of civil war, poverty has become pervasive and intensified. Illiteracy levels are also high, especially in the rural areas where 32.7% of the population has never gone to school, compared with 11.5% in the urban areas. Sierra Leone ranked 179th out of 188 countries in 2015 on the Human Development Index (HDI). The poorest people are landless people and small-scale farmers, particularly women who head rural households. Among these groups, the most disadvantaged are people who were refugees or internally displaced during the war, together with young people, especially former combatants, young women and single mothers.

Age group	Male (%)	Female (%)	Total (%)
0-9	14.44	14.42	28.87
10-19	12.16	12.11	24.27
20-29	8.26	9.66	17.92
30-39	5.66	6.40	12.06
40-49	4.06	3.57	7.63
50-59	2.23	1.96	4.19
60-69	1.27	1.35	2.63
70-79	0.71	0.77	1.48
80-89	0.29	0.38	0.67
90+	0.13	0.15	0.29
Total	49.22	50.78	100.00

District	Male	Female	Total
Kailahun	260,586	265,793	526,379
Kenema	301,104	308,787	609,891
Kono	252,751	253,349	506,100
Bombali	296,683	309,861	606,544
Kambia	165,541	179,933	345,474
Koinadugu	204,498	204,874	409,372
Port Loko	294,954	320,422	615,376
Tonkolili	263,152	268,283	531,435
Bo	280,569	294,909	575,478
Bonthe	99,014	101,767	200,781
Moyamba	153,699	164,889	318,588
Pujehun	168,869	177,592	346,461
Western Area Rural	221,351	222,919	444,270
Western Area Urban	528,207	527,757	1,055,964
Total	3,490,978	3,601,135	7,092,113

Source: Statistics Sierra Leone, 2015 Population and Housing Census 2015, Final Report, December 2016

11. Results from the 2011 Sierra Leone Integrated Household Survey indicated a poverty rate of 52.9%. Urban poverty was at 31.2% while most districts had converged to poverty levels between 50 and 60%, with the exception being Freetown at 20.7%. Out of the then 14 districts, 11 had higher poverty rates than the national poverty level (Figure M1.1), justifying the need for AVDP to cover the entire country. Food insecurity is also high in most of the districts. A 2016 beneficiary socio-economic profile and baseline survey (Table M1.3) indicates that only 43.5% of the households had some food stocks. Using the international standard of USD 2.00 per consumption unit per day, poverty levels vary from as low as 18.3% in Koinadugu District to a high of 83.7% in Moyamba District, the most important contributor to district-level income poverty being lack of employment.

³⁸Sierra Leone, HIV Epidemiology Report 2016

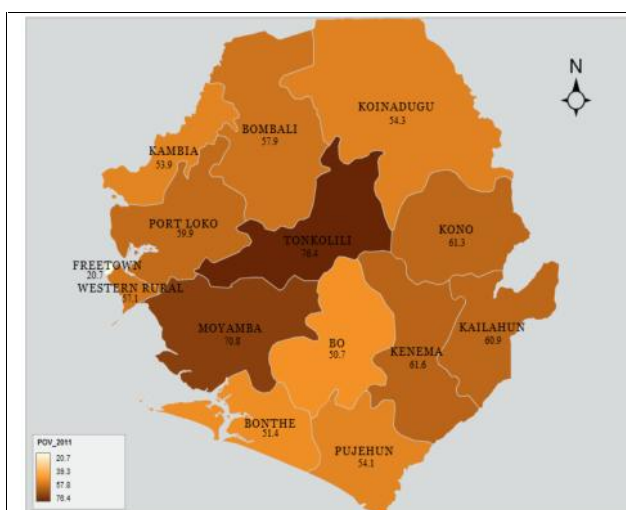


Figure M1.1: Poverty headcount by district
Source: Calculations based on SLIHS (2011)

Table M1.3: Households with stocks of food at the time of the survey (2016)

District	Per cent households
Kailahun	40.9
Kenema	40.5
Kono	84.2
Bombali	22.3
Kambia	50.0
Koinadugu	40.7
Port Loko	30.7
Tonkolili	59.9
Bo	47.0
Bonthe	4.4
Moyamba	53.4
Pujehun	45.1
Western Area Rural	43.3
Total	43.5

Source: MAF and SCP-GAFSP, Beneficiary Socio-economic Profile and Baseline Survey, 2016

12. **Gender dimension of poverty:** According to the Country Gender Profile Report (2011), women's labour force participation in crop farming and in trade and repairs stand at 65.8% and 21.9%, respectively. Though women dominate the agricultural sector, they have little or no access to credit facilities, improved technologies, extension services and postharvest technologies. They do not have permanent land rights and can be dispossessed of their lands by male relatives or through divorce or death of their spouse. This makes the women very vulnerable in terms of their livelihoods for meeting their requirements and dietary needs.
13. In the north and west³⁹, women can theoretically own plots of land, but in the south and east, they can only access land through their husbands or other male family members. Under the community system of farmland ownership, land belongs to the community or government, and individuals wishing to use it must acquire permission from the local authority. In most cases, women can be given the right to use land only if they obtain the consent of the husband. The customary system provides for private ownership, but the land belongs to the family and is most often administered by the male head of the household. Under customary marriage rules, a married woman cannot manage a couple's property nor make economic decisions, such as securing a loan, without the guarantee of the husband or a male relative. Combined with restricted property rights, which rule out putting up land as a collateral, Sierra Leonean women are thus under a very heavy handicap in getting credit.
14. Women's participation in policy and decision-making continues to grow. There is provision for equal representation at the Ward Committee level⁴⁰, and each local government council now has a gender committee. However, the numbers of females in the various decision-making bodies are still far below those of the male counterparts and there are gender disparities in several other dimensions (Table M1.4).

Table M1.4: Selected indicators by gender

Indicators	Male	Female	Difference
Population and families			
1. Population 2015 PHC	49.2%	50.8%	1.6%
2. Early marriage (at 18 years or earlier) ⁴¹	0%	39%	39%
Health			
3. Percentage living with HIV/AIDS (2008) ⁴²	1.2%	1.7%	0.5%
4. Life expectancy (HDR 2016)	45.8years	46.2 years	0.4 years
Education			

³⁹ Hazel M. McFerson (2012), "Women and Post Conflict Society in Sierra Leone" in Journal of International Women's Studies Vol. 13 #1 March 2012 60

⁴⁰ ADB (2011), Sierra Leone Country Gender Profile

⁴¹ Save the Children. Child Marriage in Sierra Leone

⁴² Sierra Leone (2008) Health and demographic survey

5. Youth literacy (15 – 24 years) ⁴³	70.6%	52.1%	18.5%
6. Currently in school (2015 PHC)	39.1%	35.3%	3.8%
7. Ever attended school (2015 PHC)	60.0%	50.9%	9.1%
8. Primary school enrolment 2008/2009	44%	56%	12%
9. Primary school participation, net attendance ratio (%) 2008-2012	73%	75.6%	2.6%
10. Secondary school participation, net attendance ratio (%) 2008-2012	39.9%	33.2%	6.7%
Power and decision making ⁴⁴			
11. Cabinet ministers 2009	90%	10%	80%
12. Parliamentary seats at national level 2009	86.7%	13.3%	73.4%
13. Chairpersons of local councils 2009	100%	0%	100%
14. Paramount chiefs 2009	93.3%	6.7%	86.6%

Source: Various as per footnotes

15. **Gender gaps in agriculture:** Women represent over 70%⁴⁵ of the agricultural labour force and they play an important role in natural resource management and food production. However, women are often discriminated against in several respects. Some of the challenges that hinder women and young people from realising their full potentials from government and development partner agricultural development initiatives include:
- Women's land rights problems. They cannot inherit or have right to land. They have less access than men to land, control over it, and land tenure security, resulting in less ability to invest in agriculture and expand beyond subsistence level.
 - Women's unequal access to resources such as, quality planting materials, fertilizer, farm labour and training.
 - Women lack tools and equipment that reduce the amount of labour they need on the farm (labour saving device).
 - Non-availability of quality or high yielding planting materials.
 - Women have little or no access to credit, extension services, and training and research facilities.
 - Community-based childcare centres for women not available.
 - Women decision making in terms of crop choice, technology adoption, and cash spending in FBOs is silenced. Women's labour is mostly non-remunerative and they have little or no access to post-harvest technologies that would help them in the marketing of their produce, credit, extension services, training and research facilities. In addition, there are limited transport facilities, bad road network, and little or no access to processing equipment.
16. **Status of Youth:** Based on the PHC 2015, 77.1% of the population were below 35 years (51.1% of those below 35 years are females). This implies that 3 out of every 4 people are young. Only 37% of school age population are in school with an 80% drop in enrolment between primary and senior secondary school leaving half of all young people illiterate (UNICEF 2010). The education system is not responsive to the job market and 70% of the youth are either unemployed or underemployed⁴⁶. However, more male youth are likely to be unemployed since their female counterparts are married off at an early age. The sector with the highest potential for youth employment is agriculture, which unfortunately is not currently performing as a commercial employer (only 1% of newly registered MSMEs⁴⁷ are in the agriculture sector).
17. **Targeting strategy.** AVDP will target about 34,000 direct beneficiaries drawn from four core target groups: (a) smallholder producers; (b) organized institutions (ABCs, FBOs and cooperatives); (c) institutions providing services or inputs such as input suppliers, agro-dealers, agents/middlemen, aggregators and small processors; and (d) large processors of cocoa, oil palm and rice and big buyers or exporters such as TASS, Gold Tree and Mountain Lion. Over the life of the project, AVDP interventions will include at least 40% women and 40% youths, and will employ mechanisms that promote gender equality and social inclusion.

⁴³https://www.unicef.org/infobycountry/sierraleone_statistics.html

⁴⁴ADB (2011), Sierra Leone Country Gender profile

⁴⁵<http://africa.unwomen.org/en/news-and-events/stories/2017/06/women-in-agribusiness-in-sierra-leone>

⁴⁶<http://www.sl.undp.org/content/sierraleone/en/home/countryinfo.html>

⁴⁷UNDP (2014), A blue print for Youth development

18. The AVDP targeting strategy consists of the following pillars: (a) geographical and socio-economic targeting; (b) gender targeting; (c) youth targeting. For all target groups, the project will employ participatory approaches, including the Gender Action Learning System (GALS) and will pay particular attention to the inclusion of those most vulnerable. The project will support direct target beneficiaries and indirect beneficiaries.⁴⁸ Over the life of the project, AVDP interventions will focus on achieving at least 40 per cent women and 40 per cent youths (men and women under 35 years), as well as mechanisms that promote gender equality, women’s empowerment and social inclusion. Four community mobilizers will be hired as AVDP staff and posted at the provincial level. Under the direction of the Targeting, Gender and Youth Officer, they will be responsible for the implementation of the targeting strategy at field level, monitoring achievements against targeting goals and will be the primary liaison between the project and beneficiary communities for issues related to mobilization, inclusion and participation.
19. **Geographical and socio-economic targeting.** The project will work in the 16 districts of the country and focus activities where the climatic and agro-ecological conditions are favourable to produce cocoa, oil palm and rice. The inclusion of new farmers, i.e. farmers that have not benefitted from the SCP-GAFSP project, will be carried out using the following criteria:
- a. For rice, the project will target low-income farmers that (i) live in proximity to Inland Valley Swamps (IVS) that are at least 10 hectares and have access to water for at least nine months per year;⁴⁹ (ii) have experience with rice production; (iii) be in possession of a legal document indicating the long-term right to use the land (iv) belong to a farmer organisation which is registered with MAF or want to belong to such a farmer organisation and which additionally is linked to an ABC.
 - b. For tree crops, the project will target low-income farmers that (i) live in areas with suitable climatic and agro-ecological conditions for cocoa or oil palm; (ii) have experience with tree crop production; (iii) have land available to establish tree crop plantations and that this will not require deforestation; (iv) belong to a farmer organisation or want to belong to a farmer organisation that are linked to an ABC.
20. The project will take a phased approach and give preference to areas where there are functioning ABC’s as these will play a central role in service provision to the farmer organisations. Experience also shows that existing groups in the community e.g. work gangs or Savings & Loan Associations, perform better than completely new groups and existing groups will therefore be prioritised. Additionally, preference will be granted to organisations in proximity of rural financial institutions as well as of agro-industries that can purchase produce (including agribusinesses that are benefitting from SCADeP).

Table M1.5: Overview of project beneficiaries

Value Chain Commodity Player	New farmers* (and land area)	Legacy Farmers* (and land area)	Beneficiaries of capacity building	Potable water and sanitation	Total beneficiaries
IVS Rice	5,000 (4,000ha)	5,000 (2,000ha)	3,000	8,000	34,000
Oil Palm	4,000 (4,000ha)	4,000 (4,000ha)			
Cocoa	5,000 (5,000ha)	-			

* At least 40% women and 40% youths; ** From RCPRP and SCP-GAFSP; *** 10,000 will be reached with potable water/sanitation improvements of which 8,000 will be additional to other beneficiaries.

⁴⁸Direct beneficiaries are the people who will participate directly in the project, and thus benefit from its existence. Indirect beneficiaries are those who will derive some benefit indirectly either through the support provided to the direct beneficiaries or impact derived from the support of the project.

⁴⁹ Except for the IVS that will benefits from earth dams or boreholes.

21. **Gender targeting.** AVDP will ensure gender- equitable participation in, and benefit from, planned activities via gender mainstreaming at two levels—systemic and programmatic. Systemic mainstreaming of gender requires modification of systems and tools to reflect gender sensitive approaches. This would include: (a) adopting gender-balanced and gender sensitive human resource/recruitment rules and procedures; (b) establishing gender-balanced project management teams; (c) ensuring that the project adopts at all levels, the principles and practices of a Gender in/and Development (GID/GAD); and (d) establishing a gender-inclusive M&E system, including monitoring of gender issues and gender disaggregation of data. The gender indicators will be developed at the start of the project with reference to the Working Paper entitled “Poverty, Gender and Livelihoods targeting for poor farmers in Sierra Leone”.
22. Programmatic mainstreaming of gender requires undertaking specific activities, where needed, to ensure that the needs of women and the poor are addressed. These would include: a gender strategy to guide the implementation of the gender and youth interventions under the Gender and Youth Action Plan (GYP); and rolling out and promoting nationwide previous successful gender-approaches (like the GALS methodology) supported by the IFAD-assisted RCPRP. The GYP will therefore include: (a) specific interventions that increase participation of women and youth in income and employment opportunities; (b) empowering women and young people in FBOs and ABCs with governance management and leadership training; (c) integrating gender responsive institutional mechanisms into institutions such as RFIs, cooperatives, ABCs; (d) gender sensitization events at community level and knowledge sharing events on best practices; (e) establishing district gender champions teams to support the gender activities; (f) short-term gender specialists to conduct gender trainings, capturing good gender based case stories and gender diagnostic studies; (g) adequate capacity building in targeting of gender for core staff of coordinating and implementing entities; (h) direct targeting of women groups, in particular in very poor districts, but also encouraging mixed groups that allow men and women to work together under equal terms; (i) integrating the GALS methodology, so that the beneficiaries and service providers apply the methodology towards transformative change; the GALS methodology can also be used to identify win-win options along the value chain; (j) using gender-disaggregated indicators to monitor outreach to women and youth; (k) using indicators of the Women’s Empowerment in Agriculture Index (WEAI), which are part of the RIMS indicators; (l) awareness creation; (m) provision of start-up kits and facilitation of access to finance; (n) agribusiness education; (o) conducting women and youth promotional campaigns using role models; (p) as a target, at least 40% of all direct project clients should be women and 20% youth (18 - 35 years).
23. Developing a gender strategy: AVDP will develop a Gender Strategy and Action Plan based on the principles and strategies of IFAD’s Gender Equality and Women Empowerment Policy 2012, to guide planning, implementation, M&E of the project. The strategy will have a gender check list in all components and activities of AVDP.
24. Gender mainstreaming. The Strategy and Implementation Plans will detail specific measures designed to: (a) promote gender equality mainstreaming; (b) support women-owned income generated activities; (c) secure women’s participation in production activities and business partnerships; (d) help women gain equal access to financial and non-financial services; and (e) ensure that female headed households access project benefits. Specific measures to be detailed in the Strategy and Implementation Plans could include: (i) ensuring that both male and female family members have access to technical training and other capacity building activities, with a target of 40% women; (ii) promoting women participation in the decision-making institutions, FBOs, ABCs, cooperatives, management committees and the innovation platforms, with a target of 40% of women; (iii) developing the capacities of service providers to include women, and, where appropriate, organising special sessions for women; (iv) carrying out gender specific studies of good practices and knowledge management; (v) supporting farmers’ groups to increase the number of women members, including in leadership, and to ensure that they have equal access to services; (vi) supporting women groups where appropriate, notably for nutrition activities; (vii) disaggregating M&E data and

analysis by gender; and (vii) supporting the recruitment of women to ensure gender balanced project implementation teams at all levels.

25. To address the gender gaps and enhance empowerment of all household members, AVDP will adopt the following:-

- Improving women's access to, ownership of, and control over, land to enhance their investments in the land for increased productivity and household welfare.
- Gender-aware extension through which the role of women in agriculture can be transformed, with positive performance in profitable opportunities.
- Ensuring women are more exposed to value chain stakeholders; facilitating outreach to women by input suppliers, processing companies and other buyers; and establishing more formal agreements between buyers and women farmers.
- Increasing efficiency in established interactions in the value chains, through facilitation of access to technologies, training, and markets.
- Addressing issues of gender sensitive infrastructure, storage technology, market information and access to finance; developing market information in a gender sensitive way to allow women farmers to take full advantage of emerging growing opportunities.
- Upgrading women's roles in value chains to include processing and marketing roles that are not currently a major strength for women in those chains.

26. **Youth targeting.** Specific AVPD initiatives will be implemented catering to beneficiaries under the age of 35 years. These will include supporting only FBOs, cooperatives and SMEs which have a minimum youth membership of 40%; expanded use of the youth contractor model from SCP-GAFSP and providing mentoring and business development services to youth contractors. Each youth contractor hired to provide services for plantation rehabilitation or establishment will be given a one ha. plot within the plantation and will be able to access required inputs through project-sponsored interventions. AVDP will train youth in rice seed multiplication and provide financial support for field establishment. The project will support the diffusion of new technologies piloted by the upcoming WB WAATP project by providing financial support to youth groups or SMEs interested in investing in technologies introduced by the WAATP. The AVDP will also finance training opportunities in equipment maintenance for rice mills, oil presses, threshers, rototillers and other machinery.

Basic steps to Implement the targeting strategy: Below find key steps in the first phase of beneficiary selection. The IVS, Tree Crop Units and the Targeting Unit will develop a comprehensive manual outlining the steps in the beneficiary selection process based on Lessons Learned during the first year of project implementation.

- Introduction of Targeting Strategy at Start-Up Workshops: The presentation of the AVDP's Targeting Strategy will figure prominently in start-up workshops at the national, provincial and district levels. The Targeting, Gender and Youth Officer (TGYO) will describe the AVDP's approach to targeting including mandatory quotas for women and youth and describe the key gender and youth issues relative to project activities.
- Rapidly develop and implement a communications and outreach strategy to introduce the AVDP to all stakeholders.
- For rice: verify inventory of IVS conducted by MAF. MAF has identified 4,300 ha. of IVS for rice development. The location of the sites should be mapped to confirm surface area and water availability characteristics as well as proximity to functioning ABCs and physical access to markets.
- After confirmation of the inventory, AVDP and MAFs will prioritize the IVS to identify the first 1,000 hectares for development. Landowners of the concerned IVS will then be contacted to obtain their consent to allowing use of the IVS for a period of ten years.
- Once the first 1000ha tranche of IVS has been identified, the Targeting Gender and Youth Officer, the Targeting Assistants and local MAF officers will hold meetings in the village(s) closest to the IVS to describe program details and criteria for participation.
- Local traditional authorities, in conjunction with villagers, will nominate farmers to farm within the IVS as per clear and transparent criteria enunciated during the preliminary meetings. AVDP Community Mobilizers/Targeting Assistants will verify that the composition of the

farmers is in line with project quotas and will serve as the key liaison between the AVDP and farmers for all questions related to women, youth and vulnerable household participation in project activities.

- For tree crops: in conjunction with MAF, the ADVP Tree Crops Unit and the Targeting, Gender and Youth Unit will conduct an inventory of potential participant communities for the first tranche of 2,000 ha. of tree crops for development based criteria contained in the PDR. The ADVP will then reach out to potential communities to provide guidance on community selection of participating farmers. Final selection will be subject to confirmation by the AVDP's Targeting Unit.
27. Operational aspects of targeting. Targeting will be tracked by the Targeting Assistants reporting to the Targeting, Gender and Youth Officer. The MAF Gender and Nutrition Unit which supervises gender and nutrition activities will be facilitated for effective service delivery at the national and district levels. The National Programme Coordinator will bear overall responsibility for the implementation of the Targeting and Gender Mainstreaming Strategy and Implementation Plans. A Targeting Gender and Youth Officer at NPCU will be responsible for ensuring that targeting and gender mainstreaming is applied throughout project activities in accordance with the Gender and Youth Strategy and action plans. In addition, specific related implementation responsibilities will be reflected in the detailed job descriptions of NPCU staff, and the recruitment process will secure to the largest extent possible gender and ethnic balance. Specifically, the NPCU should have at least 40% of qualified women; terms of reference for service providers will require gender-balanced teams with prior experience of gender mainstreaming and ethnic-balanced approaches, and contract deliverables will reflect gender and inclusion target and indicators. NPCU staff and service providers will receive capacity building in the effective implementation of Gender and Youth Strategy and action plans. Capacity building tools (training, coaching, radio programmes, and printed material) and use of the GALS methodology will take into consideration cultural differences as well as the constraints of a largely illiterate audience towards transformative change and gender justice at household and community levels. NPCU will apply a gender -responsive planning, budgeting and auditing approach.
28. Monitoring and evaluation. NPCU PM&E, Communication and KM officers will ensure that the M&E/KM system allows the monitoring of inclusion as well as gender and youth aspects, and the tracking of disadvantaged groups, including by disaggregating the data. They will provide guidance to the district M&E officers to measure progress, and ensure that achievements and lessons learned are made available to all the key stakeholders and partners involved in project implementation to support regular analysis, improved performance and annual programming of related activities.

B. Implementation arrangements

29. The lead agency for project implementation shall be the MAF. The National Steering Committee (NSC) chaired by the Minister of MAF shall provide oversight, direction and advice for project implementation, and in particular, approve the annual work plan and budget (AWPB) of the project as well its periodic progress reports. The PSC will include representation of key stakeholders including, the ministries for Finance, Economic Development and Planning, Trade and Industry, Local Government, Community Development, Social Welfare, Gender and Children Affairs, Lands, Country Planning and Environment, EPA, Youth and Sports, Directorate of Feeder Roads of SLRA, the Chief Agricultural Officer/Technical Head of MAF, two members of Farmers Associations (one for staple crops and one for tree crops), and two private sector representatives (one for staple crops, especially rice, and the other for tree crops). The National Programme Coordinator of NPCU shall be the Secretary.
30. The National Programme Coordination Unit (NPCU) will be responsible for the day-to-day coordination of project activities, including project planning, financial management, contracting implementing partners for specific activities and tasks, M&E, knowledge management, supervision of project activities at the district level, facilitating linkage with governmental, private sector and development institutions, and integrating project experience into policy dialogue. At the district level, the DAO of MAF will be responsible for coordinating

the implementation of project activities. He or she will be supported by a dedicated M&E Assistant as the focal point for the collation of data and reporting on project-specific activities at the district level. The M&E Assistant will work under the guidance of the M&E Officer at the NPCU. Figure M1.2 shows the organogram for AVDP.

31. A range of public and private sector service providers and implementation partners will be engaged by AVDP to facilitate project implementation at different stages of the value chains and build the capacity of the project target groups towards agriculture as a business. The modalities for the engagement of the service providers are specified in the description of the subcomponents.

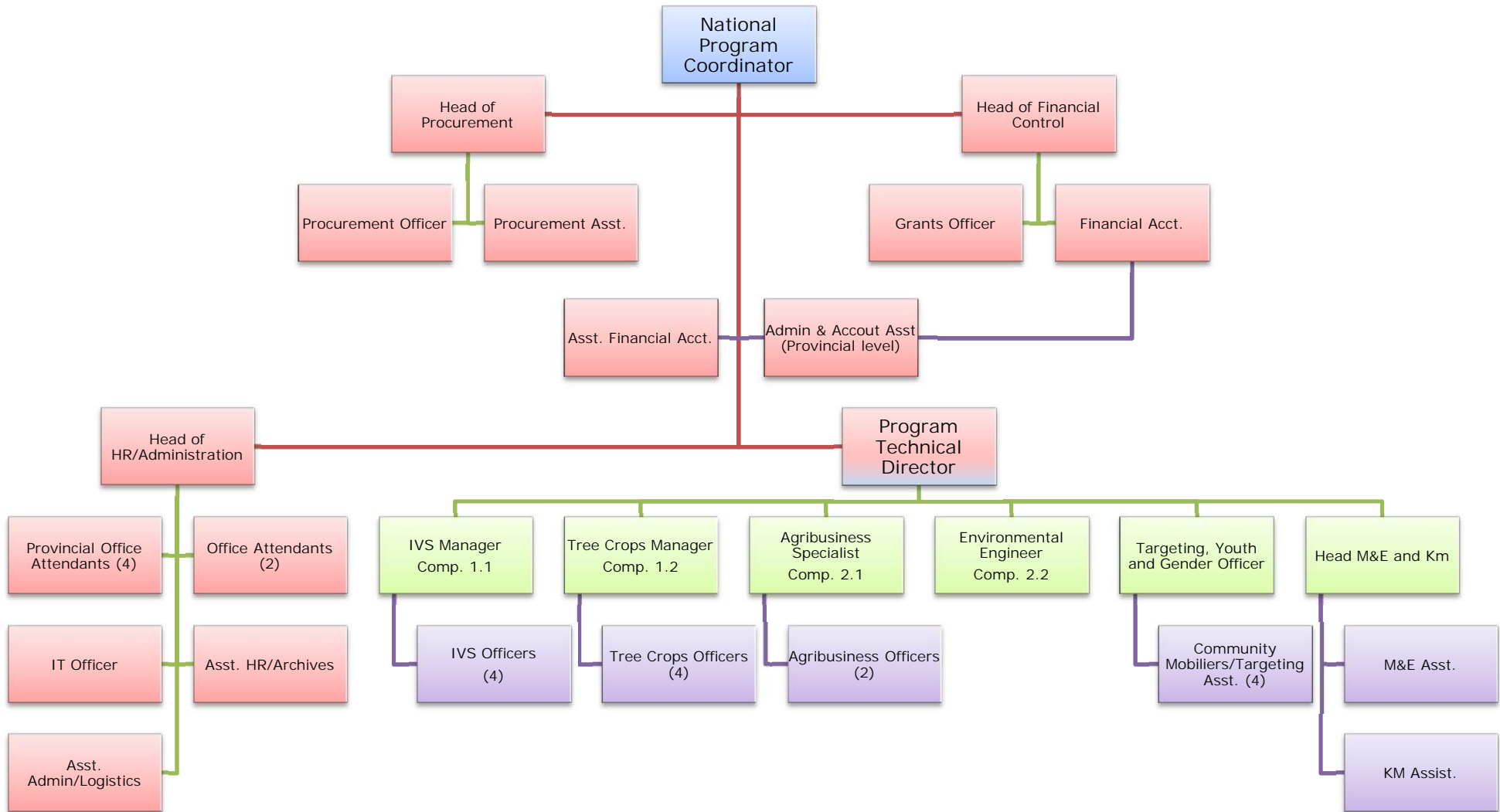


Figure M1.2 Republic of Sierra Leone: Agriculture Value Development Project – Project Organigram

C. Detailed project description and approaches

32. The **overall project goal** is livelihoods and climate change resilience of rural farming households in Sierra Leone improved. The **project development objective** (PDO) is to promote agriculture as a business for enhanced incomes and reduced rural poverty. The objective feeds into the two strategic objectives of the Country Strategic Note 2017-18, of: smallholder farmers' access to technical skills and market is improved; and rural communities' access to finance is improved. The achievement of the project goal and objective at the midterm review (MTR) and end of the project life will be measured through the Projects Logical Framework (to be found in the Project Design Document).
33. **Project components and activities.** The project is organized into three mutually reinforcing components: (a) Climate Resilient and Smart Agricultural Production; (b) Agricultural Market Development; (c) Project Coordination and Management.
34. **Component 1: Climate Resilient and Smart Agricultural Production.** The outcome of this component is volume and value of production increased, and production systems made more climate resilient. The component is divided into two subcomponents: (i) Support to smallholder rice production and productivity, and (ii) Support to tree crops production and productivity.
35. **Sub component 1.1 – Support to smallholder (family farm) rice production and productivity**
36. This subcomponent will facilitate access to improved rice seeds, fertilizers and agrochemicals, irrigation, and mechanization for land preparation and harvesting, as well as parallel cropping or rotation of vegetables in order to improve household nutrition by farmers cultivating IVS. AVDP will take over support to the 300 farmer organizations (FOs) that were supported under RCPRP and the Smallholder Commercialization Programme-Global Agriculture and Food Security Programme (SCP-GAFSP) for rice production in the IVS, and will add support to 160 new FOs, selected and organized with average farm sizes of about 0.8 ha, double the current average of 0.4ha under the RCPRP/SCP-GAFSP, in order to target farmers with greater marketable surplus and increased prospects of integration into the market economy.
37. **Support to new rice farmers:** AVDP will recruit and support 5,000 new farmers, organized into a minimum of 160 FOs, with each farmer cultivating an average of about 0.8ha. The larger farm size, compared to legacy farmers is adopted to the increase the possibility of integration into the market of AVDP farmers. If necessary, AVDP will work with the Agricultural Engineering Division of MAF to conduct an inventory to identify suitable IVS, outside the 4,300ha (of the estimated 690,000 ha available nationwide) already inventoried under SCP-GAFSP. Two of the most important criteria for selecting inland valley swamps are: (i) the size of the swamp which should be a minimum of 10ha and (ii) the swamp should be perennial or with a stream flow of at least 9 months/year.
38. The second aspect of the targeting strategy will be the identification of the landowners and getting them to sign land lease agreements with the project for duration of at least 10 years. The objective of signing such leases is to protect non-land owning project beneficiaries who are members of supported FOs from expropriation of their cultivation rights for a reasonable period after project end. That will enable farmers in the communities, without access to IVS land but with access to other inputs such as family labor or operational capital for rice cultivation, to join FOs that would eventually benefit from the inland valley swamp development.
39. The membership of each FO will be a maximum of 30 people with a gender disaggregation of at least 40% women and 40% youth. Where there are existing groups in the community that meet the criteria above they would be registered as FOs. Each FO member will receive support to cultivate 0.8 ha of irrigated IVS rice and 0.1ha of vegetables planted as a rotation in the IVS or in the fringes of the IVS.
40. AVDP will support rice based FOs who meet the following additional criteria: (a) are willing to do double or triple cropping of rice in a year, and/or produce vegetables for increased

household nutrition and value addition; (b) are registered with MAF, the local council and the Ministry of Social Welfare; and (c) possess a legal document to indicate long-term use of land. Participating farmers will be selected by the communities and the selection verified through inspection of the farms by Service Providers contracted by AVDP and staff of MAF.

41. Contracts will be given out to Service Providers (SPs) to carry out the land development works and building of the capacity of the beneficiaries and youth contractors to enable them do maintenance work on the developed IVS from time to time. Using experience from RCRCP and SCP-GAFSP, the recruited SPs for the IVS development would be required to execute the following scope of work:
 - a. Brushing, felling, clearing and de-stumping of IVS
 - b. Construction of bunds (peripherals, main-drain, internal / contour)
 - c. Construction of earth dams or bore holes
 - d. Excavation of canals (peripheral, main-drain, return)
 - e. Head bund, spillway, settling basin and riprap protection – energy dissipaters
 - f. Installation of inlets and outlets
 - g. Upstream and downstream protection
 - h. Leveling, puddling and transplanting /cultivation of the swamp
42. AVDP will use a community based development approach, with active participation, and a leading role of the project beneficiaries in the design, implementation and monitoring of the interventions to ensure that benefits actually reach the target communities. AVDP will support SPs by capacity building (training, supply of tools and equipment), cash-for-work and service fees.
43. To improve the climate resilience of IVS, AVDP will support the construction of 30 earth dams in appropriate seasonal IVS, drawing on experience of the four pilot earth dams constructed under the RCPRP in 2014. Construction of the dams can be scheduled to fit in with climatic factors and plant and equipment constraints. Depending on the size of the dam, the part of the core below ground, and perhaps the spillway, can be constructed in one dry season and the remaining embankment, and outlet works to be completed in the next. Construction on a layer-by-layer basis will allow for good compaction and stability and, spillway parameters permitting, for a flexible timetable of construction to be introduced. Compaction is an essential part of the construction process whatever the size of the embankment and should not be ignored – always pay more for the equipment needed as this cost will be recouped by the construction of a better, safer and more stable structure. A dam of zoned embankment should be constructed, as this type of dam will reduce seepage hazards to a minimum. The zoned embankment usually consists of an impervious core, semi-pervious upstream and pervious downstream sections. Stone pitching of the upstream face will help to protect the wall from wave action.
44. The operation of a dam should include adjusting reservoir levels, keeping records and opening and closing valves/gates. Proper operational procedures are extremely important in maintaining a safe structure. Dams are complex structures that may require a lot of monitoring. They are subject to several forces that can cause failure. These forces are active over the entire life of the dam, and the fact that a dam has stood safely for years is not necessarily an indication that it will not fail.
45. Assumption of responsible ownership of the dam and its catchment by the FBO/community, is vital for future maintenance and longevity of the structure. The establishment of dam committees at an early stage is strongly recommended. The main users of the dam should be well represented on this committee. The committee will be responsible for the safety, operation and maintenance of the dam. The maintenance of the dam should be done regularly in order to keep it in good order. Preparation of a check list of activities to be completed annually or seasonally (or more frequently) should be prepared and maintained as record of maintenance activities and works carried out. Training local people in all aspects of dam repair and maintenance may need to be included in the construction programme. In some cases where the problem is severe, the committee may have to send a report to the AED/MAF. In most communities, women are often responsible for drawing water and should therefore be included in the committee. The membership of the committee should comprise

about eight members of the FBO. The committee should include the chairman (of the FBO) and the youth contractors.

46. The construction of small dams is an attractive solution to retain water from the rainy season for use in the dry season for irrigation of a second crop of rice or vegetables. Small earth dams are water harvesting storage structures, constructed across narrow sections of valleys, to impound runoff generated from upstream catchment areas. The construction is best suited in areas having a landscape featuring rolling or hilly land and where small natural streams provide water to fill the reservoir formed behind the dam. Small earth dams require minimal maintenance (unless in difficult locations or in extraordinary climatic situations), and are better able to withstand foundation and abutment movements than the more rigid concrete and masonry structures.
47. The reservoirs formed by the earth dams will be stocked with fish to be managed by the women members of the FOs for improvement of household nutrition and livelihoods. An experienced NGO or private sector Service Provider will be contracted to provide aquaculture training and technical assistance to women members of the FOs.
48. AVDP will also support establishment of up to 20 solar powered borehole irrigation schemes (SPIS). The essential components of SPIS are seen in (Figure M1.5):
 - a solar generator, i.e. a PV panel or array of panels to produce electricity,
 - a mounting structure for PV panels, fixed or equipped with a solar tracking system to maximize the solar energy yield,
 - a pump controller,
 - a surface or submersible water pump (usually integrated in one unit with an electric motor), and
 - a distribution system and/or storage tank for irrigation water.. The management of borehole systems should be the same as for small dams detailed above.
49. AVDP will engage two sets of SPs providers for the FFS: lead farmers, who will contribute to the discussions in the FFS and help the reaching of consensus on actions to be taken; and, District MAF extension workers as facilitators of FFS. As indicated earlier, training will be done for two seasons, the second season to underscore the importance of irrigation to productivity.

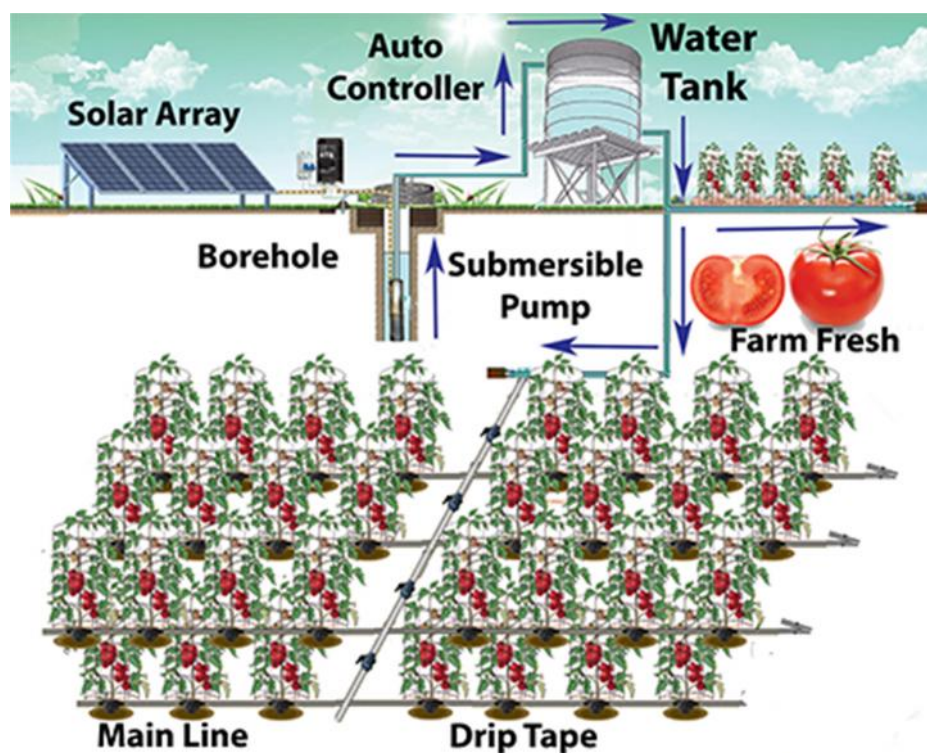


Figure M1.5: Schema for a typical solar powered borehole irrigation system

50. FFS training will be on improved farming techniques, group dynamics, management and good governance, enterprise planning and management, financial and business management, participatory M&E, and functional literacy; the conduct of FFS could be contracted to a SP (FAO, an experienced NGO or a private firm) or directly managed by PCU. The AVDP FFS must follow the core principles and components of FFS as follows:

- The FFS is field based and lasts for two cropping seasons to train all farmers and ensure double cropping
- A rice FFS meets once a week with a total number of meetings that might range from at least 10 up to 16 meetings each season.
- The primary learning material at a Farmers Field School is the rice field.
- The Field School meeting place is close to the learning plots and can be in a farmer's home, beneath a convenient tree, or a purpose built hut ("baffa").
- FFS educational methods are experiential, participatory, and learner centred.
- Each FFS meeting includes at least three activities: the agro-ecosystem analysis, a "special topic", and a group dynamics activity.
- In every FFS, participants should conduct a study comparing improved and traditional farming plots.
- An FFS will include several additional field studies depending on local field problems.
- An AVDP FFS should include additional special capacity building modules on such topics as GALS, Business Management, rice processing, etc
- Between 25 and 30 farmers participate in a FFS. Participants learn together in small groups of five to maximise participation.

- All FFSs include a Field Day in which farmers make presentations about improved technologies used and the results of their studies.
 - A pre- and post-test is conducted as part of every Field School for diagnostic purposes and for determining follow-up activities.
 - The facilitators of FFS's should be experienced experts otherwise they should undergo intensive season-long training to prepare them for organising and conducting Field Schools.
 - Preparation meetings precede an FFS to determine needs, recruit participants, and develop a learning contract.
 - Final meetings of the FFS often include planning for follow-up activities.
51. FOs that have gone through FFS will receive support for (a) adoption of climate smart technologies (seeds, fertilizers, improved crop management, etc); and (b) with support from the Adaptation Fund (AF), training of lead farmers in the FFS to monitor correct fertiliser and pesticide application and disposal, to reduce greenhouse gas (GHG) emissions. FOs trained in FFS will be the main vehicle for targeting smallholder rice farmers, rural youth and women with the development of participatory production and business plans, improved agricultural production, and advocacy on land tenure.
52. AVDP will support FOs that complete FFS to amalgamate with neighbouring FOs to form larger FBOs that will be linked to ABCs or other private sector marketing organizations such as large rice milling companies, and receive support through the Matching Grants (MG) scheme of the project for procurement and operation of mechanization and processing equipment.
53. Except for equipment funded under the MG Scheme described under Component 3, AVDP will finance all investment and operational costs of support to FOs and FBOs, subject to the following repayment schedules:
- 0% of the investment costs for land development (IVS irrigation system development, small dams and borehole construction)
 - 40% of the investment costs of IVS inputs (rice seed, fertilizer, agrochemicals, tools and equipment) at the end of the first year
 - 80% of maintenance costs of IVS systems, including dam maintenance costs in the second year (cost of labor, seeds etc), at the end of the second year.
54. FBOs will repay to a development fund housed in a Community Bank. Repaid funds will be used to maintain the secondary road network in proximity to the FBO.
55. Rice based FBOs will be strengthened with continued institutional capacity building. This activity will build the production and marketing capacity of FBOs, ABCs and cooperatives by supporting their orientation towards value chain linked agriculture production, including linkages with SCADeP agribusiness and aggregator schemes as well as the certified rice seed multiplication scheme of the planned WAATP.
56. The AF is expected to: (a) finance the construction of 30 earth dams including inland fisheries in the dams (b) 20 solar borehole irrigation schemes, (c) contract for soil and water analyses to screen for environmental pollution and excess salinity in project supported IVS, and (d) support for training of lead farmers through the FFS to monitor correct fertiliser and pesticide application and disposal, to reduce greenhouse gas (GHG) emissions.
57. Collaboration and parallel financing is envisaged from SCADeP for (a) agribusiness rice processors and aggregators to which AVDP rice FBOs in some locations will be linked as outgrowers, and (b) WAATP in which some AVDP FBOs will be linked in some locations as certified seed growers.

Support to legacy rice farmers:

58. To enhance the sustainability of previous investments under the RCPRP and SCP-GAFSP, AVDP will support capacity building of the FOs by putting all legacy FO members through FFS

which will last for two crop seasons during the first year of the project. Learning modules for improved vegetable and other secondary crop production in the IVS will be part of the curriculum of the new IVS FFS, as part of the rice-vegetable cultural system to attract the participation of women, generate additional household income and increase household nutrition and food security for the target group.

59. AVDP will also support the organization of legacy FOs into larger FBOs that will be linked to ABCs or other private sector marketing organizations such as large rice milling companies and aggregators supported by SCADeP, and will receive support through the Matching Grant (MG) scheme of the project for procurement and operation of mechanization and processing equipment as detailed under Component 3.
60. Legacy rice FOs and FBOs will be provided with support to finance maintenance of irrigation systems in the rehabilitated swamps during the first two years of AVDP, the first of which FOs will be in FFS. Such maintenance activities can be carried out by FOs and FBOs under the supervision of PMU, or contracted to SPs.
61. FOs will pay back 40% of the total contract price to SPs for first year maintenance service at the end of first year, and 80% of the maintenance cost during the second year, at the end of that year. No further support will be provided for maintenance costs, and no support will be provided for operation costs financing (purchase of seeds, fertilizers etc., which Legacy FOs and FBOs are expected to self-finance or obtain from CBs and RFIs. Funds repaid will be deposited in CBs under the same conditions as for new farmers discussed earlier.

Subcomponent 1.2 – Support to tree crops production and productivity:

62. This subcomponent will enhance the economic viability of oil palm and cocoa tree crop farmers and link them more effectively to private sector markets. The design considerations include:

Legacy communities - the impacts of the two predecessor projects, GAFSP and RCPRP, are tenuous and fragile in some instances. AVDP will target the same 13 districts (now 16) and “legacy” communities from these projects, and consolidate their achievements through design changes, such as a strong demand-driven value chain oriented to an effective exit strategy from the start. Thus, AVDP will inherit 4,000 beneficiary farmers from 1,185 communities (Table M1.5);

Climate vulnerability⁵⁰ - since Sierra Leone is on the Western Margin of the optimal growing belts of West Africa for oil palm and cocoa tree crops, and in the medium term the selected districts are likely to experience hotter days and more prolonged periods of moisture deficit with the onset of climate change, final site selection will be based on site suitability assessment. All the 16 districts will be targeted for oil palm but only seven of these districts for cocoa;

Precautionary approach to high yield⁵¹ - rather than the pursuit of maximum yields by planting high yielding new tree crops, AVDP will emphasize the use of climate resilient planting materials, considering local environmental impacts from agrochemical inputs, soil exhaustion, reduction of soil moisture capacity and excessive de-shading of natural forest trees; and

Farmer viability – which is currently weak owing to a history of neglect and preponderance of senescent old farms and low yields associated with unimproved agronomic practices. As a result of their marginal viability, these farms are often occupied by older farmers who are no longer fully fit and able to undertake their own farm work. AVDP will place more emphasis on planting of new farms using improved planting material and agronomic practices in order to enhance yields. By focussing on successful farmers in legacy communities, it will consolidate previous project impacts, and enlarge

⁵⁰Tree Crops – optimal climatic conditions – WP on Tree Crops, Attachment 1, Table 1

⁵¹Expected yields of cocoa and oil palm for various levels of agronomic treatment and input regimes on optimal growing sites – WP on Tree Crops, Attachment 1, Table 2

tree crop farm sizes through replication and extension. It will address the demographic burden of old or unfit farmers through youth quotas.

Planting of cocoa

63. AVDP will continue and expand the activities initiated under GAFSP and RCPRP, rolling out replanting of old plantations as well as expansion of cocoa by planting on degraded crop lands (5,000 ha) as follows: (a) each selected farmer will be assisted with 1.0 ha of cocoa farm, comprising any area of existing farms that need to be replanted (plantations with trees that are more than 40 years old and are yielding less than 14 pods per tree), and establishment of new plantations on degraded secondary bush regrowth areas; (b) new planting sites will be assessed for soil and climatic suitability, and be supported partially by the AF with provision of climate resilient seed. New plantation will involve smart agrochemical input regimes, and 1,111 seedlings per ha + contingency; and (c) cocoa planting on new farms will commence in Project Year 1, and provide for maintenance, protection, fertilisation and training for the infant crops through to the first commercial harvest expected by mid-Year 3.

64. There are options for where to plant or replant cocoa⁵². These include:

- Under-planting: planting new cocoa trees in an existing farm, removing some but not all cocoa trees
- Gradual replanting: removing all cocoa trees in a section or block of an existing farm and planting new cocoa trees in that section
- Complete replanting (re-establishment): removing all cocoa trees and completely replanting the whole field
- New planting (establishment): Planting cocoa on fallow land or an area where cocoa has not been planted before.

⁵² Asare, R. and David, S. 2010. Planting, replanting and tree diversification in cocoa systems. Learning about sustainable cocoa production: a guide for participatory farmer training. Manual No. 2. Development and Environment Series 13-2010. Forest & Landscape Denmark. www.sl.life.ku.dk

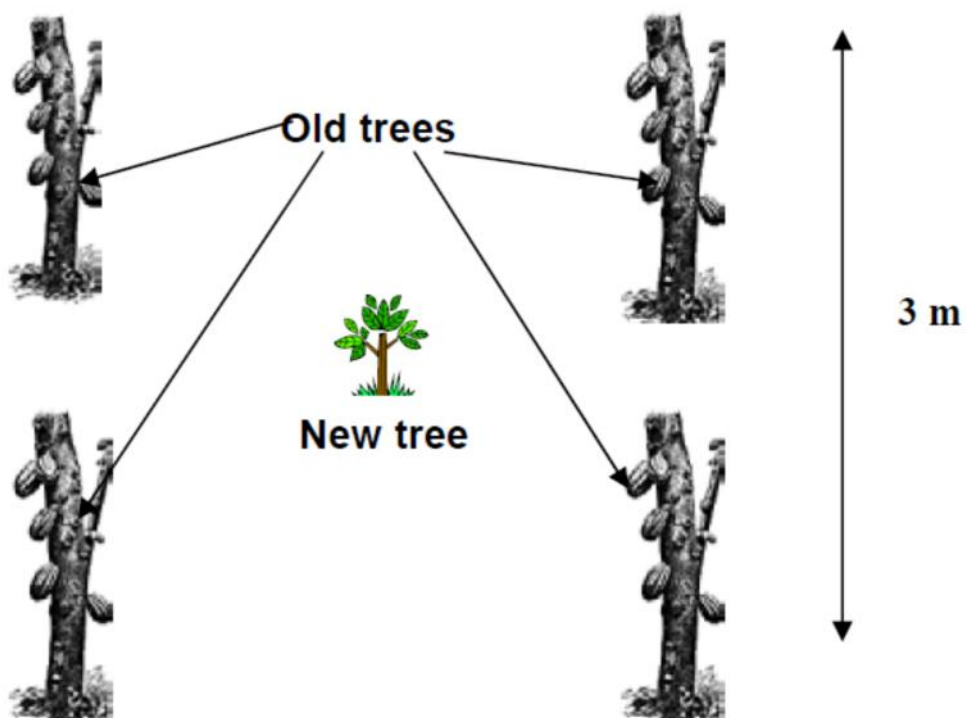


Figure M1.6: Arrangement for under planting of cocoa

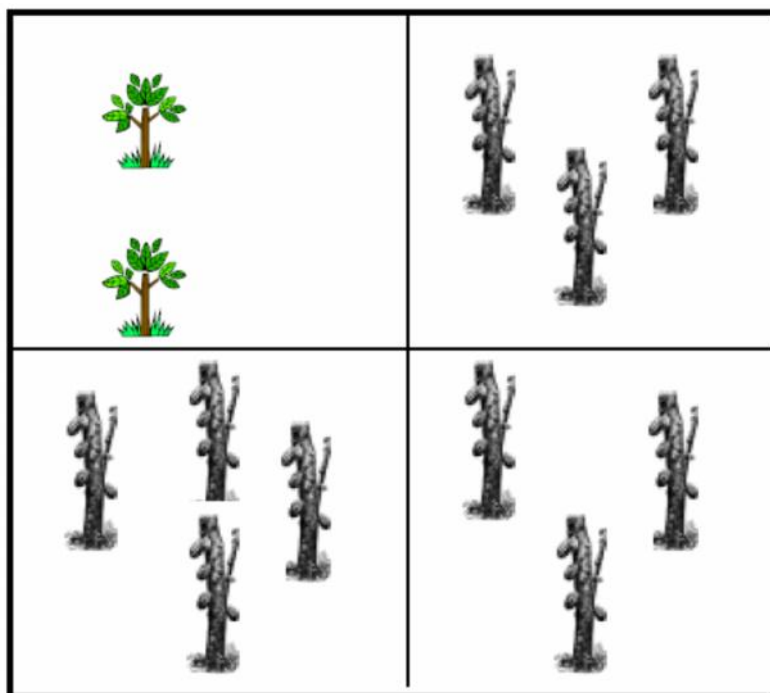


Figure M1.7: Arrangement for Block planting of cocoa

65. In order to establish a good and reliable temporary and permanent shade cover for cocoa, and provide supplementary income generation before cocoa starts yielding, food crops like cassava and plantain, and timber trees should be planted a year before the cocoa seedlings are planted. By so doing it reduces the risk of losing seedlings due to harsh field conditions like heat and mirid attack. However, if farmers are faced with time constraints, food crops and timber trees can be planted three months before cocoa with the first rains in early March to ensure that they establish well before cocoa seedlings are transplanted to the field in June the same year.

66. Young cocoa trees (0-3 years) require shade levels of about 70% (30% sunlight) and mature and old cocoa trees (4 years and beyond) need about 30-40% shade (70% sunlight). To create a well-established shade level, use the following spacing regimes for the corresponding crops and trees:

- Plantain: planted at 3 x 3 m rectangular spacing, resulting in 1111 plantain suckers per hectare
- Cassava: planted at 2 x 2 m rectangular spacing, resulting in 2500 cassava cuttings per hectare
- Timber trees: planted at 12 x 12 m triangular spacing, resulting in 69 timber seedlings per hectare
- Nitrogen fixing trees like *Gliricidia* sp.: planted at 6 x 6 m triangular spacing, resulting in 277 *Gliricidia* seedlings per hectare

67. If both plantain and cassava are planted or two other food crops, the farm should look like Figure M1.8 below.

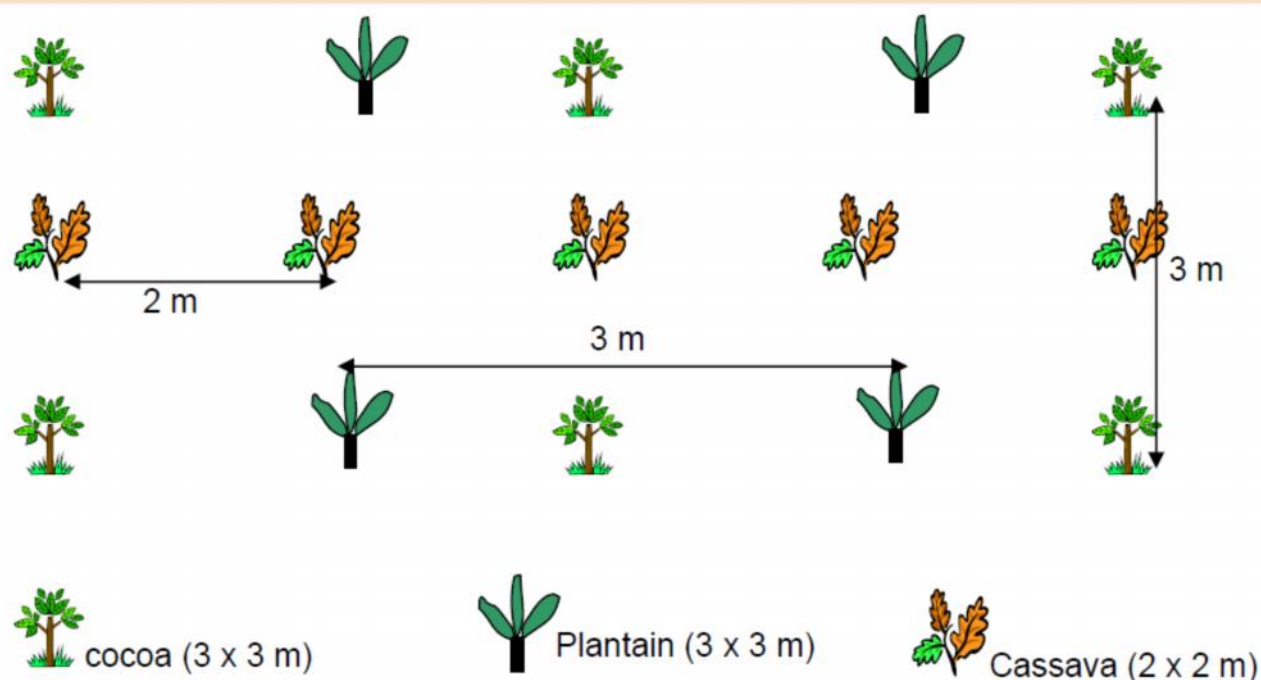


Figure M1.8: Food crop arrangement with cocoa (Source Asare & David, 2010)

Planting Oil Palm

68. For oil palm tree crops, AVDP will also continue and expand the activities initiated under GAFSP and RCPRP, rolling out new planting of high yielding oil palm as follows: (a) inherit around 4,000 ha of infant oil palm crops from GAFSP and RCPRP; (b) recruit 4,000 new-entrant farmers distributed over all 16 rural Districts in order to assist them with the establishment of 1.0 ha each of planting on new farms, and (c) in view of the potentially high

yields and incomes, AVDP will treat oil palm on a high-input basis, and provide agrochemical pesticides and fertilisers, and other agronomic inputs, maintenance and protection on the overall 4,000 ha of infant oil palm crops.

69. For intercropping with food crops and vegetable production, AVDP will assist all oil palm farmers to carry out intercropping on infant tree planting sites with rice or groundnuts, thus providing family farmers with income during the years before new oil palm starts bearing, and with parallel production of vegetables (0.1 ha each) to improve household nutrition and livelihoods. It is assumed that the food crops produced will be consumed locally and alleviate food insecurity. This activity will be implemented in collaboration with IVS activities related to planting of horticultural crops.

Table M1.7: Summary of activities and expected outputs under the tree crops subcomponent

Main activities	Area (ha)	No. of trees ('000)	Expected yield (MT/ha/yr)	Expected annual prod. (MT/yr.) ⁵³
1.3.2: Cocoa new farms planting	5,000	5,555	1.0	5,000 (cocoa beans)
1.3.3: Oil palm - (a) new planting (b) Inherited infant crops	(a) 4,000	600	16.0	192,000 (FFB)
	(b) 4,000	600	3.5	21,000 (CPO)
			1.0	6,000 (Kernels)
1.3.4: Intercropping of new planting with food crops	8,000	Depending on intercrop choice		

70. Implementation. Engagement with beneficiary tree crop farmers will be through their FBOs/ABCs (not on an individual farmer basis). The following criteria will be applied in beneficiary farmer selection: (a) within the selected districts, AVDP will start from a base of successful legacy farmers from the two preceding IFAD projects, but aim for an increase of 50% in the overall target of beneficiary farmers through the recruitment of new entrant farmers from the same communities; (b) all legacy oil palm farmers would be adopted; (c) adopt new entrant farmers who would be expected to: (i) prove land access entitlement, and (ii) be fit and able, as the AVDP will no longer subsidise tree farmers with paid youth labour; The criteria for women and youth participation in tree crops production have been highlighted in the section on Targeting. All on-farm activities will be done by the beneficiary farmers organised by their FBO, and no payments will be made to them or to youth labour squads (apart from the usual meals, rain gear, etc.). This will not apply to youth contractors hired by service providers for nursery and other public good activities.
71. In planting new cocoa or oil palm plantations AVDP will not support the clearing of forest areas for tree crop plantations. Rather degraded secondary bush areas will be used for such plantings increasing the climate resilience and carbon sequestration of the areas of bush to be replaced by AVDP supported plantings.
72. AVDP will support the smallholder tree crop farmers with training using the FFS methodology, with modules addressing the various stages of the value chains: (a) cocoa and oil palm agronomic practices, nursery operations, site identification, assessment and preparation of planting sites, field planting, mulching and manual weed control; (b) demonstration of crop protection techniques in the field and nursery, fertiliser application, organic and “smart” agrochemical treatment; (c) timely harvesting and production, and improved processing technologies, with special emphasis on the pursuit of improved recovery and produce quality for premium markets; and (d) farming as a business.
73. Tree crop FFS should be run based on crop life cycle from cultivation/production to processing and marketing, i.e., on a Seed (Production) –to- Seed (Processing/Marketing) basis, instead of on a 9 months or a yearly basis as it is currently implemented under the SCP-GAFSP. This will enable farmers to learn about the agronomy of the crop, procedures and techniques involve in processing the crop into consumable products. With this strategy,

⁵³Note: FFB = Fresh Fruit Bunches; CPO=Crude Palm Oil; Kernels includes Kernel cake and Kernel oil

the FFS session shall be conducted on a monthly basis rather than on a weekly basis as is currently done under GAFSP.

74. The graduation of FFS members to be done by completion of crop cycle phases as follows:
 - Production phase
 - Processing phase
 - Packaging and marketing phase
75. Two facilitators to be assigned in the running of one FFS, instead one facilitator facilitating five FFS as is currently done in the SCP-GAFSP. Also facilitators to be selected from MAF and from within the communities on a 50%: 50% basis instead of selecting 90% of personnel from MAF as is done under GAFSP.
76. On-Farms (On-the-job) training of FFS members in order to assess their knowledge and skills gains during the implementation phase, and assessment of gaps and challenges, conducted on a monthly basis under the GAFSP, will be conducted on a quarterly basis under the AVDP. This On-Farms training is done at FFS sites, and will help to strengthen farmers knowledge and skills, and enable them to roll over these skills to their individual farms
77. AVDP will link farmers to markets: (a) initially through interim arrangements involving ABCs or farmers' cooperatives in aggregation, processing, storage and group selling. AVDP will support the selected ABCs/cooperatives with MG and training in value-added, improved processing (oil presses, solar driers) for market premiums, quality assessment and identification of market opportunities, and engaging with RFIs for working capital; and (b) as part of a strengthened exit strategy, AVDP will identify and broker processing and marketing agreements with the private sector from 2022 onwards. In view of the need to provide market outlets for palm oil producers in up to 13 districts, the need is likely to arise for the promotion of small-scale oil presses in various strategic locations. This will need to be elaborated in Phase II of the AVDP.⁵⁴
78. There is need for the redesigning of ABCs to be able to accommodate tree crop production, processing and marketing facilities. The establishment of ABCs were initially designed only food crops and therefore, provision in terms of processing facilities and storage were only made for food crops. There are 94 non-project supported ABCs and 36 project supported ABCs that need to be re-designed under the AVDP to accommodate tree FBOs for processing and marketing of tree crop produce in the 9 SCP-GAFSP districts. For the 4 districts (Kailahun, Kenema, Kono & Koinadugu) that are outside the SCP-GAFSP operational areas, there are 63 ABCs that need to be re-designed to be able to host tree FBOs for processing and marketing.
79. The following service providers will support the implementation of the subcomponent: (a) ABCs/cooperatives will be re-engaged in legacy communities through an MOU for the purpose of capacity building for produce aggregation, local processing and securing long term transparent supply contracts with principal buyers. Ten partners will be engaged per district (130 in total) whose selection will be subject to a performance and capacity test, with remedial capacity strengthening in marketing, business and financial planning as assessed to be necessary. Additional ABCs may be identified according to the needs of the target communities and gaps in coverage; (b) government strategic partners will be contracted through MOUs, including: (i) SLARI Clonal Seed Orchard Station in Pendembu to supply high yield and climate resilient cocoa planting material, and undertake overall supervision and oversight of project activities in all cocoa planting communities to ensure good agronomic practice until mid-2022; (ii) Njala University to supply high yield and climate resilient oil palm planting material, and undertake overall supervision and oversight of project activities in all oil palm tree crops planting communities to ensure good agronomic practice until mid-2022; and (iii) MAF District Offices to provide overall supervision and oversight of project activities, especially those of implementation partners (IPs), facilitate the FFS and training delivery for tree crops through its extension services; and (c) private implementation partners will include: (i) field service providers, retained/re-hired subject to a contract performance review, from the existing providers under GAFSP and RCPRP, to manage and implement all field activities

⁵⁴ For an example of possible small-scale processing units produced by WAPACOL, see WP on Tree Crops, Annex 6, Attachment 4

relating to tree crops under the overall supervision of MAF District Offices and under the specialised supervision of the government strategic partners. The target will be to engage 16 providers, one per district and (ii) two or more private sector marketing partners specialising in cocoa and oil palm, with experience in outreach, training, processing, quality control and marketing, competitively recruited from mid-2022 to partner with the ABCs/cooperatives, and enter into contract farmer or out-grower agreements with AVDP farm communities and/or their affiliated ABCs/cooperatives. The contracts will aim to establish durable and equitable long-term partnerships involving pre-financing, training, processing, price transparency and marketing in order to prepare for the project's exit strategy.

80. AVDP will support SLARI to engage a suitable international consultant to help design and supervise the establishment of a new garden. It is expected that it will consist of 3 pod bearing parents, with about 5ha of each as mono-clone blocks with a degree of isolation (10m of bush should suffice). At 3m² spacing this is 5,555 trees per clone. The choice of pollen parents will depend on the results of trials that are in progress in Ghana. Although 20 candidates are under test four have dropped out and it is likely that the final list will be about eight. Among these one or two may be used for two or even all three of the pod bearing parents. Others will be used for only one, and the choice may change over time as more experience is gained. It is proposed to plant 250 trees of each of the 16 pollen parents, so 4,000 trees in all, and 50 each of other named clones, say another 40 clones, making 6,000 in all. At 3m² spacing this is 5.4ha. There is no requirement for isolation. Thus, the total area for the SLARI Germplasm station should be 20.4 ha. There will be some scope to produce additional seed pods using pollen parents as pod-bearing parents.
81. The New AF supported germplasm station will only start supplying seeds in the 4th year of the project. In the interim, arrangements must be made to import the necessary seeds for use in AVDP from Ghana and/or Cote d'Ivoire, etc. Sixty pods will need to be imported to plant each ha of cocoa (1.5 seeds nursed per mature plant produced, 1,200 plants per ha, 30 seeds per pod).
82. To fulfil its objective of establishing a functioning germplasm station in SLARI for sustainable and long term development of the cocoa industry, AVDP will finance long as well as short term training of SLARI staff as follows:
 - One SLARI staff with MS degree to PhD in Cocoa breeding at the University of Ghana/CRIG.
 - One SLARI Staff with BS to MS in Cocoa Agronomy/Breeding at the University of Ghana/CRIG.
 - Short term training of CARI technicians at Mabang, Ghana – two x 3 week attachments per year for 2 years.
 - Short in-country training sessions for village technicians in village cocoa nursery establishment and management
 - The tree crop subcomponent will be implemented in two phases of three years each. Phase 1 will include farmer engagement and training, input procurement including advance seedling sourcing, nursery operations, cocoa rehabilitation, planting of cocoa and oil palm, crop maintenance and protection, and intercropping for vegetables. Phase 2 will still include maintenance and protection, but will shift emphasis to harvesting, processing, marketing and the exit strategy. As is the case with new rice farmers, except for equipment funded under the Matching Grant Scheme described under Component 3, AVDP will finance all investment and operational costs of support to FOs and FBOs, subject to the following repayment schedule: 40% of the investment costs for inputs for Cocoa and Oil palm beneficiaries (seedlings including pre-nursery and nursery costs, fertilizer and agro chemicals, farm tools and equipment) repaid over a 5 year period starting in the 5th year.
83. **Component 2: Agricultural Market Development:** The expected outcome of this component is value chain organization and performance improved. The component consists of two subcomponents: (i) Market access; and (ii) Climate-resilient rural infrastructure.

84. **Subcomponent 2.1 – Market Access:** This sub-component aims to enhance value chain organization and performance through better access to input and output markets to improve production planning and linkage of the smallholder farmers to profitable markets. This subcomponent therefore supports the strengthening of business skills along the value chain and the organisation of multi-stakeholder platforms.
85. **Strengthened business skills.** The AVDP will provide training and mentoring to Farmer Field Schools, Farmer-based organizations, Agribusiness Centers and SMEs (input dealers, aggregators, farm service providers, small processors) over the course of the project. It will also finance Training of Trainers intended for local NGOs, consulting firms and relevant government personnel. The project will introduce simple participatory cost/benefit analysis on demonstration plots established through support to FFS in order to calculate demo and control plot investment costs versus returns after harvest in order to demonstrate the costs and benefits of use of improved inputs. The project will train MAF personnel and lead farmers to conduct this exercise.
86. The project will hire an international NGO specialized in business development training to assess both the needs of beneficiary institutions and those of potential local service providers including relevant AVDP staff who will be trained to provide the training and mentoring to beneficiaries. The International NGO will assist the AVDP to identify and modify existing appropriate training modules that meet the needs of the target group. The AVDP will engage local service providers to offer training in basic bookkeeping, budgeting and business planning and management to FBOs, ABCs and SMEs and will follow up training with mentoring through regularly scheduled visits. AVDP district level agribusiness assistants will be responsible for local oversight of this activity and will monitor uptake of the training.
87. **Development and operation of multi-stakeholder platforms:** This activity aims to improve the functioning of the three target value chains by improving information flows between stakeholders, introducing and sharing innovations, identifying policy or regulatory roadblocks to value chain development and providing a forum for Business to Business Meetings and deal facilitation among buyers and sellers. The activities to be supported by AVDP include: (a) a mapping of existing value chain actors to identify the roles, linkages and challenges of each; (b) capacity building interventions to address the identified needs of the value chain player groups, including exchange learning to better performing ABCs (around 25⁵⁵ of these); (c) diffusion of innovations pertinent to the value chain and (d) linking buyers and sellers where smallholders can increase their strength as reliable market players, and buyers can enter into stable buying relationships with smallholder farmers. The platform will facilitate discussions concerning issues of supply, market realities, pricing challenges, transportation problems, contracting and so on, and will be an important vehicle for awareness raising and business networking. Platforms will be established at provincial level. Rice and oil palm platforms would be established in all four provinces. Cacao platforms would be limited to the Eastern and Southern Provinces where the overwhelming majority of plantations are situated. Platforms would meet three times per year.
88. **Implementation.** The FBOs/ABCs/cooperatives and others to benefit from market access capacity building will be identified through AVDP's engagement with the organizations in partnership with the District MAF Office staff. During the first six months of implementation, the project will present the overall objectives of the platform as part of its outreach efforts. This will be followed up with separate workshops for specific value chain actors (farmers' organizations, input suppliers, buyers, processors, RFIs) to conduct participatory mapping of major constraints to improved value chain performance. During these workshops, the AVDP will also conduct training needs assessments for input suppliers, service providers, and processors to shape its training program for these value chain actors. The workshops will be organized by the AVDP's Agribusiness Specialist, in collaboration with the District Agricultural Development Officers. Upon completion of the mapping exercises, a large workshop will be organized regrouping all value chain members to share results of the mapping exercise and training needs assessment and establish an informal platform.

⁵⁵FAO estimate, 2017 September

89. During the first year of the project the AVDP will engage an expert in value chain commodity platforms who will travel to Sierra Leone to undertake a survey of expectations from potential platform members, define platform scope and functionalities and develop an interim guidance note on platform facilitation with relevant AVDP staff. On a second and third visit, the consultant will facilitate the first rounds of platform meetings in one province for the three selected crops. These pilot rounds will form the projects final approach to the multi-stakeholder platforms and the guidance note will be finalised.
90. The project will hire qualified service providers to provide the training. Larger entities further up the commodity chain, such as smaller milling companies, will also be supported to improve milling efficiency, equipment maintenance and business management including transparent contracting procedures with their suppliers.
91. AVDP will conduct a detailed description of the purpose of the platforms, the work required to enable them to take place, and a clear delivery plan through varying existing entities to reach as many players as possible. Membership of the initial “informal” platforms will be generated from those who attend the platform meeting, who will also determine the actual constitution of the Rice, Oil Palm or Cocoa platforms. The chair may well be an AVDP staff initially but this will be handed over to the representatives of the varying parts of the value chain as they gain traction.
92. AVDP will support selected players from each node in the chain to undertake study visits to see examples of best practice performing platforms within Sierra Leone or regionally such as Ghana. An example is the Farm to Market Alliance (formerly known as Patient Procurement Platform), a public-private sector led consortium of organisations seeking to transform food value chains in emerging markets by building a demand-led value chain, based on long-term linkages between suppliers (farmers), buyers and other key market players such as suppliers of finance, inputs and technical expertise. Their aim was to actively engage smallholders, increase their productivity, profitability and resilience and their strength as reliable market players. Buyers then have been to enter into stable buying relationships with smallholder farmers, typically through contracts extending beyond one season. Smallholders can use this “stability” in demand as collateral to access finance used for seeds, fertilizer and machinery to improve their productivity and incomes⁵⁶.
93. The commodity value chains under AVDP are short with only three or four “player types” in any given chain. These players are general input suppliers, FBOs/ABCs/cooperatives, farm groups, agents (particularly independent ones) and buyers from each commodity. The inclusion of RFIs and other financial entities will also be equally important.. As this is a self-learning process, the platforms that appear more successful will be encouraged to transfer their experiences to other platforms not necessarily even in the same commodity. Where “deals” or contracts can be developed or improved upon may require investment, and AVDP will consider any such plan submitted for MG support. Figures M1.10 to M1.12 present a series of suggested configuration for a typical platform for each commodity and at the district level.

⁵⁶ <https://www.growafrica.com/groups/smallholder-working-group>. GrowAfrica have claimed that through the work of the platform 30 off-take contracts had been signed for over 21,000 metric tons of maize and pulses and which had been procured from over 25,000 farmers. In Rwanda, 47 off-take contracts were signed for just over 8,000 metric tons of maize and beans, procured from over 17,000 farmers, almost 50% of them women. Also see <https://www.growafrica.com/groups/national-cassava-platform---ghana>.

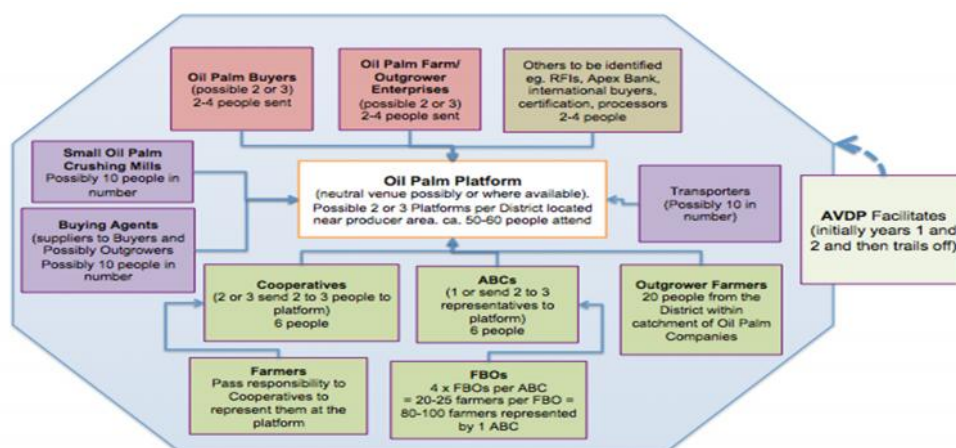


Figure M1.10: Platform development and structure for oil palm

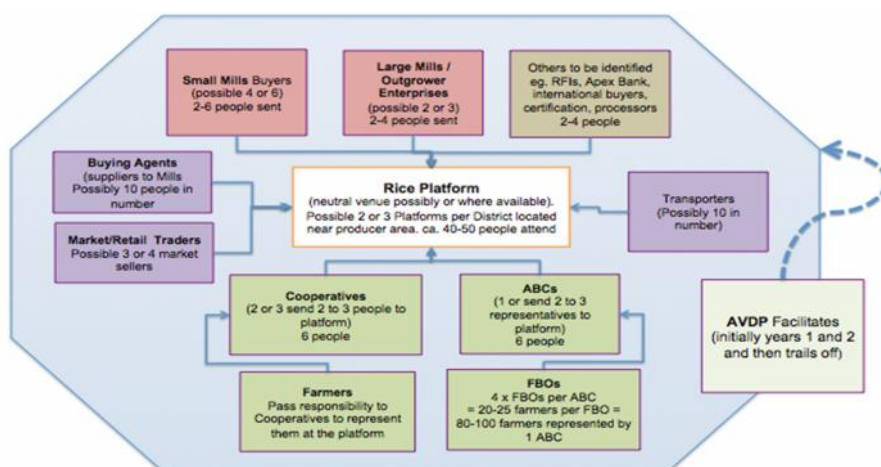


Figure M1.11: Platform development and structure for rice

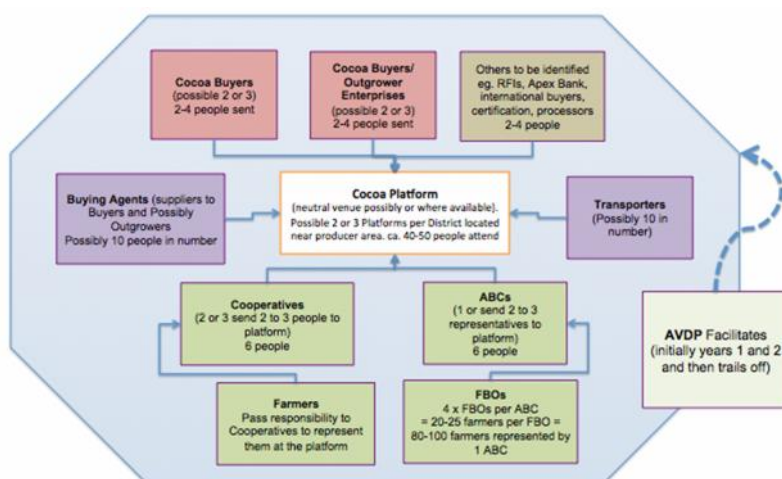


Figure M1.12: Platform development and structure for cocoa

94. **Subcomponent 2.2: Climate resilient rural infrastructure:** The outcome of this subcomponent is access to markets, processing and storage facilities improved. The major activities will be the construction/rehabilitation of warehouses, feeder roads and farm tracks.
95. **Warehouses.** Many of the storage facilities provided to the FBOs by previous projects have been seriously damaged after many years of construction and/or use. Twenty warehouses

identified on a demand-driven basis under Component 1 will be rehabilitated in order to improve the quality of post-harvest practices. Rehabilitation works may include: (i) change/modification of some parts/components of the building; or (ii) provision of extension facilities (water system, sanitation, fence, slab for sun drying, etc.). The Project Engineer will assess the physical condition of the targeted warehouses and develop bills of quantity (BoQ) for procurement processing. Rehabilitation works will be carried out by private contractors hired on a competitive basis, under the supervision of the Project Engineer. At the completion of rehabilitation works, each rehabilitated facility will be handed over to the respective FBO/cooperative for utilisation, with an agreed plan for its maintenance.

96. **Climate resilient roads and farm tracks.** Roads to ensure sustained connection between farms and markets will be provided on a demand-driven basis, complying with selected criteria including: (a) likelihood to connect with existing road networks; (b) synergy with other projects' activities for roads development; (c) an existing potential for maintenance; and (d) inclusion in the District Development Plan (for feeder roads). The project targets 50 km of feeder roads (connecting farms/villages to trunk roads) and 150 km of farm tracks (serving within a farm) that will include earthworks and structures (drainage and bridges). Based on the lesson learned that the provision of continuous physical access from one end to another is key in a value chain context, "hot spots" along trunk roads will be addressed through spot improvement (provision of structures).
97. **Potable water supply.** This activity includes: the rehabilitation and extension of 50 drinking water supply facilities and protection of catchment areas; the construction of 50 simplified networks, HOP boreholes and standalone water points in surrounding rural villages; and, the construction of 10 public and 150 individual sanitation facilities in the project area.
98. **Implementation.** Road development activities will start from the first year of the project, to ensure timely delivery of inputs to farmers and produce to the buyers. All the developed roads/farm tracks will be climate resilient. The survey and design for roads will be undertaken by a competitively recruited private consultancy firm and will include an Environmental Social Impact Assessment (ESIA), and the production of relevant designs and BoQs for rehabilitation/construction. A number of such firms (of various sizes) are service providers for similar projects under implementation and can be involved in the process when needed. The survey to be done will be required to identify unexpected hazards to be mitigated to ensure that climate resilient roads are provided. Standard designs of feeder roads developed by the SLRA will be customised to the local conditions for each road. Various technological options will be envisaged, to reduce the consequence of erosion and other effects of water on the road assets, particularly due to extreme climatic events resulting from climate change. Out of the three classes of feeder roads recommended by the National Rural Feeder Road Policy, Class F3 (4.5m wide) will be implemented in an improved way, including: (a) increased thickness of the gravel pavement layer (150 mm); (b) use of reinforced concrete for all piped culverts; (c) provision of side and mitre drains ditches (0.44 m²); (d) camber of 5-7%; and (e) no shoulder. Standard designs for farm tracks which are not yet available, will be developed by the project based on a maximum carriageway width of 3 m (including side drains, no shoulder). Given that farm tracks will be constructed on new farms, the survey will include land demarcation (based on an average density of 0.2km of road per ha of farm) to ensure sustainable access on each farm. Farm tracks will be provided in farms above a minimum of 3 ha size and will exclusively be served by intermediate means of transport (IMTs). Overall, all designs developed by the private consultancy firm will be subject to approval by SLRA prior to implementation. The installation of the potable water infrastructure and the capacity building and campaigns for a change of behavior towards hygiene, and logistic support to municipal councils for potable water management will be conducted by a locally procured NGO or institution.
99. **Procurement.** Based on the lessons learned from previous project implementation, lots allocation and distribution would be based on geographic rather than technical considerations (earthworks vs structures). Thus, a road can be split into two lots with different extension lengths rather than different technical aspects. The following will be considered in selecting competitively recruited private contractors, to ensure good quality and timeliness of works: (a) past experience on road infrastructure construction (at least five years); (b) number of similar construction works implemented (at least seven); and (c) ownership of construction

equipment (grader, wheel loader, tank truck, compactor, etc.). Such contractors have partnered with IFAD-assisted past and on-going projects. AVDP would plan the procurement process and contract award to allow execution of works during the dry season. Each contractor will be assigned a duration of not more than six months to complete the targeted works. Road works will be executed through the equipment-based approach and according to the technical specifications. Before starting with works, sensitisation of the target beneficiary communities along each road will be carried out by AVDP, to ensure their effective participation. Local community participation will include provision of local material (aggregate, water, etc.) and unskilled labour which will be paid by the contractor. It is expected that such community involvement will contribute to build their capacity to maintain the rehabilitated/constructed roads. Each rehabilitated/constructed road/farm track will be under a liability period of 12 months after the completion of works and will be officially (written letter) handed over to the district (feeder roads) or cooperative (farm tracks) for management and maintenance.

100. Supervision will be the responsibility of the private consultancy firm that developed the designs, with each assigned staff (stationed on site) responsible for one road (or section of road) not exceeding 15 km for better efficiency. After the contract is awarded, each contractor will update the work chronogram to serve as a tool to assess the physical progress (quantity and quality) of work and monitor the overall target. In association with the SLRA assigned Engineer, the Project Engineer will carry out regular supervision visits to each site and maintain a comprehensive report of each visit. It is expected that regular site supervision visits will provide relevant guidelines and recommendations to quickly address technical (and all others) issues arising on the sites during implementation of works. This will ensure that the deliverables are sustained and aligned with technical specifications.
101. Road maintenance. While the districts are responsible for feeder roads maintenance, no institution is responsible for farm tracks maintenance. Capacities for feeder roads maintenance in the country are reduced due to: (a) limited funding - the Road Maintenance Fund Authority (RFMA) did not release the expected amount of funds to the districts in the last two years, only limited funds were availed for emergency works; (b) limited logistics (none of the districts is provided with functional road maintenance equipment); and (c) lack of a coordinated approach to feeder road maintenance between the donor partners. For routine and periodic maintenance, AVDP will: (i) form and train road gangs for each road and provide them tools (cutlasses, diggers, shovels, wheelbarrows, spades, mason head pans, whippers, steel tampers, etc.) to be used for regular routine maintenance activities; (ii) initiate (and lead) dialogue with other donors, SLRA, RMFA and the districts, to address key challenges for sustainable feeder road maintenance in the country; (iii) support each district and targeted cooperative to develop Road Maintenance Plans. The Farm Tracks Maintenance Plan will integrate possible ways to set up a functioning levying system (retention from produce sold) as a source of funds to implement the plan. All relevant socioeconomic and managerial prerequisites to implement the levying system will be assessed and addressed. Members of farmers' cooperative informed the design mission that they are willing to play a leading role in the functioning of that system; (iv) support the cooperatives to implement the Farm Tracks Maintenance Plan for one year; and (v) maintain (two routine and one periodic) all rehabilitated roads and constructed farm tracks to ensure they are in good physical conditions before the project ends. In the other places, the following practices have been identified among farmers as having comparative advantages to successful farm tracks maintenance: an existing system of deduction (in-kind) to meet with the cooperative's needs for funds; and self-help practices among farmers for farm brushing and road maintenance activities.
102. Road mapping. A comprehensive map of the road and farm tracks network will be developed by the project. In line with the maps produced by RCPRP, this will include the location of all structures (type and size) and other relevant information. The maps will clearly illustrate: (a) the connection between farm tracks, feeder roads and trunk roads for all newly developed access; (b) the connection of newly developed access with existing ones provided by other stakeholders; and (c) the location of other project' activities as compared to access provided. Such developed comprehensive map will contribute to the overall national road mapping process as a support to SLRA. Partnership will be developed with SLRA (result-based signed MoU) who will assign an Engineer to overview the overall implementation

process of road development to ensure: (i) compliance with the overall guidelines of the National Rural Feeder Road Policy throughout the development process; and (ii) synergy and harmonisation with other donors. Prior to farm tracks construction, a memorandum of agreement (MoA) will be signed between the project, the cooperatives and the district (where the cooperative is located), with a commitment by the cooperative to ensure their maintenance. The Project Engineer will be involved throughout the entire process of road development.

103. **Targeting and impact assessment.** The direct beneficiaries of road development are the farmers targeted by the project. The indirect beneficiaries include all community members living along the rehabilitated/constructed feeder roads and farm tracks. It is expected that the investment in road development will positively impact the lives of the members of the targeted communities. At the very early stage of activity implementation, it will be important to develop simple tools that will be used to capture all related information for further assessment at any time of the project lifecycle.
104. **Component 3: Project Coordination and Management:** The expected outcomes of this component are: efficiently and effectively managed project achieving results; and existing regulations/policies/strategies proposed to policy makers for approval, ratification or amendment. The implementation of AVDP will be anchored within the National Programme Coordination Unit (NPCU) as well as the MAF at the district level. At the NPCU level, the project will provide for staff (many of whom are expected to be drawn from the merged NPCU and SCP-GASFP), vehicles, office equipment and supplies, and operational costs.
105. Two changes are foreseen to the organigram of the NPCU: (a) creation of four positions for Community Mobilizers/Targeting Assistants who will be posted in provincial capitals and will report to the Targeting, Gender and Youth Officer and (b) the deletion of the positions of Financial Accountant and Assistant Financial Accountant of RCPRP and GAFSP, and the insertion of the same positions for AVDP, since GASFP will be closing in March 2019. Staffing levels at NPCU will be complemented with technical assistance as needed, including for thematic studies. At the district level, support will be provided for operational costs, including for the supervision of project activities, alignment of AVDP activities with similar activities by other development agencies through the District Agricultural Coordination Committee, and monitoring of project activities and report rendition. The project will also provide for short training and workshops (one per staff per year) to enhance the implementation capacity of the various cadres of staff at the national and district levels.
106. **Matching Grants:** The rationale for AVDP's matching grants is to leverage financing for profitable, productivity-raising investments that would otherwise not be undertaken due to imperfections in the financial markets. They are intended to address three key constraints on financing for agricultural value chains and rural enterprises in Sierra Leone that have been identified: (i) persistent high real interest rates that make term loans unaffordable; (ii) high collateral requirements of banks; and (iii) high risks, in particular for agricultural asset loans. The grants will be used to defray the costs associated with the acquisition of agricultural production or processing equipment used by AVDP beneficiary groups (ABCs or FBOs) or service providers and SMEs in the rice and tree crop value chains.
107. For financing of production, processing equipment and infrastructure such as warehouses, drying facilities or solar powered generators, the project will provide a one-time only matching grant of 60% of the acquisition cost for equipment and 80% of the cost of infrastructure, contingent on loan approval and beneficiary contribution for the remaining portion of the financing. Indicative ceiling amounts for grants would be \$60,000 for infrastructure grants destined to select ABCs allowing for an investment of \$75,000 and \$25,000 for equipment acquisition for ABCs and SMEs, permitting an investment of \$41,666.

II. Indicative criteria for MGF eligibility would include:

An Agribusiness Center, FBO, service provider or SME that is a receiving AVDP support or is used as a AVDP service provider or vendor;

Is able to contribute at least 10% of the investment cost as an equity contribution;

Is able to meet the financial institution's creditworthiness criteria and gain approval for a complementary loan;

Is primarily involved in rice cultivation or processing or oil palm and cacao production and processing;

Is not be in default of any existing formal or institutional loan;

Has received business development training by the AVDP and has a basic accounting system in place which records costs and revenues.

III. As part of project start-up activities and periodically during project implementation, the AVDP will organize workshops for financial institutions and prospective borrowers to inform them of the objectives and eligibility requirements of the MGF.

IV. The AVDP will establish a Grant Evaluation Committee composed of MAF and AVDP officers who will meet monthly to approve grants which have gone through the financial institution's due diligence procedures and have been accepted for loans. The financing institution will address grievances and complaints from borrowers as part of their normal loan administration procedures.

108. The project's field-based agribusiness assistants and RFI loan officers will jointly supervise grants and associated loans. Prior to disbursement of the loan and grant, a baseline of the client /recipient will be established in order to later assess the impact of the investment on yield, output and profitability.

Indicative Matching Grant Funded Investments and Coverage

Grant Recipient	Commodity	Indicative Investments	Proposed MG Financing Percentage	Notes
ABC	Rice	Equipment and consumables: rice mill, destoner, power tiller, generator (solar or thermic), scales, sacks, jute bags, stitching machines, motorized tricycle. Infrastructure: store house, cement drying floors, well, pump.	Equipment and consumables: 60% Infrastructure: 80%	All grants contingent on receiving complementary loans to cover the remaining costs.
ABC	Oil Palm	Equipment: hydraulic press, boiler, stamping machine, metal drums, wheelbarrows, plastic for packaging. Infrastructure: store house, cement drying floors, well, pump.	Equipment and consumables: 60% Infrastructure: 80%	MG to disburse in Year 4 to coincide with first production from new plantations.
ABC	Cacao	Equipment: pallets, moisture meters, standing and hanging scales, tarpaulin, stitching machine. Infrastructure: store house, cement drying floors, well, pump.	Equipment and consumables: 60% Infrastructure: 80%	MG to disburse at end Year 3 to coincide with first production from new plantations.
IVS FBO	Rice	Consumables: seed, fertilizers, crop protection products	Project Year 1: 60%, Project Year 2: 40% Project Year 3: 0%	AVDP exits from input provision in Year 3, replaced by loans from recapitalized RFIs from RFCIP II

FBO	Cacao	Inputs and small equipment: seedlings, machetes and other tools	60% of overall cost	AVDP will advance 100% cost small equipment. Farmers will repay 40% of cost over a two year period starting after first harvest in Year 3.
FBO	Oil Palm	Inputs and small equipment: seedlings, crop protection products, machetes and other tools	60% of overall cost	AVDP will advance 100% cost small equipment. Farmers will repay 40% of cost starting after first harvest in Year 4.
SMEs	All target commodities and services	Motor tillers, threshers, rice milling equipment, motorized tricycles, innovative technologies.	60% of overall cost.	Contingent on loan approval for remaining cost.

5. Indicative steps to establish and implement the Matching Grant Fund:

At project start-up, the AVDP Grants Manager to confirm indicative grant parameters included in the PDR and PIM through discussions with RFCIP II and RFIs;

The AVDP and the APEX Bank project to develop an MOU detailing nature of collaboration on joint financing (loan + AVDP grant)

AVDP to reach out to other RFIs or commercial banks to inform that about the AVDP grant facility.

AVDP to develop communication products describing the AVDP Grant Fund in English and local languages.

AVDP and RFIs to develop flow chart outlining process to marry a RFI loan with AVDP grant. Process map to define modalities on information exchange between AVDP and RFIs regarding loan and grant applications, approvals and rejections, payment methods to successful loan/grant applicants, default and asset recovery procedures, due diligence and loan and grant monitoring.

AVDP Grant Manager, with support from IFAD, to draft grants manual with all necessary forms and procedures.

AVDP to pilot the grants program for one year, prior to scaling up the program.

D. Costs

Main assumptions for Cost Estimation

109. In deriving AVDP costs, the assumptions below were used:

- **Inflation** –Local Inflation Rate in Sierra Leone is currently 16.5% and is projected to keep this range during AVDP implementation. All is costing done foreign currency (USD) terms and international inflation rate of 2% has been used.
- **Exchange Rates** – In Sierra Leone, the foreign exchange rate is controlled by the forces of demand and supply. During AVDP final design, the exchange rate was 1 USD = SLL 7,800.This is the rate that has been used for cost estimation in COSTAB for the entire Programme period.
- **Taxes and Duties** – Value Added (Sales) Tax will be charged on goods, Equipment and some consultancy services procured by the project a rate of 15%. This has been factored in

the costs as GoSL contribution. There are various import duties levied at Customs and their estimates have been factored in the cost tables.

- **Physical Contingencies** – Provision for physical contingencies has been included in the cost estimates at a rate of 5%; these were deemed necessary, especially under Works category.

Project Costs

110. The total combined AVDP investment and incremental recurrent costs, including physical and price contingencies, are estimated at US\$ 59.8 million (SLL 642 million). Table M1.9 presents a breakdown of the costs by components and subcomponents. The detailed cost tables and additional summary tables are presented in Appendix 1.. The investment in Component 1: Climate Resilient and Smart Agricultural Production, in total accounts for US\$ 37.6 million (63% of total project costs) while Component 2: Agricultural Market Development, accounts for US\$ 11 million (18% of total project costs). Component 3: Project Coordination and Management Unit accounts for US\$ 11.1 million (19% of total project costs)..

Table M1.9: Project Components by Year –totals Including Contingencies (US\$'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Project Components by Year – Totals Including Contingencies	Totals Including Contingencies (SLL Million)							Totals Including Contingencies (US\$ '000)						
	2020	2021	2022	2023	2024	2025	Total	2020	2021	2022	2023	2024	2025	Total
	A. Climate Resilient and Smart Agricultural Production													
Support to smallholder (family farm) rice production and productivity:	46,289	61,977	39,609	21,891	4,095	4,095	177,956	5,786	7,715	5,051	2,788	525	525	22,391
Support to tree crops production and productivity	33,474	66,202	18,953	410	410	410	119,857	4,292	8,487	2,430	53	53	53	15,366
Subtotal	79,762	128,179	58,563	22,300	4,505	4,505	297,813	10,078	16,202	7,481	2,841	578	578	37,757
B. Agricultural Market Development														
Market Access	7,437	13,204	13,749	11,488	11,378	13,255	70,512	682	1,060	986	707	613	625	4,654
Climate resilient rural infrastructure and information systems	481	9,552	20,418	32,586	31,369	8,263	102,669	44	767	1,435	2,005	1,690	390	6,332
Subtotal	7,919	22,756	34,167	44,074	42,747	21,519	173,181	726	1,827	2,402	2,712	2,303	1,015	10,985
C. Project Coordination and Management														
Project coordination and management	22,358	22,723	26,071	30,360	31,074	38,661	171,247	2,053	1,828	1,837	1,874	1,874	1,824	11,090
Subtotal	22,358	22,723	26,071	30,360	31,074	38,661	171,247	2,053	1,828	1,837	1,874	1,874	1,824	11,090
Total PROJECT COSTS	110,039	173,658	118,801	96,734	78,326	64,684	642,241	12,857	19,857	11,720	7,427	4,555	3,417	59,832

Financing Plan

111. AVDP will be cofinanced by IFAD loan, IFAD grant, the Government of Sierra Leone, the Adaption Fund (AF), Private Sector and the direct beneficiaries' contribution. IFAD has shown commitment to contribute about US\$ 40.3 million (i.e. Cycle I US\$ 11.8 million and Cycle II US\$ 28.5 million) which accounts for 67.3% of programme costs. The AF will contribute US\$ 9.2 million representing 15.3% of total costs and Private Sector US\$ 1.3 million representing 2.1% of the total project costs respectively. Beneficiaries are also expected to make in-kind contribution of about USD 1.4 million or 2.3% of the total project costs. The Government will finance the taxes and duties (US\$7.8 million, representing 13% of total costs). The details of the financing arrangements are shown in Table C2.

Table M1.10 Project Components by Financier (US\$'000)

Republic of Sierra Leone Agriculture Value Chain Development Project Components by Financiers (US\$ '000)	Government		IFAD II cycle		IFAD I Cycle		Adaptation Fund		Private sector		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
	A. Climate Resilient and Smart Agricultural Production																
Support to smallholder (family farm) rice production and productivity:	3,359	15.0	5,283	23.6	10,428	46.6	2,799	12.5	-	-	522	2.3	22,391	37.4	6,685	12,347	3,359
Support to tree crops production and productivity	2,305	15.0	7,759	50.5	895	5.8	3,580	23.3	-	-	828	5.4	15,366	25.7	3,502	9,560	2,305
Subtotal	5,664	15.0	13,042	34.5	11,323	30.0	6,379	16.9	-	-	1,350	3.6	37,757	63.1	10,187	21,906	5,664
B. Agricultural Market Development																	
Market Access	679	14.6	3,100	66.6	-	-	-	-	875	18.8	-	-	4,654	7.8	-	3,975	679
Climate resilient rural infrastructure and information systems	950	15.0	2,667	42.1	-	-	2,313	36.5	402	6.4	-	-	6,332	10.6	1,312	4,070	950
Subtotal	1,629	14.8	5,766	52.5	-	-	2,313	21.1	1,277	11.6	-	-	10,985	18.4	1,312	8,044	1,629
C. Project Coordination and Management																	
Project coordination and management	467	4.2	9,692	87.4	466	4.2	464	4.2	-	-	-	-	11,090	18.5	340	10,282	467
Total PROJECT COSTS	7,760	13.0	28,500	47.6	11,789	19.7	9,156	15.3	1,277	2.1	1,350	2.3	59,832	100.0	11,840	40,233	7,760

IV. Module 2: Administrative Procedures

112. The Head of Human Resources/Administration shall be responsible for the day to day administration of AVDP under the oversight of the National Programme Coordinator. AVDP shall be administered in accordance with extant Government of Sierra Leone guidelines and guided by the Administrative Manual, a sample of which is attached to this Module of the PDR (Attachment M2.1). The draft manual should be adapted to the realities on the ground at the take-off of AVDP, and harmonizing the administrative processes of RFCIP and GAFSP.

COMPONENT 1 ANNEXES

Annex C1.1: Sample IVS land lease

LAND AGREEMENT

This agreement is made this.....day of.....20.....
between..... and heirs, all
of..... village/town in

..... district in the
Province of the Republic of Sierra Leone (Hereinafter called the Land Owners/Sellers on the one part
and

FBO/CBO/FA/FO/Cooperative of Village /Town in
..... Chiefdom, district in the
..... Province of the Republic of Sierra Leone
(hereinafter called the Land begger(s)/buyer(s) on the other part.

Whereas the begger(s)/buyer(s) have contracted and agreed with the donors/sellers for
donation/purchase that piece of land situated, lying and being at
village/town in chiefdom,

..... District in the
province of the Republic of Sierra Leone in the site as drawn and attached herewith to hold the same
unto the use of the begger(s)/buyer(s).

That in pursuance to this agreement and in consideration of the sum of
Le..... Being begging/buying fees to the donors/sellers (the receipt of
which the sum the donors/sellers herein acknowledge).

The donors/sellers hereby convey to the begger(s)/buyer(s), their heirs, assignees and successors –
in-title all rights of ownership and privileges formerly enjoyed by them in respect of the said land as
bonafide owners (for buyers) or to be utilized for a period of years (for borrowers/beggars)

And whereas the contents of this agreement conform to the culture and customs at present operating
in the Village/town in
..... chiefdom, district, in

so far as the acquisition and possession of the land is concerned, the Town/Section/ Paramount Chief
and Ward/Section/Chiefdom Councillors of the aforementioned Town/Section/Chiefdom hereby
subscribe their signatures herein under signifying their approval thereto.

Signed, sealed and delivered by the under mentioned donors/sellers after the contents of this
agreement have been read over to them and they seem perfectly well to understand the same before
affixing their right hand thumb-print and their signatures respectively in the presence of :

DONORS/SELLERS: (1)
(2)

BEGGER(S)/BUYER(S): (1)
(2)

PRINCIPAL WITNESS:
(1) Paramount Chief:.....
(2) Village/Town Chief:.....
(3) District Agric. Officer:.....

CHIEFDOM COUNCILLORS: (1)
(2)

WITNESSE FOR BOTH DONORS/SELLERS AND BEGGERS/BUYERS

(1)

(2)

BEGGING/BUYING FEE/ FREE OF CHARGE Le.....

Attachment M2.1: Sample Administrative Manual

IFAD ASSISTED AGRICULTURE VALUE CHAIN DEVELOPMENT PROGRAMME (AVDP)

NATIONAL PROGRAMME COORDINATION UNIT
Ministry of Agriculture Forestry and Food Security

ADMINISTRATIVE MANUAL FOR THE AVDP

September 2018

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WELCOME NOTE TO THE EMPLOYEES OF AGRICULTURE VALUE CHAIN DEVELOPMENT PROJECT

On behalf of IFAD Country Office, Freetown, Sierra Leone, the MAF and the Agriculture Value Chain Development Project (AVDP), we welcome you to the AVDP Family and wish you every success here. At AVDP, we believe each employee is important and will be given the opportunity to contribute directly to the growth and success of the Project and we hope employees will take pride being members of the AVDP team.

This manual was developed to describe some of the expectations of our employees and to outline the policies, programmes and benefits available to eligible employees. Employees should become familiar with the manual as soon as possible, for it will answer many questions about their employment and engagement with the AVDP. It is therefore a must read document for all employees. We believe that professional relationships are easier when all employees are aware of the culture and values of the organization. This manual will help you to better understand AVDP vision for the future and the challenges that lie ahead. The manual is also expected to promote a more harmonious relationship among employees and a peaceful and disciplined work environment.

No employee manual can anticipate all circumstances or questions about policy. As the need arises, AVDP reserves the right to revise, supplement or rescind any policies or portion of the manual from time to time as it deems appropriate, in its sole and absolute discretion. Employees will be notified of such changes to the manual as they occur.

National Programme Coordinator

January 2019

1. Introduction

The Republic of Sierra Leone is implementing a six year GoSL/IFAD assisted Agriculture Value Chain Development Project (AVDP) in all the districts of Sierra Leone. The project's goal is "livelihoods and climate change resilience of rural farming households improved". The project development objective is "promote agriculture as a business for enhanced incomes and reduced rural poverty".

The AVDP Administrative Manual is a reference guide for staff on the AVDP policies and procedures in line with the government public service rules and operational guidelines that are applicable when carrying out administrative support operations for the IFAD Country Office (ICO) as they affect AVDP. The manual is not a substitute for the existing policies and procedures. Rather it intends to guide the employees and stakeholders through the most salient features of the relevant policies and procedures. When appropriate, references are given to the full policies and procedures, as well as any established guidelines that may be relevant.

Any new procedure adopted for the National Programme Coordination Unit (NPCU) or the Regional Programme Coordination Office (RPCO) must be in line with GoSLand ICO existing regulations and policies. Any changes to the guidelines and procedures in this Manual will require the clearance from the ICO while the NPCU will be responsible for the amendment.

This Administrative Manual is designed to provide a logical operational sequence for the AVDP that will bring all stakeholders in the value chain i.e. producers, aggregators, processors, off-takers, marketers, transporters, researchers, extensionists and financial institutions together.

2. AVDP Mandate

The AVDP mandate is to directly improve the livelihoods of approximately 34,000 smallholder farmer households and to benefit indirectly approximately XX,XXX households. The primary and secondary target groups include but not limited to poor rural households engaged in the rice, oil palm and cocoa value chains and downstream stakeholders. Of importance are processors/marketers linked to a large number of the primary target groups and the district councils. Farmer based organizations (FBOs), agribusiness centres (ABCs) and cooperatives are to be strengthened to sustainably manage the marketing infrastructures supported by AVDP.

3. AVDP Mission

AVDP aims to XXX.

4. AVDP Vision

AVDP's vision is to XXX.

5. Objectives of the Administrative Manual

The Administrative Manual has been prepared to:

- Set a defined system for day to day operations of AVDP.
- Provide better focus to AVDP and the respective National and Regional Coordination units.
- Guide recruitment processes and ensure due process with respect to the project's policy on recruitment is adhered to.
- Ensure staff welfare and development are properly addressed.
- Ensure that disciplinary cases/issues are dealt with judiciously and fairly.
- Ensure that every employee understands his/her duties, responsibilities and code of conduct.
- Serve as a blueprint for future programme endeavours.

6. Organizational Structure

AVDP is a project under the MAF. AVDP relates directly with the MAF through the National Steering Committee (NSC) chaired by the Minister of MAF, where project activities/achievements are discussed. The project's AWPB and Procurement Plans are also discussed and approved by the NSC. The National Programme Coordinator (NPC) is to ensure that the committee meets as stipulated in the Project Design Report (PDR). At the project level, the NPC heads National Programme Coordination Unit (NPCU) and reports to the Minister on general government policies and administrative issues. A number of key staff head the different departments of NPCU, supported by competent technical assistant and support staff as well as consultants.

The Regional Offices (4 in number) are administratively headed by the most senior officers in the technical departments. They are supported by a limited number of administrative staff. (Insert Organogram).

7. Key Staff

All AVDP staff are on contract appointment. The contract appointment of NPCU are for a period of two years while those of technical and support staff are for a period of one year in the first instance, subject to renewal for the same period based on satisfactory performances acceptable to MAF and IFAD.

7.1 NATIONAL PROGRAMME COORDINATION UNIT (NPCU)

- a) National Programme Coordinator
- b) Financial Controller
- c) Procurement Officer
- d) Planning, Monitoring & Evaluation Advisor
- e) Head Human Resource and Administration
- f) Head Commercial Agriculture
- g) Head Community Development
- h) XX
- i) XX
- j) Regional Coordinators

7.2 DISTRICT PROJECT COORDINATION

- a. District Agricultural Officer

Each MAF District Office has technical and extension staff to support project implementation.

8. AVDP Operational Principles

AVDP activities are guided by the following operational principles:

- I. Ensure economically, socially and environmentally sustainable project activities.
- II. Implementing projects in line with government policies and programmes.
- III. Market driven approach.
- IV. Attaining of scalability and replicability for project activities.
- V. Identification, documentation and dissemination of success stories and innovation
- VI. Discipline and commitment at all levels and at all times.
- VII. Knowledge and information sharing with all stake holders (particularly, policy makers at national and district level, ICO, and IFAD Office in Rome.
- VIII. Commitment to AVDP Mission, Vision and Core Values as well as pursuit of its strategic objectives.
- IX. Delegation of Authority.

These principles determine and define the level of efficiency and effectiveness of AVDP.

9. Location and Addresses of National and Regional Offices

The AVDP's national office is in Freetown, located at XXX while there are four Regional Offices located in XX, XX, XX, and XX.

10. AVDP Personnel Policy

AVDP HR policies, rules, procedures and guidelines apply to AVDP staff, unless otherwise specified in their contract. The NPCU is responsible for providing AVDP staff with HR services and for ensuring the proper implementation of AVDP rules, policies and procedures on human resource matters.

AVDP recognises a robust and professional approach to recruitment and selection of staff to attract and appoint individuals with the necessary skills, knowledge and attributes to effectively support the achievement of the Programme's goals.

All appointments are made on the Principle of Merit and need in line with relevant national policies and related processes. The AVDP is an equal opportunity employer where emphasis is placed on applicant's ability to do the job, not on factors that are unrelated to job performance (such as ethnicity, gender, religion, age, disability, HIV status or marital status). All vacant staff positions will be advertised, and recruitment will be conducted on a competitive basis, to ensure the best employees are hired.

10.1 Publication of Job Position

Depending on the nature of the job, the AVDP's HRD can advertise a job opening using internal AVDP's information network, electronic and print media or through reputable employment agencies relevant stakeholders.

When posting a vacancy, the HR Department should create a simple position description for the job covering key activities, tasks, skills required, expectations, deliverables and safety considerations. When advertising, discriminatory language/insinuations should be avoided. The requirements of the job should be the target.

10.2 Recruitment Process

Staff recruitment is strictly based on clearly defined needs

- Declare vacant positions in consultation with component heads.
- Advertise for the vacant position.
- Accept curriculum vitae.
- Constitute the AVDP's interviewing panel (if not contracted to an external agency)
- Collate results.
- Shortlist candidates.
- Set up interview date with the interviewing panel.
- Call to inform candidates of date.
- Send candidates for final interview.
- Ensure proper documentation of finalists.
- Furnish HR department with details as to names, cadre of entry, department deployed to and salary per annum of each new intake.

The HRD will co-ordinate the recruiting process. The NPC in consultation with ICO will give final approval for all full-time hires.

10.3 Job Descriptions

The Head HR/Administration is responsible for developing detailed Job Description for all AVDP staff and ensures that Job Description records are properly managed and regularly updated for all positions. Job Descriptions are indicative of the characteristics/requirements of the jobs - terms of duties and responsibilities, order of reporting, seniority, and functional relationship with other jobs.

The objectives of Job Description in AVDP are to:

- a. Aid in orienting employees to their jobs,
- b. Identify the requirements of each position,
- c. Establish hiring criteria
- d. Set standards for employee performance evaluations.
- e. Identify role boundaries and avoid role conflicts among staff.
- f. Provide the information needed to put a job in the proper classification in order to assign an appropriate salary range and to comply with applicable employment and personnel laws and regulations.
- g. Guide the process of interviewing candidates to fill a job opening.
- h. Guide newly hired employees to understand the job duties.
- i. Assist in conducting employee performance appraisals

Job descriptions may be rewritten periodically to reflect any changes in the position's duties and responsibilities. All employees will be expected to help ensure that their job descriptions are accurate and current, reflecting the work being done.

Employees should remember that job descriptions do not necessarily cover every task or duty that might be assigned, and that additional responsibilities may be assigned as necessary. Contact the Human Resources Department if you have any questions or concerns about your job description.

10.4 Orientation Training

All new employees should be made to feel welcome and ready to start work safely and competently through the use of a proper, formal induction process. The induction exercise should cover among others the following areas:

- Introductions
- Workplace tour
- HR policies and procedures
- Project overview- Structure and implementation arrangements
- A working safely plan
- Training policies and procedures
- IT system orientation
- Policy and procedural requirements

10.5 Probation Period

For all staff, the first 90 days of employment are considered a probation period. This time gives a staff member the opportunity to learn and adjust to his/her new job and work associates. It also gives a supervisor the opportunity to work with the employee and to evaluate work performance and progress, punctuality and attendance, and any other considerations that will contribute to a satisfactory employment relationship. At the end of the period, all new employees will be formally evaluated and recommended for confirmation or otherwise.

10.6 Confirmation of Appointment

On successful completion of probation, the employee's appointment will be confirmed. This will qualify him/her to enjoy:

- Staff training and development
- Annual increment in salary subject to fulfilment of other requirements
- Maternity leave
- Terminal benefit

10.7. Special Appointments

AVDP may appoint consultants and other temporary staff.

Consultants (Independent Contractors) are individuals with whom the AVDP has signed an agreement for a specified period of time and for a specified task. Consultants are not employees and receive no benefits. Fees will be agreed upon by the appropriate AVDP representative and the consultant prior to assignment, and will be based on the type of work involved and approved procurement guidelines. Such appointments are based on contracts. All contracts are renewable depending on:

- (a) Satisfactory job performance
- (b) Continuity of the project
- (c) Availability of sufficient funds
- (d) Approval of the NPC
- (e) In some cases, approval of IFAD

The NPC shall identify terms and conditions of the contract. Contracts are not guarantees of continued employment.

11. Emoluments

11.1 Salary Structure

It is AVDP's policy to compensate its employees in a fair and equitable manner on the basis of responsibilities, qualifications, and work performance. Staff salaries and allowances are determined based on what is paid by government and other similar organizations. All major incentives, salaries and allowances are subject to periodic reviews in response to situations regarding the current job market of its operating locations as determined by periodic surveys and availability of funds. When a staff member is hired, his/her position in the salary range for the job is determined by the NPC in consultation with relevant NPCU members based on the employee's qualifications and experience.

11.2 Salary Payment

Salary is payable in equal monthly instalments directly into the employee's assigned bank account. Employees will receive an itemized statement of wages when the Programme makes direct deposits. All salaries and benefits shall be subject to taxation and other deductions according to applicable laws and legislation.

11.3 Salary Review

Salaries may be reviewed at the end of a contract period based on availability of fund and other considerations in the interest of moving the project forward. Promotional increases or other salary adjustments (called administrative changes) may be considered based upon changes in the level of responsibility and the recommendation of a supervisor. Such adjustments must be fully justified by the supervisor and approved by the NPC. AVDP does not guarantee regular salary adjustments. All increases will be dependent upon the financial position of the AVDP, both generally and with respect to the funds available for particular projects or activities

11.4 Confidentiality

A staff member's salary is a confidential matter between the employee and the AVDP, and it is not a topic for discussion with anyone other than the employee's immediate supervisor and other AVDP personnel on a 'need-to-know' basis.

11.5. Absence from Office

The NPC and department Heads should always inform the office of their absence from duties in writing stating the period of absence, purpose of the trip and location. He/She should designate an appropriate officer to act for him /her. Appropriate files for information on absence should be opened for information purposes.

11.6. Insurance

Insurance of AVDP Vehicles and Capital equipment is mandatory. Project vehicles and equipment are major assets and should be properly secured and managed. As much as possible, such assets should be insured with government insurance companies.

12. Performance Improvement

12.1 Policy

AVDP is concerned about continuous improvement of staff performance. The project has put in place a lot of incentives to create the necessary enabling environment for staff to put in their best. However, should such improvement processes be unsuccessful in improving an employee's performance, AVDP may decide to end an employee's employment. Depending on the circumstances, performance improvement actions may include verbal or written warnings, counselling or retraining.

AVDP requires a minimum standard of conduct and performance, which will be made clear to employees in management appraisals. If an employee does not meet this standard, AVDP will take appropriate corrective action, such as training. Formal performance improvement procedures will generally only apply when other corrective action fails.

AVDP will take measures against any employee found guilty of general misconduct in line with provisions of the civil services rules. These include:

1. Dismissal
2. Termination of Appointment
3. Loss of Pay
4. Suspension
5. Written warning
6. Reprimand
7. De-secondment

Note: cases of gross misconduct attract outright dismissal from service

Each employee must understand their responsibilities, be counselled and given the opportunity to reach the standards expected of them. AVDP will give an employee the opportunity to defend himself or herself before management takes further action.

12.2 Procedure

1. AVDP will advise the employee of any shortfall in their performance, and give them an opportunity to improve.
2. Once they respond, the supervisor will consider their response and decide if performance improvement action should be taken. AVDP will provide support such as training where appropriate.
3. If the employee is given a verbal warning, the supervisor should make a note of it, date it and sign it.
4. The supervisor will advise the employee in clear terms what they see as the performance problem or the unacceptable conduct. To highlight the deficiency they should use specific examples, and refer to the correct policy or procedure.
5. The supervisor will allow the employee to respond before making a decision and consider the employee's responses. The employee may have a support person present at such meetings.
6. The supervisor will decide if more action is needed.
7. If a written warning is to follow, the supervisor is to:
 - document it and give the employee a copy
 - give the employee the opportunity (and their support person the opportunity) to sign the warning
 - keep a copy on file
8. The warning must clearly define:
 - the deficiency
 - a clear explanation of the expected standard
 - by when the employee needs to achieve it
 - how the project will help the employee achieve the improvement required
 - consequences of failing to improve
9. The supervisor concerned will keep a record of all meetings, training and/or coaching given and a summary of discussions, and put a copy in the employee's personnel file. This should include date, location and time of discussion.
10. The supervisor will continue to support the employee and note the support given, for example, training or counselling.
11. If the employee's performance or conduct doesn't improve, the supervisor will give the employee a final written warning and follow steps 4–10 above. This document needs to warn the employee in clear terms AVDP will terminate their employment if there is not enough improvement, and a sustained improvement in, their performance.

Note: some circumstances justify going straight to a second or final warning.

13. Disciplinary Action and Dismissal

13.1 Policy

AVDP expects its employees to perform their duties in a professional manner and according to specified standards. It is the project's objective in addressing poor performance, absenteeism and other job-related problems to correct the situation or prevent the reoccurrence of past problems as well as to deter other problems

from arising. When a staff member's performance or behaviour fails to meet established standards, it is the responsibility of the supervisor to counsel the employee and to assist in resolving the problem. Should these efforts fail, the supervisor may at his/her discretion, under the guidance of the National Programme Coordinator, initiate a program of constructive disciplinary action to be administered in a fair and consistent manner. If there is not sufficient improvement, the employee is subject to dismissal.

13.2 Progressive Discipline

The best disciplinary measure is the one that does not have to be enforced and comes from good leadership and fair supervision at all employment levels. AVDP's own best interest lies in ensuring fair treatment of all employees and in making certain that disciplinary actions are prompt, uniform, and impartial. The major purpose of any disciplinary action is to correct the problem, prevent recurrence, and prepare the employees for satisfactory service in the future.

Although employment with AVDP is based on mutual consent and both the employee and VCDP have the right to terminate at will, with or without cause, AVDP may use progressive discipline at its discretion. Disciplinary action may call for any of four steps – verbal warning, written warning, suspension with or without pay, or termination of employment – depending on the severity of the problem and the number of occurrences. There may be circumstances when one or more steps are bypassed.

Progressive discipline means that, with respect to most disciplinary problems, these steps will normally be followed: a first offence may call for a verbal warning; a next offence may be followed by a written warning; another offense may lead to a suspension, and, still another offense may then lead to termination of employment. AVDP recognizes that there are certain types of employee problems that are serious enough to justify either a suspension, or, in extreme situations, termination of employment, without going through the usual progressive discipline steps. While it is impossible to list every type of behavior that may be deemed a serious offense, the Employee Conduct and Work Rules policy includes examples of problems that may result in immediate suspension or termination of employment. However, the problems listed are not all necessarily serious offences, but may be examples of unsatisfactory conduct that will trigger progressive discipline. By using progressive discipline, we hope that most employee problems can be corrected at an early stage, benefitting both the employee and AVDP.

13.2(i) Procedure

Should the supervisor choose to initiate a program of progressive discipline, any written documentation in this regard must be reviewed by the NPC before signing and must be copied to the employee's file. A corrective interview should be conducted and documented on a corrective interview form. Both supervisor and employee should sign off on the written form. Signatures reinforce the fact that both parties have read and fully understand the situation and the content of the interview, as well as demonstrate a good faith effort by the organization to review and help correct an undesirable situation. Employees should be advised that signing the corrective interview form does not necessarily mean that the employee is in agreement and that the employee has the right to respond in writing to the interview. If an employee refuses to sign the form a notation should be made on the form indicating that the employee has refused signature and for what reasons. All corrective interviews will specify, if appropriate, any disciplinary action to be taken. The type of disciplinary action is determined by the appropriate project staff member in conjunction with the NPC on a case by-case basis as required. If there is not sufficient improvement, the employee is subject to dismissal.

All corrective interviews (original copies) are placed in the employee's confidential file; employees may request copies of any document in their files that they have signed. The use of progressive discipline will be decided, in its discretion, by AVDP in each individual case taking into consideration the seriousness of the situation, facts and circumstances surrounding the case and the employee's past work record. Any decision regarding continued employment will be made by the NPC in collaboration with the recommendation of the immediate Supervisor. A staff member may appeal his/her dismissal to the NPC in writing within two weeks of the date of dismissal. The decision of the NPC is final. For government-assigned staff, however, the NPC's decision will be referred to the appropriate government agency.

14 Termination of Employment

Termination of employment is an inevitable part of personnel activity within any organization, and many of the reasons for termination are routine. Below are examples of some of the most common circumstances under which employment is terminated:

- Resignation - voluntary employment termination initiated by an employee.
- Discharge - involuntary employment termination initiated by the organization.
- Layoff - involuntary employment termination initiated by the organization for non-disciplinary reasons.
- Retirement - voluntary employment termination initiated by the employee meeting age, length of service, and any other criteria for retirement from the organization.

14.1 Dismissal

Summary (instant) dismissal for gross or very serious misconduct is possible (depending on the facts involved). Management should seek legal advice before taking this step.

14.2 Procedure

1. The supervisor is to investigate the alleged offence thoroughly, including talking to witnesses, if any.
2. The supervisor should ask the employee for their response to the allegation (taking notes of this discussion) and allow them to have representation. The supervisor should also have a witness present. The supervisor shall give genuine consideration to the employee's response and circumstances.
3. If still appropriate, following a thorough investigation, the supervisor can recommend termination/dismissal of the employee to the NPC.
4. The supervisor should keep a file of all evidence collected and action taken in these circumstances.
5. AVDP will send the employee a letter of termination noting brief details.

Other unsatisfactory performance that is grounds for dismissal includes, but is not limited to, habitual absenteeism or tardiness, inadequate work performance, fighting in the office, antagonism or refusal to accept reasonable work assignment, and failure to comply with AVDP's code of ethical standards.

14.3 Position Elimination

There are some cases in which a position may be eliminated through no fault of the staff member. Reasons for position elimination might include lack of funding, work that is no longer required by the project or work that has been absorbed by other positions.

Resignation is a voluntary act initiated by the employee to terminate employment with AVDP. AVDP requires one month written notice from employees or the corresponding salary in lieu of notice.

AVDP will give the required notice stipulated above or pay in lieu of notice if the termination of appointment is at its instance.

Prior to an employee's departure, an exit interview may be scheduled to discuss the reasons for resignation/termination and its effect on benefits.

14.4 Employees' Obligations

Employees leaving the organization after their contract has come to an end must:

- Carry out an inventory of their working equipment;
- Return the corporate badge and any identification tools that they may still have (for example, stickers with the corporate logo on them) and the working tools;
- Reimburse the loans subscribed or advances on salary, if any.
- Make sure that the work can be continued.
-

14.5 Employer's Obligations

When an employee leaves the organisation, AVDP shall take the following steps:

- Provide the employee with a work certificate/attestation;
- Inform all key stakeholders involved of the termination of the contract;
- Pay out all amounts due to the employee.

15 Problem Resolution

15.1 Policy

AVDP is committed to providing the best possible working conditions for its employees. Part of this commitment is encouraging an open and frank atmosphere in which any problem, complaint, suggestion, or question receives a timely response from AVDP's supervisors and Management. AVDP supports the right of every employee to lodge a grievance with their supervisor if they believe a decision, behaviour or action affecting their employment is unfair. An employee may raise a grievance about any performance improvement action taken against them.

We aim to resolve problems and grievances promptly and as close to the source as possible. When necessary, AVDP will escalate a grievance to the next higher level of authority for more discussion and resolution, and continue escalating it to the level above until it is resolved. Supervisors will do their utmost to action grievances objectively, discreetly and promptly. Be aware that grievances that are misconceived, vexatious, and lacking substance may result in disciplinary action being taken against the employee lodging the grievance.

15.2 Procedure

1. The employee should try to resolve the grievance as close to the source as possible. This can be informal and verbal. At this stage, every possible effort should be made to settle a grievance before the formal grievance process starts. If the matter still can't be resolved, the process continues and becomes formal.
2. To start the formal grievance the complainants must fully describe their grievance in writing, with dates and locations wherever possible and how they have already tried to settle the grievance.

3. The person(s) against whom the grievance/complaint is made should be given the full details of the allegation(s) against them. They should have the opportunity and a reasonable time to respond before the process continues.
4. If the grievance still can't be resolved, refer the matter to the most senior officer for consideration and a final decision. A grievance taken to this level must be in writing from the employee.

16 Employee Benefits

16.1 General Medical Benefits

AVDP believes that employees are in the best position to be responsible for their own health. AVDP tries to maximize the amount of payroll expenses that are disbursed to the employee in cash so that the employee can decide for him or herself how much to spend on whatever benefits is privately available.

16.2 Maternity Leave

Female full-time staff who have worked for AVDP for at least 12 months are eligible for 4 months paid maternity leave, starting anytime in the last month of pregnancy. The benefit of maternity leave is provided to the primary caregiver and only to those staff members who fully intend to return to work at AVDP following their leave. A written agreement to this effect will be drawn up and signed by the employee. Vacation, all bonuses and other benefits are not accrued or paid during maternity leave. Annual and Sick leave do not accrue during periods of maternity leave. Pregnant women are exempted from query or suspension from duty.

16.3 Public Holidays

AVDP will grant paid public holidays for those days required by Sierra Leonean legislation. If an observed holiday falls within an employee's vacation period, vacation is not deducted on these days.

Holidays are NOT exchangeable for other days. Employees wishing to observe holidays other than the ones noted above are free to do so as a leave day or an unpaid leave of absence, subject to management approval.

Employees traveling and/or working on official duty during a paid holiday may take one compensating day either during the trip or upon return.

16.4 Personal Leave

Full-time staff of AVDP shall be entitled to specific leave with full pay to cover vacation or sickness. Other employees are not entitled to personal leave. Leave shall be taken under conditions that are convenient to the organization. The following categories and conditions shall apply:

- a) Annual leave is earned at the following rate starting on the date of appointment:
 - i) All full-time senior staff, earn 30 working days per annum.
 - ii) All full time senior/support staff earn 21 working days
 - iii) All full time junior staff including drivers are entitled to 14 working days.
- b) The employee must have earned at least half of their leave, i.e., worked for the organization for six months to be eligible to take leave. If leave is requested before that time, the employee may apply subject to the approval of the NPC.
- c) Leave days may be taken one at a time (for personal days), a few days at a time, or all together.
- d) Staff are encouraged to take their annual leave. If leave is not taken in the year it is due, unless for serious and approved reasons, the officer forfeits the leave for that year.
- e) In an emergency situation, management may recall a staff member from leave. In such instances, the balance of his leave is deferred.
- f) A staff member who fails to return to duty on due date at the expiration of his/her leave, is deemed to be absent from duty without permission. Absenteeism without permission or without just cause, as determined by the NPC, will result in subtraction of future leave days, equal to the days absent, probation or dismissal.
- g) Leave time cannot be taken by employees during the probation period. If a staff member is terminated before the probation period has been completed, he/she will not be reimbursed for any accrued but unearned vacation.
- h) Requesting leave - Written authorization by your supervisor, with a copy to the NPC, is required no less than one month in advance. This ensures that there is no conflict with future work assignments or other leave periods. In the event that there is a conflict, employee seniority will be the deciding factor.
- i) Leave is not accrued on overtime hours or during periods of medical disability leave or other unpaid leaves of absences.
- j) Before departing for leave, employees are expected to make sure that their immediate supervisor is aware of the status of projects or special assignments and where all materials can be located. The departing employee is also responsible for leaving all assignments at a reasonable point where they can be completed by other staff if necessary. He must leave his full contact address while on leave in case there is a need to contact him or her.
- k) Leave allowance is paid according to the terms of employee's contract.

NOTE: The HR Department should develop a tentative calendar for annual leave for all staff to guide staff leave management.

16.5 Leave of Absence

Policies regarding specific types of leave of absence are discussed below. Leaves of absence are unpaid unless otherwise specified. Personal leave do not accrue during periods of leave of absence and only full-time employees are eligible to apply for leaves of absence. Unless otherwise specified, employees' jobs will be held open during periods of leave.

* An employee who returns to work within the terms of the granted leave of absence shall be considered to have unbroken service (except for the loss of personal leave accrual) during the absence.

* Before taking a leave of absence, employees are expected to make sure that his/her immediate supervisor is aware of the status of projects or special assignments and where all materials can be located. The departing employee is also responsible for leaving all assignments at a reasonable point where they can be completed by other staff if necessary.

*In order to ensure efficient office management it is important that the supervisor be informed of staff whereabouts at all times and that this information should be noted in the office calendar.

16.6 Return to Employment from Leave of Absence

An employee who has been officially granted leave shall be assured the same or a comparable position as previously held upon return from the leave and will be reasonably accommodated, unless:

* The same or comparable position is no longer available due to an operational necessity associated with reorganization, financial retrenchment or similar cause; or

* The right to such reinstatement has been waived in the terms of the leave, signed by both the employee and the NPC.

Any employee on leave with reasonable expectation of reinstatement at the end of such leave, whose position upon initiation of said leave has been subsequently terminated for circumstances indicated above, shall be given 30 days' notice that the same or comparable position will not be available for their return.

16.7 Leave without Pay

A staff member who does not have any accrued vacation may take time off for personal reasons to a maximum of two weeks in the form of a leave without pay. The request must be made in writing to the employee's immediate supervisor and approved by the NPC at least one month in advance. The purpose of the leave, length of service with AVDP, and general performance record will be taken into consideration when granting a staff member's request for a leave of absence without pay.

16.8 Personal Leave of Absence/Sabbaticals

In cases where it is deemed in the best interest of the organization, a staff member may take up to a one month leave of absence without pay to participate in education, training, or other related activities. It will be at the discretion of the NPC to determine if the assignment is in the interest of the organization. Personal leaves of absences must be requested in writing to the employees' immediate supervisor and approved by the NPC at least one month in advance.

NOTE: AVDP does not accept staff of other organisations/institutions on sabbatical leave engagement.

16.9 Unplanned and planned absence

a) Unplanned absence: When absent from work because of personal or dependent illness the immediate supervisor should be notified no later than 9:00 a.m. of the first day of the period of absence and every day during the illness.

b) Planned absence: When planning a doctor or dental appointment during official hours, inform your supervisor at least one week in advance (with the exception of appointments in the case of emergencies).

16.10 Compassionate Leave

Full-time staff with approval of the NPC and his/her immediate supervisor are eligible for compassionate leave of up to five (5) paid days to a staff member who must be away from work as a result of death or critical illness or injury of an immediate member of the family (spouse, child, brother, sister or parent) and 1 paid day from work as a result of death of a relative.

Compassionate leave will normally be granted unless there are unusual official needs or staffing requirements. Employees may, with their supervisors' approval, use any available paid leave for additional time off as necessary.

Critical illness or injury is defined as an instance in which death is imminent or likely to occur as based on competent medical opinion or one in which the absence of the staff member would result in great personal hardship.

16.11 Death of an Employee

Realizing that the death of an employee brings hardship to the employee's family, AVDP policy is to provide assistance to the employee's family in receiving all appropriate benefits due to them. The AVDP's Accountant will prepare the following: a final payroll cheque based on wages earned through the date of death, calculate the cash equivalent of earned and accrued vacation and reconcile any outstanding accounts.

The foregoing payments should be made to the next of kin. Items of indebtedness to the organization are to be deducted from any money due to the employee's next of kin. In addition AVDP will provide the family of the deceased with some funds to offset cost of obituary announcement, coffin and transporting the corpse home

where necessary. If the amount of indebtedness exceeds the money due, the AVDP's Accountant should make an arrangement for repayment of the balance.

The NPC will assist the family with benefits coordination. A final letter of settlement, accompanied by a letter of condolence, will be sent to the next of kin. The letter will contain the following:

- Status of unpaid wages and other amounts and benefits due to the employee
- Withholding tax statement
- Status of debts owed to the organization

17. Training and Staff Development

Staff Training in AVDP is not a right. It is a privilege and based on identified needs. AVDP has a robust staff training and capacity building policy that provides project staff the opportunity to improve on their knowledge skills and performances. AVDP conducts regular skills gap analysis (Skills Audit) to determine staff training and development needs. The results of the analysis remain the basis for determining training beneficiaries as well as types of training interventions.

The Skills Gap analysis also helps in identifying non-training and capacity building interventions as well as organizational performance problems and remedial measures. AVDP undertakes the following types of training.

Categories of Training

- a) Orientation Training:
- b) In – house training
- c) Workshops/Seminars
 - Local Trainings
 - International Trainings
- d) Study tours,local and international
- e) Part – time studies
- f) Professional Associations Trainings/Meetings

17.1 Policy

It is AVDP's policy to hire only individuals who are already fully qualified for the job for which they were selected. However, growth and life-long learning are essential for everyone who wishes to realize his/her maximum potential. Clearly the primary responsibility for realizing that potential lies with each individual. As individual growth and development relate to an employee's job, AVDP will seek to encourage and facilitate the learning process with on-the-job coaching by supervisors and fellow employees.

18. Work Conditions and Hours

18.1 Work Schedules

The normal work schedule for all employees is 8 hours a day, Monday to Friday. Supervisors will advise employees of the times their schedules will normally begin and end. Staffing needs and operational demands may necessitate variations in starting and ending times, as well as variations in the total hours that may be scheduled each day and week.

Staff members are expected to be always punctual. AVDP operates an attendance register that all project staff must sign every morning on reporting for duty and at closing.

Flexible scheduling, or flextime, is available in some cases to allow employees to vary their starting and ending times each day within established limits. Flextime may be possible if a mutually workable schedule can be negotiated with the supervisor involved. However, such issues as staffing needs, the employee's performance, and the nature of the job will be considered before approval of flextime.

18.2 Place of Work

Although the AVDP recognizes that the creative and conceptual work in which employees are engaged will sometimes necessitate work to be done at some outside locations, regular office presence is necessary to maintain interface among staff. The normal place of work for all office staff is their assigned desk or operations area at their various national or state offices. All employees are expected to work at the office unless their duties require them to be on the field. Any exceptions to this policy must be approved by the immediate supervisor on a case-by-case basis.

Staff must be accountable for time spent away from the office or assigned area of operations. Inability to properly account for time spent away from the office will be the basis for appropriate disciplinary action to be instituted by the Staff's supervisor. National Office Staff in particular are advised to minimise official engagements outside their offices and spend more time in their office work. State should be encouraged, guided and supported to manage field activities.

18.3 Attendance and Punctuality

To maintain a safe and productive work environment, AVDP expects employees to be reliable and to be punctual in reporting for scheduled work. Absenteeism and tardiness place a burden on other employees and on AVDP. In the rare instances when employees cannot avoid being late to work or are unable to work as scheduled, they

should notify their supervisor as soon as possible in advance of the anticipated tardiness or absence. *Poor attendance and excessive tardiness are disruptive. Either may lead to disciplinary action, up to and including termination of employment.*

18.4 Excessive Absence

Since each employee is part of a team, AVDP places a premium on good attendance and an on-time arrival and departure record. Excessive absences decrease morale and productivity and the project will take disciplinary action, which may include dismissal, to curb excessive absences or lateness.

In determining excessive absence, AVDP looks at the number of periods of absence a staff member has. A period of absence is defined as all consecutive days of absence from work regardless of reason. For example, an absence on Thursday, Friday and Monday, is considered one (1) period of absence. However, an absence on Monday and then again on Thursday of the same week, is two (2) periods of absence.

Excessive absence is when there are five (5) periods of absence, regardless of reason, in any four (4) month time span. The four (4) month time span is the most recent four (4) months, even if several of those months had been figured in a previous disciplinary action. Disciplinary action for excessive absence may be taken up to and including dismissal.

Personal affairs should be arranged during lunchtime or before or after work whenever possible. If employees must be away during official hours for personal affairs, the supervisor's approval is required and the absence should be recorded on time sheets appropriately. In the event of an unexpected absence or lateness, please notify your supervisor and/or the NPC within a reasonable period of time (preferably before 9:00 a.m.) on the morning of the absence. If the employee's supervisor or the NPC is unavailable, the employee should leave a message with the secretary.

18.5 Short and Long Term Disability

No Short or Long Term Disability Coverage is offered by the AVDP. Vacation and sick days do not accrue during periods of disability.

18.6 Use of Official Phone and Mail Systems

Personal use of the telephone for long-distance and toll calls is not permitted. Employees should practice discretion when making local personal calls and may be required to reimburse AVDP for any charges resulting from their personal use of the telephone.

18.7 Smoking

In keeping with AVDP's intent to provide a safe and healthful work environment, smoking is prohibited throughout the workplace. This policy applies equally to all employees, customers, and visitors.

18.8 Alcohol and Drugs Policy

AVDP is concerned by factors affecting an employee's ability to safely and effectively do their work to a satisfactory standard. The project recognises alcohol or other drug abuse can impair short-term or long-term work performance and is an occupational health and safety risk.

AVDP will do its utmost to create and maintain a safe, healthy and productive workplace for all employees. AVDP has a zero tolerance policy in regards to the use of illicit drugs on their premises or the attending of other official related premises (e.g. clients) while under the influence of illicit drugs. Contravening either of these points may lead to instant dismissal.

AVDP does not tolerate attending work under the influence of alcohol. This may result in performance improvement action or dismissal.

18.9 Overtime

All employees are expected to work the hours required to get the job done. When operating requirements or other needs cannot be met during regular working hours, employees will be encouraged to undertake overtime work assignments. Appropriate incentives will be extended to concerned officers and staff.

18.10 Use of Equipment

Equipment essential in accomplishing job duties is often expensive and may be difficult to replace. When using property, employees are expected to exercise care, perform required maintenance, and follow all operating instructions, safety standards, and guidelines.

Please notify the supervisor if any equipment, machines, or tools appear to be damaged, defective, or in need of repair. Prompt reporting of damages, defects, and the need for repairs could prevent deterioration of equipment and possible injury to employees or others. The supervisor can answer any questions about an employee's responsibility for maintenance and care of equipment. The improper, careless, negligent, destructive, or unsafe use or operation of equipment may attract sanctions.

18.11 Emergency Closing

At times, emergencies such as fires, floods or political disturbances, can disrupt project operations. In extreme cases, these circumstances may cause danger to staff and project property.

Management should order emergency closure of work until such situations are under control.

18.12 Official Travel Expenses

VCDP will reimburse employees for approved official travel expenses incurred while on assignments away from the normal work location. All official travels must be approved in advance by the NPC.

Employees whose travel plans have been approved should consult the relevant department to make all travel arrangements. When approved, the actual costs of travel, meals, lodging, and other expenses directly related to accomplishing official travel objectives will be paid by AVDP.

Expenses that generally will be reimbursed include the following:

- Airfare or train fare for travel in coach or economy class or the lowest available fare.
- Car rental fees, only for compact or mid-sized cars.
- Fares for shuttle or airport bus service, where available; costs of public transportation for other ground travel.
- Taxi fares, only when there is no less expensive alternative.
- Mileage costs for use of personal cars, only when less expensive transportation or official vehicles are not available.
- Cost of standard accommodations in low to mid-priced hotels, motels, or similar lodgings.
- Telephone calls, fax, and similar services required for official purposes.

Employees are encouraged to use their cellular telephone or calling cards when traveling, as hotel charges are excessive.

Employees who are involved in an accident while traveling on official duties must promptly report the incident to their immediate supervisor. Vehicles owned, leased, or rented by AVDP may not be used for personal use without prior approval.

Cash advances to cover reasonable anticipated expenses may be made to employees, after travel has been approved. Employees should submit a written request through their supervisor to the NPC when travel advances are needed.

When travel is completed, employees should immediately submit travel expense reports within 10 days. Reports should be accompanied by receipts for all individual expenses.

Employees should contact their supervisor and finance officers for guidance and assistance on procedures related to travel arrangements, travel advances, expense reports, reimbursement for specific expenses, or any other official travel issues.

Abuse of this official travel expenses policy, including falsifying expense reports to reflect costs not incurred by the employee, can be grounds for disciplinary action, up to and including termination of employment.

AVDP strongly upholds and enforces the "No Retirement, No New Advance Policy" as non-retirement of advances affect the phase of preparation of withdrawal applications and fund replenishment to support programme activities.

18.13 Vehicles' Operation and Maintenance

Official vehicles are major assets of AVDP. Drivers are responsible for the operation and maintenance of the vehicles allotted to them. They are required to check their vehicles daily (water, oil, etc.) and sign in the log register daily. Vehicles should be washed daily and kept clean. All problems arising from the use of the vehicles should be reported to the Head HR/Administration. Fuelling should be done at designated gas stations and signed for.

Drivers are responsible for the safety of their passengers. They should practice defensive driving and drive within acceptable speed limits and avoid excessive speed.

In the event of an accident, report immediately to your supervisor or other senior official.

Careless driving and tardiness to work could be ground for disciplinary actions up to, and including dismissal.

18.14 Visitors in the Workplace

To provide for the safety and security of employees and the facilities at AVDP, only authorized visitors are allowed in the workplace. Restricting unauthorized visitors helps maintain safety standards, protects against theft, ensures security of equipment, protects confidential information, safeguards employee welfare, and avoids potential distractions and disturbances.

All visitors should go through the body and car scanners at the entrance gate of AVDP Office and should enter AVDP Offices at the reception area only. Authorized visitors will receive directions or be escorted to their destination by the receptionist. Employees are responsible for the conduct and safety of their visitors.

If an unauthorized individual is observed on AVDP premises, the security officer should be notified for immediate necessary action.

18.15 Computer and E-Mail Usage

Computers, computer files, the e-mail system, and software furnished to employees are AVDP property intended for official use. Employees should not use a password, access a file, or retrieve any stored communication without authorization. To ensure compliance with this policy, computer and e-mail usage may be monitored.

AVDP strives to maintain a workplace free of harassment and sensitive to the diversity of its employees. Therefore, AVDP prohibits the use of computers and the e-mail system in ways that are disruptive, offensive to others, or harmful to morale.

For example, the display or transmission of sexually explicit images, messages, and cartoons is not allowed. Other such misuse includes, but is not limited to, ethnic slurs, racial comments, off-color jokes, or anything that may be construed as harassment or showing disrespect for others.

E-mail may not be used to solicit others for commercial ventures, religious or political causes, outside organizations, or other non-official matters.

18.16 Internet Usage

Internet access to global electronic information resources on the World Wide Web is provided by AVDP to assist employees in obtaining work-related data and technology. The following guidelines have been established to help ensure responsible and productive Internet usage. While Internet usage is intended for job-related activities, incidental and occasional brief personal use is permitted within reasonable limits.

All Internet data that is composed, transmitted, or received via AVDP computer communications systems is considered to be part of the official records of AVDP and, as such, is subject to disclosure to law enforcement or other third parties. Consequently, employees should always ensure that the official information contained in Internet e-mail messages and other transmissions is accurate, appropriate, ethical, and lawful.

The equipment, services, and technology provided to access the Internet remain at all times the property of AVDP. As such, AVDP reserves the right to monitor Internet traffic, and retrieve and read any data composed, sent, or received through AVDP online connections and stored in AVDP computer systems.

Data that is composed, transmitted, accessed, or received via the Internet must not contain content that could be considered discriminatory, offensive, obscene, threatening, harassing, intimidating, or disruptive to any employee or other person. Examples of unacceptable content may include, but are not limited to, sexual comments or images, racial slurs, gender-specific comments, or any other comments or images that could reasonably offend someone on the basis of race, age, sex, religious or political beliefs, national origin, disability, sexual orientation, or any other characteristic protected by law.

The unauthorized use, installation, copying, or distribution of copyrighted, trademarked, or patented material on the Internet is expressly prohibited. As a rule, if an employee did not create the material, does not own the rights to it, or has not gotten authorization for its use, it should not be put on the Internet. Employees are also responsible for ensuring that the person sending any material over the Internet has the appropriate distribution rights.

Internet users should take the necessary anti-virus precautions before downloading or copying any file from the Internet. All downloaded files are to be checked for viruses; all compressed files are to be checked before and after decompression.

Abuse of the Internet access provided by AVDP in violation of law or AVDP policies will result in disciplinary action, up to and including termination of employment. Employees may also be held personally liable for any violations of this policy. The following behaviors are examples of previously stated or additional actions and activities that are prohibited and can result in disciplinary action:

- Sending or posting discriminatory, harassing, or threatening messages or images
- Using the organization's time and resources for personal gain
- Stealing, using, or disclosing someone else's code or password without authorization
- Copying, pirating, or downloading software and electronic files without permission
- Sending or posting confidential material, trade secrets, or proprietary information outside of the organization
- Violating copyright law
- Failing to observe licensing agreements
- Engaging in unauthorized transactions that may incur a cost to the organization or initiate unwanted Internet services and transmissions
- Sending or posting messages or material that could damage the organization's image or reputation
- Participating in the viewing or exchange of pornography or obscene materials
- Sending or posting messages that defame or slander other individuals
- Attempting to break into the computer system of another organization or person
- Refusing to cooperate with a security investigation
- Sending or posting chain letters, solicitations, or advertisements not related to official purposes or activities
- Using the Internet for political causes or activities, religious activities, or any sort of gambling
- Jeopardizing the security of the organization's electronic communications systems
- Sending or posting messages that disparage another organization's products or services
- Passing off personal views as representing those of the organization
- Sending anonymous e-mail messages
- Engaging in any other illegal activities

18.17 Security

Entry to the AVDP premises during and / or outside of normal official hours must be through the security officers at the entrance gate.

It is the responsibility of every AVDP employee to submit himself or herself for routine security check when entering or leaving the office premises.

Employees must ensure that all confidential/sensitive documents are locked away at night. You should make sure that your personal belongings and valuables are locked away and secured. Personal property is not covered by Company insurance. Employees must ensure that all inner lights and connections to electronic gadgets are put off /disconnected at close of work. Only security lights should be left on overnight.

18.18 Security Disposal/Shredders

Paperwork with any sensitive or confidential AVDP information needs to be disposed of by either being shredded or placed into the locked security disposal bin. Such Documents include but not limited to:

- Procurement related documents
- Financial related documents
- AVDP Official correspondence
- Personnel Information
- Classified Documents
- Any other sensitive materials/documents

18.19 Security Inspections

AVDP wishes to maintain a work environment that is free of illegal drugs, alcohol, firearms, explosives, or other improper materials. To this end, AVDP prohibits the possession, transfer, sale, or use of such materials on its premises. AVDP requires the cooperation of all employees in administering this policy.

Desks, lockers, and other storage devices are provided for the convenience of employees but remains the sole property of AVDP. Accordingly, they, as well as any articles found within them, can be inspected by any agent or representative of AVDP at any time, either with or without prior notice.

18.20 Intellectual Property and Security

All intellectual property developed by employees during their employment with AVDP, including discoveries or inventions made in the performance of their duties related in any way to the official of AVDP, will remain the property of AVDP.

Employees may be given access to confidential information, data, official property, keys to premises or any other official related property/information in the performance of their duties. This must be protected and used only in the interests of AVDP.

Employees must not:

- disclose or use any part of any confidential information outside of the performance of their duties and in the interests of AVDP; or
- authorize or be involved in the improper use or disclosure of confidential information during or after their employment without the Employer's written consent, other than as required by law.

'Confidential information' includes any information in any form relating to AVDP and related bodies, clients or activities, which is not in the public domain.

Employees must act in good faith towards AVDP and must prevent (or if impractical, report) the unauthorized disclosure of any confidential information. Failure to comply with this policy may result in performance improvement proceedings including dismissal, and AVDP may also pursue monetary damages or other remedies.

18.21 Workplace Monitoring

Workplace monitoring may be conducted by AVDP to ensure quality control, employee safety and security.

Employees, who regularly communicate with contractors, consultants, farmers, etc, may have their telephone conversations monitored or recorded. Telephone monitoring is used to identify and correct performance problems through targeted training.

Computers given to employees are the property of AVDP. As such, computer usage and files may be monitored or accessed.

Employees can request access to information gathered through workplace monitoring that may impact employment decisions. Access will be granted unless there is a legitimate official reason to protect confidentiality or an ongoing investigation.

Because AVDP is sensitive to the legitimate privacy rights of employees, every effort will be made to guarantee that workplace monitoring is done in an ethical and respectful manner.

18.22 Workplace Violence Prevention

AVDP is committed to preventing workplace violence and to maintaining a safe work environment. Given the increasing violence in society in general, AVDP has adopted the following guidelines to deal with intimidation, harassment, or other threats of (or actual) violence that may occur during official hours or on its premises.

All employees, both senior and support staff, should be treated with courtesy and respect at all times. Employees are expected to refrain from fighting, "horseplay," or other conduct that may be dangerous to others, including gossiping, peddling rumors and pressure groupings.

Conduct that threatens, intimidates, or coerces another employee, a customer, or a member of the public at any time, including off-duty periods, will not be tolerated. This prohibition includes all acts of harassment, including harassment that is based on an individual's sex, race, age, position or any characteristic protected by national or local law.

All threats of (or actual) violence, both direct and indirect, should be reported as soon as possible to your immediate supervisor or any other member of management. This includes threats by employees, as well as threats by contractors, consultants, or other members of the public. When reporting a threat of violence, you should be as specific and detailed as possible.

All suspicious individuals or activities should also be immediately reported to the appropriate authority. Do not place yourself in peril. If you see or hear a commotion or disturbance near your office premises do not try to intercede or see what is happening.

AVDP will promptly and thoroughly investigate all reports of threats of (or actual) violence and of suspicious individuals or activities. The identity of the individual making a report will be protected as much as is practical. In order to maintain workplace safety and the integrity of its investigation, AVDP may suspend employees, either with or without pay, pending investigation.

Anyone determined to be responsible for threats of (or actual) violence or other conduct that is in violation of these guidelines will be subject to prompt disciplinary action up to and including termination of employment.

AVDP encourages employees to bring their disputes or differences with other employees to the attention of their supervisors or the HR Department before the situation escalates into potential violence. AVDP is eager to assist in the resolution of employee disputes, and will not discipline employees for raising such concerns.

19.0 Employee Conduct and Disciplinary Action

19.1 Policy

To ensure orderly operations and provide the best possible work environment, AVDP expects employees to follow rules of conduct that will protect the interests and safety of all employees and the organization.

19.2 Employee Conduct and Work Rules

It is not possible to list all the forms of behavior that are considered unacceptable in the workplace. The following are examples of infractions of rules of conduct that may result in disciplinary action, up to and including termination of employment:

- Theft or inappropriate removal or possession of AVDP property
- Falsification of timekeeping records
- Working under the influence of alcohol or illegal drugs
- Possession, distribution, sale, transfer, or use of alcohol or illegal drugs in the workplace, while on duty, or while operating employer-owned vehicles or equipment
- Fighting or threatening violence in the workplace
- Boisterous or disruptive activity in the workplace
- Negligence or improper conduct leading to damage of employer-owned property
- Insubordination or other disrespectful conduct
- Violation of safety or health rules
- Sexual or other unlawful or unwelcome harassment
- Possession of dangerous or unauthorized materials, such as explosives or firearms, in the workplace
- Excessive absenteeism or any absence without notice
- Unauthorized use of telephones, mail system, or other employer-owned equipment
- Unauthorized disclosure of official "secrets" or confidential information
- Violation of personnel policies
- Unsatisfactory on the job performance or conduct
- Operating pressure groups

19.3 Sexual and Other Unlawful Harassment

AVDP is committed to providing a work environment that is free from all forms of discrimination and conduct that can be considered harassing, coercive, or disruptive, including sexual harassment. Actions, words, jokes, or comments based on an individual's sex, race, color, national origin, age, religion, disability, or any other legally protected characteristic will not be tolerated.

Sexual harassment is defined as unwanted sexual advances, or visual, verbal, or physical conduct of a sexual nature. This definition includes many forms of offensive behavior and includes gender-based harassment of a person of the same sex as the harasser. The following is a partial list of sexual harassment examples:

- Unwanted sexual advances.
- Offering employment benefits in exchange for sexual favors.
- Making or threatening reprisals after a negative response to sexual advances.

- Visual conduct that includes leering, making sexual gestures, or displaying of sexually suggestive objects or pictures, cartoons or posters.
- Verbal conduct that includes making or using derogatory comments, epithets, slurs, or jokes.
- Verbal sexual advances or propositions.
- Verbal abuse of a sexual nature, graphic verbal commentaries about an individual's body, sexually degrading words, or suggestive or obscene letters or invitations.
- Physical conduct that includes touching, assaulting, or impeding or blocking movements.

Unwelcome sexual advances (either verbal or physical), requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- (1) submission to such conduct is made either explicitly or implicitly a term or condition of employment;
- (2) submission or rejection of the conduct is used as a basis for making employment decisions; or,
- (3) the conduct has the purpose or effect of interfering with work performance or creating an intimidating, hostile, or offensive work environment.

You should report immediately to your supervisor if you experience or witness sexual or other unlawful harassment in the workplace. If the supervisor is unavailable or you believe it would be inappropriate to contact that person, you should immediately contact the NPC or any other member of Management. You can raise concerns and make reports without fear of reprisal or retaliation.

All allegations of sexual harassment will be quickly and discreetly investigated. To the extent possible, your confidentiality and that of any witnesses and the alleged harasser will be protected against unnecessary disclosure. When the investigation is completed, you will be informed of the outcome of the investigation.

Any officer who becomes aware of possible sexual or other unlawful harassment must immediately advise NPC or any member of management so it can be investigated in a timely and confidential manner. Anyone engaging in sexual or other unlawful harassment will be subject to disciplinary action, up to and including termination of employment.

20. Personal Appearance

Dress, grooming, and personal cleanliness standards contribute to the morale of all employees and affect the corporate image AVDP presents to supervising agencies, stakeholder and visitors.

During official hours or when representing AVDP, staff are expected to present a clean, neat, and tasteful appearance. You should dress and groom yourself according to the requirements of your position and accepted social standards. This is particularly true if your job involves dealing with senior government officials, IFAD Staff, Farmers Organizations, Senior AVDP Officials or visitors in person.

Without unduly restricting individual tastes, the following personal appearance guidelines should be followed:

- Jeans, bermudas, t-shirt, and shorts do not present appropriate official professional attire.
- Unnaturally colored hair and extreme hairstyles, such as spiked hair and shaved heads, do not present an appropriate professional appearance.
- Offensive body odor and poor personal hygiene is not professionally/official acceptable.
- Facial jewelry, such as eyebrow rings, nose rings, eye shadow, lip rings, and tongue studs, is not appropriate and must not be worn during official hours.
- Multiple ear piercings (more than one ring in each ear) are not professionally appropriate and must not be worn during official hours.
- Visible excessive tattoos and similar body art must be covered during official hours.

21. Workplace Etiquette

AVDP strives to maintain a positive work environment where employees treat each other with respect and courtesy. Sometimes issues arise when employees are unaware that their behavior in the workplace may be disruptive or annoying to others. Many of these day-to-day issues can be addressed by politely talking with a co-worker to bring the perceived problem to his or her attention. In most cases, common sense will dictate an appropriate resolution. AVDP encourages all employees to keep an open mind and graciously accept constructive feedback or a request to change behavior that may be affecting another employee's ability to concentrate and be productive.

The following workplace etiquette guidelines are not necessarily intended to be hard and fast work rules with disciplinary consequences. They are simply suggestions for appropriate workplace behavior to help everyone be more conscientious and considerate of co-workers and the work environment. The NPC should be contacted for further clarifications or suggestion regarding these workplace etiquette guidelines.

- Avoid public accusations or criticisms of other employees. Address such issues privately with those involved or your supervisor.
- Try to minimize unscheduled interruptions of other employees while they are working.
- Communicate by e-mail or phone whenever possible, instead of walking unexpectedly into someone's office or workspace.

- Be conscious of how your voice travels, and try to lower the volume of your voice when talking on the phone or to others in open areas.
- Keep socializing to a minimum, and try to conduct conversations in areas where the noise will not be distracting to others.
- Minimize talking between workspaces or over cubicle walls. Instead, conduct conversations with others in their workspace.
- Try not to block walkways while carrying on conversations.
- Refrain from using inappropriate language (swearing) that others may overhear.
- Monitor the volume when listening to music, voice mail, or a speakerphone that others can hear.
- Clean up after yourself and do not leave behind waste or discarded papers in your office.

22. Code of Conduct

22.1 Principles

Employees conduct contribute to the success or failure of organisation. AVDP fully endorses that all employees are not deprived of their basic human rights. However, AVDP believes in responsible social and ethical behaviour from all employees

Furthermore, AVDP employees have an obligation to the Programme, stakeholders and to themselves to observe high standards of integrity and fair dealing. Unlawful and unethical practices undermine the much needed trust and confidence in the programme.

22.2 Policy

Code of Conduct policy applies to all employees and provides the framework of principles for conducting official, dealing with other employees, Stakeholders, consultants, farmers and contractors. The Code of Conduct does not replace legislation and if any part of it is in conflict, then legislation takes precedence. All employees should:

- Act and maintain a high standard of integrity and professionalism
- Be responsible and scrupulous in the proper use of Programme information, funds, equipment and facilities
- Be considerate and respectful of the environment and others
- Exercise fairness, equality, courtesy, consideration and sensitivity in dealing with other employees, contractors, consultants and farmers.
- Avoid apparent conflict of interests.
- Promote the interests of AVDP at all times.
- Perform duties with skill, professionalism, honesty, care and diligence
- Abide by policies, procedures and lawful directions that relate to your employment with AVDP and/or Stakeholders.
- Avoid the perception that any official transaction may be influenced by offering or accepting gifts
- Under no circumstances should an officer offer or accept money

Any employee, who in good faith, raises a complaint or discloses an alleged breach of the Code, whilst following correct reporting procedures, will not be disadvantaged or prejudiced. All reports will be dealt with in a timely and confidential manner.

AVDP expects co-operation from all employees in conducting themselves in a professional, ethical and socially acceptable manner of the highest standards.

Any employee in breach of this policy may be subjected to disciplinary action, up to, and including termination.

Should an employee have doubts about any aspect of the Code of Conduct, they must seek clarification from his/her supervisor.

This policy will be regularly reviewed by AVDP and any necessary changes will be implemented.

23. Conflict of Interest

23.1 Policy

Conflict of interest arises whenever the personal, professional or official interests of an employee are potentially at odds with the best interests of AVDP.

All employees are required to act in good faith towards AVDP. Employees need to be aware of the potential for a conflict of interest to arise and should always act in the best interests of AVDP.

As individuals, employees may have private interests that from time to time conflict, or appear to conflict, with their employment with AVDP. Employees should aim to avoid being put in a situation where there may be a conflict between the interests of AVDP and their own personal or professional interests, or those of relatives or friends. Where such a conflict occurs (or is perceived to occur), the interests of AVDP will be balanced against the interests of the staff member and, unless exceptional circumstances exist, resolved in favour of AVDP.

23.2 Procedure

Employees must:

- declare to management any potential, actual or perceived conflicts of interest that exist as soon as soon as you are employed by AVDP in any capacity.
- avoid being placed in a situation where there is potential, actual or perceived conflict of interest if at all possible

If an employee declares such an interest, AVDP will review the potential areas of conflict with the employee and mutually agree on practical arrangements to resolve the situation.

Employees must not set up or engage in private official or undertake other employment in direct or indirect competition with AVDP, using knowledge and/or materials gained during the course of employment with AVDP. Engaging in other official interests during work hours will result in strong performance improvement/ disciplinary action.

Failure to declare a potential, actual or perceived conflict of interest or to take remedial action agreed with AVDP, in a timely manner, may result in performance improvement proceedings including dismissal.

24. Return of Property

Employees are responsible for all AVDP property, materials, or written information issued to them or in their possession or control. Employees must return all AVDP property immediately upon request or upon termination of employment. Where permitted by applicable laws, AVDP may withhold from the employee's check or final paycheck the cost of any items that are not returned when required. AVDP may also take all action deemed appropriate to recover or protect its property.

25. Suggestion for Project Improvement

As employees of AVDP, you are encouraged to contribute to AVDP's future success and growth by submitting suggestions for practical work-improvement or cost-savings ideas.

All employees are eligible to participate in the suggestion program.

A suggestion is an idea that will benefit AVDP by solving a problem, reducing costs, improving operations or procedures, enhancing service to farmers, eliminating waste or spoilage, or making AVDP a better or safer place to work. Statements of problems without accompanying solutions, or recommendations concerning co-workers and management are not appropriate suggestions.

All suggestions to management should contain a description of the problem or condition to be improved, a detailed explanation of the solution or improvement, and the reasons why it should be implemented.

Special recognition may be given to employees who submit a suggestion that is implemented.

Employee Declaration

I have read and understand the contents of the AVDP Administrative Manual and I agree to the terms and conditions as stated in the manual.

Employee Name: _____

Employee Signature: _____

Date: _____

V. Module 3: Financial Procedures

IFAD ASSISTED AGRICULTURE VALUE CHAIN DEVELOPMENT PROGRAMME (AVDP)

NATIONAL PROGRAMME COORDINATION UNIT
Ministry of Agriculture Forestry and Food Security

FINANCIAL PROCEDURES MANUAL

Outline

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Section 1: Introduction

(i) 1.1 Purpose of the Financial Procedures Manual

This manual provides broad guidelines for the development and maintenance of financial management system for the Agriculture Value Development Project (AVDP) by the International Fund for Agricultural Development (IFAD). The principles and themes outlined here are specifically to address the financial management aspects of the implementation of IFAD funded project, including planning and budgeting, accounting, internal controls, financial reporting, flow of funds, audit arrangements etc.. In particular this manual aims to ensure that the funds are used for the intended purpose and in the most efficient way and that the NPCU is able to generate accurate and timely financial reports to MAFS, IFAD, and other stakeholders.

(ii) 1.2 Additions, Deletions and Amendments to the manual

Any main section or sub-section of the Financial Procedures Manual may be amended if the need arises, and in consultation with the, the lead project agencies (MOF and MAFs), and IFAD. The amendments shall be submitted to IFAD for its non-objection before they can be effected.

Log book of amendments to this Manual	
Description of changes	Date of IFAD non objection

(iii) 1.3 Plan for key FM activities during start up

During the start-up of the project, the FM staff must make sure the following is conducted:

Activity	Remarks
Hire the service provider to configure the accounting software.	The accounting software must be able to produce all financial reports and WA forms automatically as well as record all assets including farming input in the possession of the project and waiting for delivery.
Review the financial procedures manual and suggest updates as required.	Important to ensure consistency with other manuals as well including matching grants manual and procurement procedures manual.
Review the forms (annexes) and suggest updates, improvements and new forms as required.	
Undertake the IFAD FM e-learning course	
Familiarize yourself with IFAD manuals. Note that	Loan disbursement handbook, and audit

these may contain updates	handbook have recently been updated.
Study the Financing agreement, LTb and project design document	
Develop FM input for agreements, including agreements with implementing partners	Important to include: i) disbursement schedule with clear disbursement triggers outlining the necessary documentation, ii) anticorruption clause and iii) an audit clause.

Section 2: IFAD Anticorruption policy

The management of the project funds shall be sufficiently rigorous to safeguard against Fraud and Corruption. Fraud and corruption include, but are not limited to:

- corrupt practice - offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party
- fraudulent practice - any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation
- collusive practice - an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party
- coercive practice - impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party

IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. 'Zero tolerance' means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied to parties or entities involved where the allegations are substantiated. IFAD takes all possible actions to protect individuals who submit allegations of fraudulent or corrupt practices in its activities from reprisal. The primary responsibility for enforcing the Anticorruption Policy lies with the Borrower/Recipient, and the first defence for controls shall be exercised by Project staff, Implementing Partners and Counterparts. Pursuant to this, the Borrower/Recipient shall have the responsibility to incorporate pertinent provisions of the Anticorruption Policy in its contracts with project staff, cooperating/implementing partners, and suppliers/consultants. The IFAD anticorruption policy is available on IFAD website at www.ifad.org/governance/anticorruption/index.htm). The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (<http://www.ifad.org/governance/anticorruption/how.htm>).

Under the IFAD General Conditions for Agricultural Development Financing, by notice to the Borrower/Recipient, the Fund may require that all bidding documents and contracts for procurement of goods, works and services financed by the Financing include provisions requiring bidders, suppliers, contractors, sub-contractors and consultants to: (i) allow full inspection by the Fund of all bid documentation and related records; (ii) maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and (iii) cooperate with agents or representatives of the Fund carrying out an audit or investigation.

It is the Project Coordinator's and the Project Financial Manager's responsibility to make sure that all NPCU staff, including the financial department, are aware of IFAD's and the National's anticorruption policies and whistle blowing procedures.

Section 3: Project financing and cost tables

The financing structure of the project and its costs are outlined in the cost tables. The IFAD financing is derived from the cost tables and formally agreed between the Government and IFAD in the

Financing Agreement (FA). In particular, the schedule 2 of the FA show the different amounts allocated to categories of eligible expenditures.

The project design report contains the detailed cost tables of the project. In addition to the schedule 2 of the financing agreement the most important cost table include the following three tables;

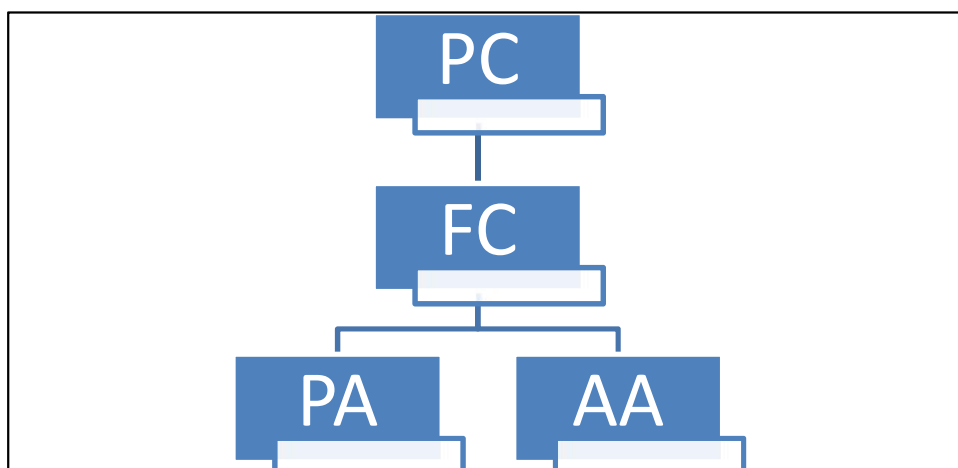
- Project expenditures by component and financier
- Project expenditures by disbursement accounts and Financier

It is essential that the Project Coordinator, Financial Controller, and the Project accountant , master these tables and understand the interrelation between them tables when developing the Annual Work Plan and Budget, setting up the chart of accounts, configuring the accounting software and formalizing the financial reporting formats to ensure compliance with the IFAD's and other stakeholders requirements.

Section 4: Staffing

The FM unit will report to the Project coordinator of the NPCU will include the following staff:

- A Financial Controller (FC)
- Project accountant (PA)
- Assistant accountant/Administrative assistant (AA)



The detailed ToRs of the Financial Controller and the project accountant are outlined in annex 1 of this manual.

In order to ensure that the financing proceeds are used for the intended purpose and as efficiently as possible, it is essential that the Financial Controller sets up and maintains adequate financial management arrangements in each stage of the project cycle: i) preparation and planning, ii) implementation as well as iii) completion and closing, as illustrated in the chart below.

i) Preparation and Planning	ii) Implementation	iii) Completion and Closing of the financing
<p>a) Setting up and proper staffing of the NPCU</p> <p>b) Setting up accounting and systems and financial management procedures</p> <p>c) Annual work plan and budget</p> <p>d) Opening of a designated and project accounts</p> <p>e) Training of staff (IFAD procedures etc.)</p>	<p>a) Record keeping and accounting</p> <p>b) Withdrawal applications</p> <p>c) Bank reconciliations</p> <p>d) Periodic reporting, comparison with actual expenses and forecasts</p> <p>e) Auditing arrangements</p> <p>f) Amendments and budget reconciliations</p> <p>g) IFAD supervision missions</p>	<p>a) Expenditures (eligible) claimed by the borrower by closing date</p> <p>b) Final inventory (disposal/handover)</p> <p>c) Closure of bank accounts and refund balances</p> <p>e) Final audit and financial reporting</p> <p>f) Budget wrap up</p>

(Financial management arrangements in the different stages of the project cycle)

Section 5: Planning and budgeting

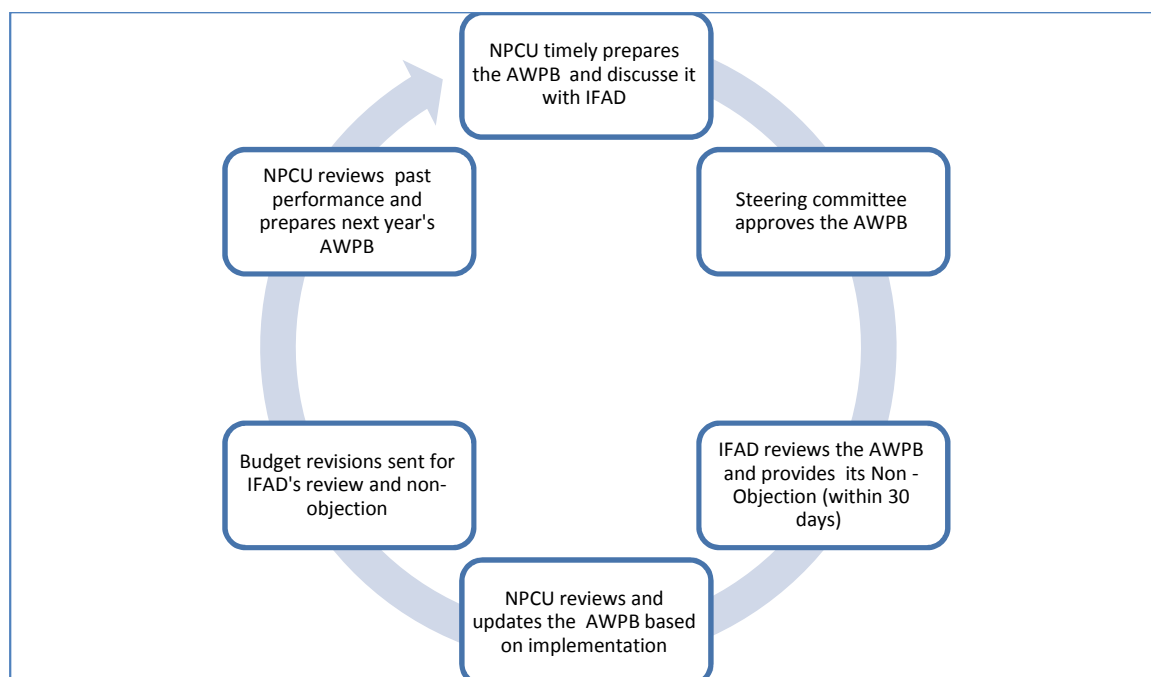
(iv) 5.1 Structure of the AWPB

The NPCU is responsible for developing an Annual Work Plan and Budget (AWPB). The AWPB is expected to contain several key elements such as:

- i) Introduction and brief background;
- ii) Narrative covering the strategic focus, target group, geographical focus (project sites), outreach (with gender disaggregation), project components and specific activities to be undertaken and the planned output for each activity;

- iii) Outline of major risks that could affect adversely the project outcomes and actions undertaken by the recipient to ensure that these risks are mitigated and outputs secured.
- iv) Budget and Financing plan describing the necessary inputs and outputs for each activities, including the expenditures, financing source and by when it will be completed. The expenditures should be classified per activity and should also be linked to a component, expenditure category as per the financing agreement and a financing source. In addition each activity should be coupled with tangible outputs or physical targets to facilitate the measurement of project progress.
- v) Procurement plan outlining what will be procured, at what cost, under what procurement method and when. The first Procurement plan should cover the first 18 months of the project lifecycle while the subsequent procurement plans should cover 12 months of the project lifecycle.
- vi) Training and technical assistance schedule and,
- vii) NPCU staff development plan
- viii) Full payroll for all project staff including the names, titles as well as monthly and annual salary.
- ix) From the second year onwards the AWPB should also discuss the past performance of the project including i) Summary of the key achievements and ii) Problems encountered and how these were resolved and iii) variance analysis of the actual financial progress vs planned expenditures separately for the past year and cumulative. The past financial performance should also be disclosed in order to provide more strategic focus and avoid overspending or category overdrafts (incurred expenditures by Category and by component).

(v) 5.2 Preparation of the Budget



(The project budget cycle)

The AWPB with related Procurement Plan will be developed in a preparatory manner. The preparation will include the following steps:

- Well before (four months recommended), the beginning of each fiscal year the Project Coordinator will develop guidance including targets and a timetable for the budget preparation and distribute these to all component heads and key units such as procurement, finance etc..
- Based on the guidance, each component head will then prepare their separate plans. The plans will outline all the planned activities in each quarter. For each activity the physical targets or outputs number of farmer's to be trained etc.), unit cost and total cost estimates, the relevant cost category and the date of completion will be clearly specified. With the exception of the first year's AWPB, the past years' experience and unit costs should be used as input. Indeed, the units costs should be based on the project's (up to date) cost estimates or past experience in recent similar activities.
- The plans developed by each component will be discussed in a joint work plan preparation session involving all component heads , relevant technical staff, as well as finance and procurement staff. This will ensure overlap issues are considered, omissions addressed and any duplications eliminated.
- The procurement team will then work with the various teams to prepare the related procurement plans. As the procurement process can be time consuming, good communication between the technical persons (or component heads) and the procurement specialist is vital in order to ensure that the contractors (for works), suppliers (for goods) and consultants (for services, studies etc.) are contracted on time to achieve the necessary outputs in a timely manner.
- The Finance team will also work with the various teams to ensure that each expenditure item is linked to the right expenditure category and no category overdraft is expected.

- The different plans are then, consolidated in a joint AWPB session chaired by the project coordinator and reviewed thoroughly. **In this regards, focus on the below checklist.** The Finance team will ensure that no category overdrafts are expected that could require a reallocation of funds. Due to the fact the majority of the funds goes through procurement it is vital that the finance team and the procurement team work together to ensure sufficient availability of funds. While managing well the intersection between financial management and procurement does not alone ensure reaching the development goals, neglecting it virtually guarantee the project to fail.
- Once the AWPB and the PP have been finalized, these are discussed or sent for comments to the IFAD CPM, ensuring that activities are eligible for funding under project.
- The AWPB and PP will then be forwarded to the technical Management Committee for final approval.
- The Project Coordinator will then submit the package of cleared AWPB and PP for No Objection from the IFAD CPM - preferably 60 days before the start of the calendar year,
- It important that all activities and approval are obtained for the AWPB by the end of the year preceding the year to the AWPB is related.
- Similarly it is important to note that for an expenditure to be eligible for IFAD financing, it has to be included in the AWPB approved by the relevant authority (usually the steering committee) and IFAD i.e. received the IFAD's non objection.
- If required, the NPCU can propose adjustments in the AWPB during the relevant project year, which would become effective after IFAD' approval.

i) <i>AWPB Check:</i> The checks listed below are designed to improve the quality of the AWPB during the final preparation stage.	i) Yes	i) No
c) Is the AWPB complete and clearly presented? Does it disclose sufficient information?	c)	i)
i) Is the AWPB in line with the project description and rational (schedule 1) as per the financing agreement and the project log-frame? Are all the activities relevant to the project?	i)	i)
c) Does it contain the necessary summary tables by component and financier and by expenditure category and financier as well as the detailed tables by component?	i)	i)
i) Does the implementation schedule seem realistic and does it show appropriate targets and milestones? Are the targets and execution level realistic compared to past years progress?	c)	c)
i) Does it contain a separate annex disclosing the details of the project payroll?	i)	i)

g) Does it contain a separate annex containing outlining the planned trainings?	g)	i)
i) In the detailed tables are the expenditures structured by activity and linked to a component, expenditure category and financing source?	i)	g)
g) Are the cost categories of the AWPB in line with the Schedule 2 of the IFAD financing agreements and are expenditures within the agreed allocations?	i)	i)
i) Is any expenditure category going to be overdrawn during the year? Is a reallocation of IFAD funds needed?	g)	g)
i) Do the total (and subtotal) costs add up? Are the inputs (unit cost) and outputs (physical targets) adequately quantified? Is there coherence between the inputs and outputs? And does these represent value for money (i.e. what is the unit costs for per output, e.g. cost per trained farmer)?	i)	i)
g) Are the unit cost are realistic and do they reflect market prices?	i)	i)
i) Is the AWPB accompanied by a procurement plan? Is the procurement plan consistent with the AWPB.	i)	g)
g) Is the format of the AWPB compatible with other financial reports and the accounting software to allow input in the budget module and generation of actual vs budget reports and	i)	i)
i) If last audit, does it take into account completion date of the project as well as winding up activities such as project completion report, final audit as handover/disposal of project assets (computers, vehicles etc.),	g)	i)

(AWPB check list)

(li)

(lii) 5.3 Budgetary Control

The AWPB is developed and modified using excel. However, once the AWPB has been developed and approved, it must be inserted in the budget module of the NPCU's accounting system to ensure that expenditures not part of the AWPB are blocked reducing the risk of incurring ineligible expenditures.

For an expenditure to be eligible for IFAD financing, it has to be included in the AWPB approved by the relevant authority (usually the steering committee) and IFAD i.e. received the IFAD's non objection.

Inserting the budget into the accounting system will also allow for variance analysis i.e. actual vs budgeted expenditures which is a mandatory requirement under IPSAS cash basis and will help management identifying bottle necks in project implementation.

Section 6: Accounting

(liii) 6.1 Accounting standards

The NPCU will use the International Public Sector Accounting Standards (IPAS)- cash basis. The used accounting standards are to be clearly stated in the project financial reports and annual financial statements.

When using the cash flow accounting method, the project accounting should be consistent with the following principles:

- The income/expenditure is identified upon receipt/disbursement of cash, no matter when the goods or services have been received.
- Liabilities are not considered until payment; therefore, liability accounts are not used normally. However, advances to individuals or implementing partners can not be considered as expenditures before these have been properly justified. It is also best practice to disclose liabilities /receivables separately in the notes of the financial reports.

Adjustment of expenditures over the accounting period may be required for the purposes of auditing and reporting. If so, expenses that are actually incurred yet unpaid are adjusted and taken into account in the current accounting period. This also applies to the expenditures that have been incurred during in the past, yet paid during the current period

(liv) 6.2 IPSAS cash basis of accounting

Detailed guidance and instructions regarding IPSAS can be found under:

- Deloitte -IPSAS in your pocket — 2018 edition
<https://www.iasplus.com/en/publications/public-sector/ipsas-in-your-pocket-2018>
- http://www.icgfm.org/IPSAS/Compilation_Guide.pdf
- http://www.kpmg.com/CH/en/Library/Articles-Publications/Documents/Sectors/pub_20110420_ipsas-handbook-2011-part-2_EN.pdf

(lv) 6.3 Accounting system

The majority of project activities result in the receipt, commitment or expenditure of funds. The accounting system records, processes and organises this data in order to produce useful financial information in form of AWPB, Financial Reports, Withdrawal Applications, Financial Statements etc. needed by the Project Financiers (IFAD, Government, Beneficiaries) as well as the NPCU management.

The Project will record all its transactions in the TOMPRO accounting software already in use in the NPCU. For detailed instructions on the use of the accounting software, please refer to the TOMPRO user manual.

6.4 Fine-tuning the accounting software and the Chart of Accounts.

The Chart of Accounts is used to: (i) capture the financial data under the appropriate headings and (ii) classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by: (i) the Project components, sub-components, activities (ii) expenditure items under each component and sub-component, (iii) The IFAD expenditure's categories for the Project as outlined in the finance agreement, and (iv) sources of funding. The chart of account may also be expanded to take into account the different accounts and or different districts and implementing partners/entities.

As part of the project start up, the TOMPRO service provider should be contracted to fine-tune the accounting software to meet the needs of the project as necessary. In this regard, the structure of the Chart of Accounts should conform closely to the project cost tables (as presented in the project design report and section 1 of this manual) to enable comparison of actual project costs during implementation with those estimated during the project preparation.

6.5 Budgeting and budgetary control.

The project budget will be recorded in the budget module of the TOMPRO accounting software. The budget control features of the software should be used to allow for variance analysis (actual vs budgeted expenditures) and highlight payments that are being made against non-existing or overdrawn budget lines.

6.6 Recording and processing of transactions.

Whenever a transaction takes place under the Project, it should be recorded and processed using the accounting software. Processing of payments in the accounting software is outlined in the relevant section of the accounting software user manual.

The recording of transactions under the Project follows the Cash basis of accounting which allows for the recognition of cash inflows in the period they are received and the reporting of expenses in the period those expenditures are paid.

Individual records of transactions are treated as source documents. For the project accounting purposes, the following source documents are considered:

- Purchase orders/ Contracts
- Purchase invoices
- Service invoices
- Consultants/engineers' reports

All transactions occurred should be registered in the accounting software in accordance with the date of occurrence and under the form of journals. The journal should contain sufficient and detailed information about the date of the transaction, its type, amount and reference to the source document. All the transactions should be entered on the accounting software using the principle of double entry, which means that each transaction should be recorded twice, once on the debit side of the transaction and once on the credit side of the transaction. The accounting software will automatically process those transactions and post them to the ledger accounts, which are accounts where all transactions, of a similar type, are recorded. This processing of transactions also allows for the production of timely reports.

The accountant should reconcile the project accounts on a monthly basis. In case certain adjustments of entries in the accounting process have to be made, the accountant should produce a memorandum in which the reasons and the way in which the adjustment has been made is explained. The memorandum will be authorized by the Project coordinator after being cleared by the Financial controller.

For detailed instructions on how to record the expenditures in the accounting software, please refer to the TOMPRO user manual.

(Ivi) 6.7 Foreign exchange conversion in accounting

When claiming expenditures in local currency in Withdrawal Applications (forms 101, 102 and 104) or preparing a financial report, it is important to use the prevailing rate (historical exchange rate) at the time of transfer of funds from the Designated Account (denominated in USD) to the local currency account. This type of conversion is also called the First in First out (FIFO) basis.

6.8 Tracking and Recording of In-kind Contributions and tax exemption

In order to comprehensively monitor the financial performance and the contributions made by all stakeholders of the project, it is important that the NPCU is able to estimate the value and record the following:

- the in-kind contributions made by the different financiers, usually beneficiaries and the government; and,
- the tax exemptions provided by the government.

Moreover, to ensure reliable measurement, accurate records of in kind contributions must be retained (e.g., calculation of tax exemptions, total hours of labour contributed by communities, value of goods contributed by communities, government tax exemptions etc.) and duly filed just like other financial records. How to calculate the value of the in-kind contribution and the necessary supporting documentation to be retained for different cases is outlined in the table below:

Type of in-kind Contribution and unit of measurement	How to calculate it	Supporting documentation to be retained
Labour = total hours of labour contributed by communities.	Value =total hours worked X applicable wage rate (in most cases the applicable minimum wage rate for uneducated labour in the country)	Time sheet by the community group outlining the persons, and the hours they contributed during a specified time period. The time sheet should be duly signed by the community representative and Project technical/M&E staff
Goods = value of goods/land contributed by communities.	Value = number of goods/land contributed X their estimated value.	Sheet by the community group outlining the number and type of goods or area of land, contributed during a specified time period. The sheet should be duly signed by the community representative and Project technical/M&E staff
Government pro-rata shares of staff salaries.	Value = government monthly salary X % of time worked for the project. Value= monthly salary x the % covered by the government	
Government pro-rata shares of utilities.	Value= monthly/annual value of utilities X the % covered by the government	

The calculation of tax and duties exemptions should be done using the prevailing tax or duties rates as outlined in the table below. The tax/duties exemptions should be supported by adequate documentation.

Category	Tax/duties rate	Example how to calculate the VAT exemption on an item that cost USD 1 000 net of tax.
Goods	Value added Tax rate YY%, Import duties XX%	0.17*1000=170
Works	Value Added Tax rate YY%, Import duties XX%	0.15*1000=150
Services	Value Added Tax rate YY%, Import duties XX%	0.03*1000=30

The tax-exemptions should be duly recorded in the accounting software if possible. If the accounting software is not able to accommodate this, then separate excel spreadsheets should be maintained in such a format that they can be easily harmonized with the other financial reports as necessary.

When recording the in-kind contributions, it is important that the in-kind contributions are classified according to the same principles as regular project expenditures; that is, every contribution must be by linked to an activity/component, by category and by financing source (government and/or beneficiaries) to ensure that consolidated financial reports can be produced without any extra effort. All data (including excel spreadsheets) with regards to in-kind contribution should be backed up regularly.

In-kind contributions should be disclosed in the notes of the financial statements in the agreed format. The notes of the financial statements should also briefly explain the methodology of how it was calculated. On the other hand, when in-kind contributions cannot be reliably measured, for example the use of office space, then these should also be discussed in the notes to the Project financial statements.

(Ivii) 6.9 Income from project activities

During the project life, AVDP may receive funds from different activities including but not limited to:

- i) sale of bids (VS, Tree Crops, Construction, vehicles and equipment etc..),
- ii) Sale of an asset (old vehicle et..)
- iii) receipt of funds from farmers as part of the recovery of purchased and delivered inputs and equipment/machinery from farmers (crops, IVS, ABC equipment).
- iv) Other reflows from project activities

All income from the activities listed above must be deposited in the counterpart account or another account separate account to be opened by the project as agreed with MAF and IFAD. All income will need to be supported by adequate financial documentation and registered in the accounting software/TOMPRO by the Accountant under "other income" and disclosed in the financial reports. The notes of the financial statements will include a breakdown of all the income received from sale of bids, recovery of funds from beneficiaries, etc. and an account reconciliation. All income will be audited as part of the annual audit exercise, like with the rest of the project funds.

(Iviii) 6.10 Year-end accounting activities.

By the end of January, the financial controller will ensure that the following checks and activities are performed to ensure the accuracy of the project financial statements:

- Ensure all project expenditures, including IFAD, government, beneficiary and co-financier expenditures have been properly captured and included. In-kind contributions may be tracked outside the accounting software.
- Conduct a reconciliation of Withdrawal applications submitted to IFAD and the amounts paid by IFAD. This can be done with the help of the Historic transaction reports which can be accessed through the IFAD client Portal or by asking IFAD to submit it.
- Conduct a verification of financial reports from districts and Implementing Partners and analysis of outstanding advances. Are there any outstanding advances? Follow-up as necessary.
- Conduct a verification of completeness of transactions recorded in the accounts.
- Conduct a Bank reconciliations for all accounts including designated accounts and petty cash reconciliations. Remember to list and analyse the reconciliation items (if any).
- Analysis of account balances in the General Ledger and verification of trial balance. Remember, for any time period the trial the total debit entries should equal the total credit entries. A trial balance can be performed at intermediate stages to ensure errors are spotted as early as possible.
- Conduct corrections and adjustment of entries (omissions, coding errors, double-counting, etc.)
- Conduct an analysis of the execution of the approved/re financial execution (budget-to-actual by activity). Remember to briefly explain any significant variations in the notes of the financial report.

- Reconciliation of IFAD statements with project accounts
- Conduct an inventory of assets, supplies and materials. All missing assets should be reported to the police and properly investigated and reported separately in the inventory report and in the notes of the financial statements.

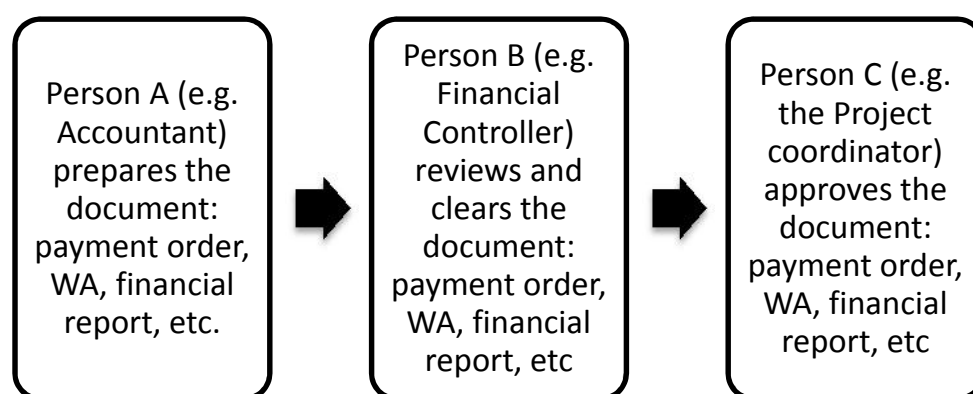
Section 7: Internal controls

Designing, Installing, and maintaining a system of internal financial control is an integral part of the Financial management function. Internal financial controls aim to ensure) efficiency, ii) reliability, of financial reports and iii) compliance with applicable laws and regulations including the conditions set forth in the financing agreement. The key features of the internal control system are summarised below:

- Segregation of duties;
- Authorization;
- Reconciliations and checks;
- Restricted access; and
- Monitoring and review.

(lix) 7.1 Segregation of duties

An important element in any control system is the separation of those duties which would, if combined, enable one individual to record and process a complete transaction. It is the Financial Controller's responsibility to ensure that the following duties are segregated under the project: preparation, authorisation, execution, custody, recording and the and operation of systems.



(Char: Example of Segregation of duties)

In particular it is important that the following functional responsibilities are performed by different persons:

- authorization to execute a transaction, ii) recording a transaction, iii) custody of assets involved in the transaction, iv) reconciliation of bank accounts and subsidiary ledgers
- ordering, ii) receiving, iii) accounting for and iv) paying for goods and services.

(Ix) 7.2 Authorization

Authorization controls require the certification that a transaction or event is acceptable for further processing. Several types of authorization are in effect at the project, mainly in the procurement cycle,

payment cycle, bank and cash management cycle including reconciliation. The Financial Controller must ensure that the authorizations of NPCU staff ensure efficient implementation while keeping the risk as low as possible. The authorization of project staff should be in line with their respective job descriptions.

(Ixi) 7.3 Reconciliations and Checks

Reconciliations between independent, corresponding sources of data are a key control for identifying errors and discrepancies in balances. The Finance Manager should perform the following reconciliations each month:

- Bank reconciliation
- Reconciliation between system and special account receipts and payments statement
- Reconciliation of system payroll and physical payroll
- Any reconciling or balancing amounts should be promptly cleared. Unusual or long outstanding reconciling items such as outstanding advances to implementing partners or individuals, must be brought to the attention of the financial officer and must be thoroughly investigated. The financial controller will review and sign all reconciliations as evidence of his review.

In addition physical checks should be performed on assets held and on petty cash (if any).

(Ixi) 7.4 Restricted Access

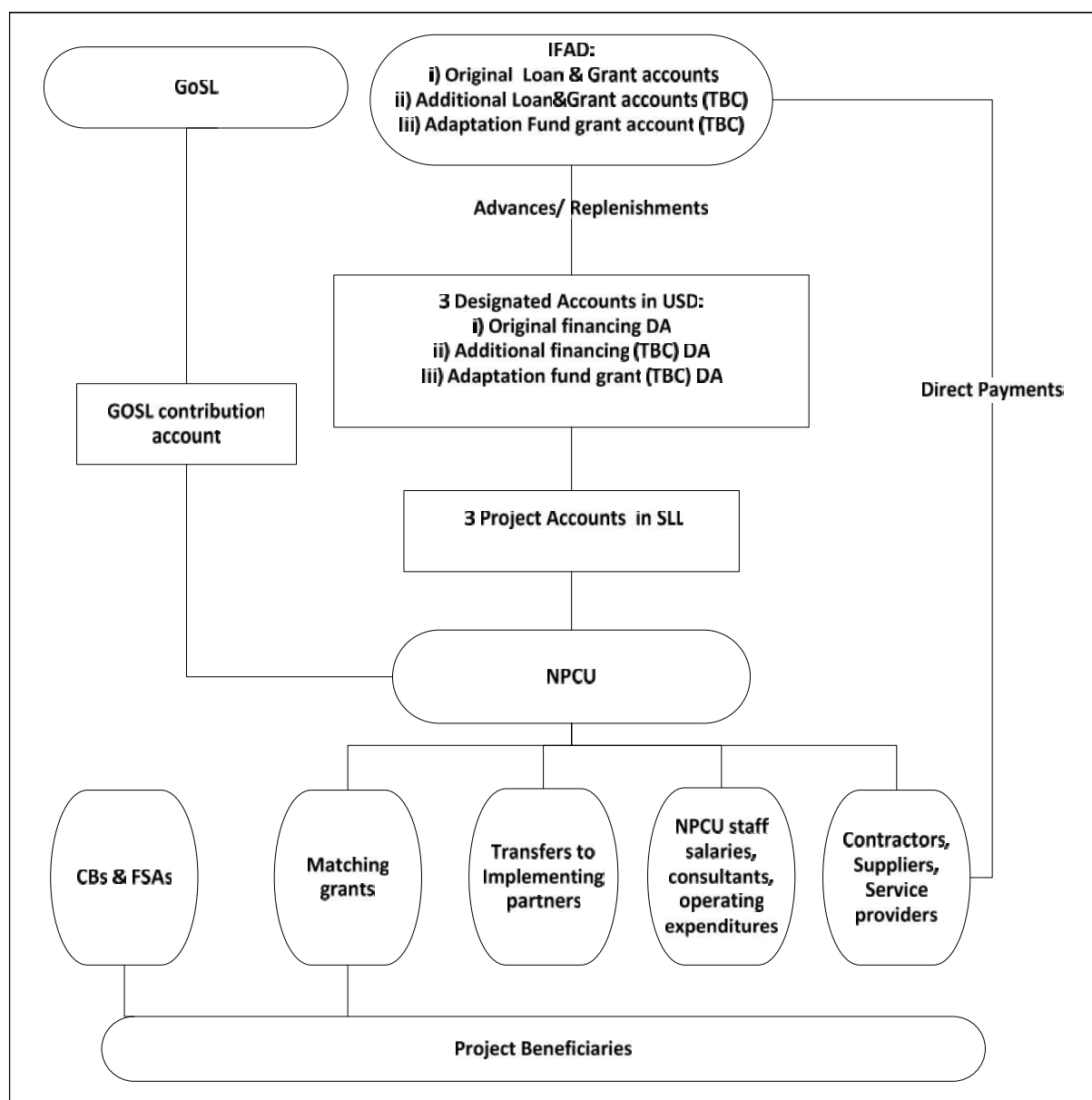
All data, records and assets should be kept in a physically secure environment. This should cover safe keeping of finance records such as official order forms and bank details. In addition, any petty cash should be kept securely. Financial data and other records should also be protected in the form of weekly back up procedures. All work and financial records should be regularly backed up and copy records stored securely off site.

(Ixi) 7.5 Monitoring and Review

As detailed in financial reporting section, periodic financial reports must be prepared and submitted to the fund. For the purposes of internal control the same information should be prepared and monitored by the financial controller and the project coordinator on a monthly basis. Especially variance analysis is useful to detect bottlenecks in implementation while reconciliation statements are good and cash forecast are important to ensure sufficient liquidity for the project. The reports should be prepared on a timely basis and should normally be available for distribution two weeks after the end of the reporting period to which they relate. The periodic reports should be reviewed by the financial controller and the project coordinator as a minimum. Where necessary, corrective action should be taken to ensure the authorized budget and procurement plan is not exceeded.

Section 8: Flow of funds

Ministry of Finance will open in a bank three separate Designated Accounts denominated in USD to the benefit of the project as follows i) one for the original financing (original IFAD loan and grant), ii) one for the additional financing (additional IFAD loan and grant) and iii) one for the adaptation fund grant. These funds will not be mingled with other funds. From the designated accounts the funds will flow to separate three separate project accounts denominated in local currency to finance eligible expenditures under the project. In addition, there will be separate government counterpart account. The NPCU will be authorized to operate the accounts. The Flow of funds is illustrated in the graph below.



(lxiv) 8.1 Accounting for the Exchange rate and mitigation of the Exchange rate risk

The designated account is maintained in USD while most of the project expenditures are incurred in local currency. This flow of funds arrangement makes it important for the project to have proper controls and procedures in place to be able to:

- Properly account for the exchange rate and its fluctuations
- Mitigate any risks rising from potential exchange rate fluctuations or shock such as high rate of inflation or devaluations of the local currency.

As soon as funds are transferred from the designated account denominated in USD to the project account in local currency account, the converted funds may lose part of their value with respect to the designated account denomination currency resulting in an exchange rate loss. Particularly in the case of high domestic inflation or currency devaluation, the project may incur a substantive exchange rate loss and as a result the project must have proper procedures in place to mitigate the potential financial impact.

The risk of incurring an exchange rate loss can be mitigated by keeping the balance of the local currency account(s) as low as possible while keeping the funds in the designated account until these are really needed. As a result, the financial controller should actively undertake the following mitigation actions:

- Monitor the level of domestic inflation as well as other news related to the domestic currency and assess the risk of exchange rate loss occurring,
- Conduct bi-weekly expenditure forecast; and,
- Limit the transfer funds from the designated account to the local currency accounts to the amount equalling the estimated expenditures for the next two weeks.

8.2 Income from project activities

During the project life, AVDP may receive funds from different activities including but not limited to:

- v) sale of bids (VS, Tree Crops, Construction, vehicles and equipment etc.), and
- vi) Sale of an asset (old vehicle et..)
- vii) receipt of funds from farmers as part of the recovery of purchased and delivered inputs and equipment/machinery from farmers (crops, IVS, ABC equipment).
- viii) Other reflows from project activities

All income from the activities listed above must be deposited in the counterpart account or another account separate account to be opened by the project as agreed with MAF and IFAD. All income will need to be supported by adequate financial documentation and registered in the accounting software/TOMPRO by the Accountant under "other income" and disclosed in the financial reports. The notes of the financial statements will include a breakdown of all the income received from sale of bids, recovery of funds from beneficiaries, etc. and an account reconciliation. All income will be audited as part of the annual audit exercise, like with the rest of the project funds.

Section 9: IFAD Disbursement procedures

The disbursement procedures under the programme will follow the established IFAD disbursement procedures using withdrawal applications as outlined in the IFAD disbursement handbook and letter to the borrower.

(I xv) 9.1 Responsibility for Preparing and submitting Withdrawal Applications to IFAD

The NPCU will consolidate, prepare and submit Withdrawal applications to IFAD based forms and supporting documentation produced by the NPCU and/or received from the Implementing partners, contractors, suppliers, service providers etc... Separate Withdrawal applications should be submitted for requesting financing from different IFAD financing instruments (IFAD loan, IFAD grant etc..). As a result it is important the NPCU master sand complies with the IFAD disbursement procedures outlined in the letter to the borrower and the Loan disbursement handbook.

(I xvi) 9.2 Eligibility of expenditures

In accordance with the IFAD disbursement procedures, between the date of entry into force of the Financing Agreement and the Financing Closing Date, the NPCU may request withdrawals from the Loan Account and/or Grant Accounts of amounts paid or to be paid for eligible expenditures.

Eligible expenditures are defined in the IFAD General Conditions Section 4.08 as follows: The Financing shall be used exclusively to finance expenditures meeting each of the following eligibility requirements:

- i. The expenditure shall meet the reasonable cost of goods, works and services required for the Project and covered by the relevant AWPB and procured in conformity with the Fund's Procurement Guidelines.
- ii. The expenditure shall be incurred during the Project Implementation Period, except that expenditures to meet the costs of winding up the Programme may be incurred after the Programme Completion Date and before the Financing Closing Date.
- iii. The expenditure shall be incurred by a Programme Party.
- iv. If the Agreement allocates the amount of the Financing to categories of Eligible Expenditures and specifies the percentages of such Eligible Expenditures to be financed by the Financing, the expenditure must relate to a category whose allocation has not been depleted, and shall be eligible only up to the percentage applicable to such category.
- v. The expenditure shall be otherwise eligible in accordance with the terms of the Financing Agreement.
- vi. The Fund may from time to time exclude certain types of expenditure from eligibility.
- vii. Any payment prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, shall not be eligible for financing by the Financing.
- viii. Any payments to a person or an entity, or for any goods, works or services, if making or receiving such payment constitutes a coercive, collusive, corrupt or fraudulent practice by any representative of the Borrower/Recipient or any Project Party, shall not be eligible for financing by the Financing.
- ix. All expenditures must be supported by sufficient supporting documentation as stated in the LTB and the IFAD disbursement handbook (please see section below on supporting documentation).
- x. The proceeds of the financing shall not be used to pay taxes. However, taxes paid by the ultimate recipient of an expenditure (e.g. withholding tax, income taxes paid by a Programme employee or taxes on the profits of a contractor) are not considered to be taxes paid by the Programme.

(I xvii) 9.3 Refund of Withdrawals

If the IFAD determines that any amount withdrawn from the Loan and/or Grant Accounts was not used for the purposes indicated or will not be needed thereafter to finance Eligible Expenditures, the Borrower/Recipient shall promptly refund such amount to the IFAD upon instruction by the Fund.

(I xviii) 9.4 IFAD standard disbursement procedures:

The IFAD disbursement procedures are governed by the Letter to the Borrower (LTB) and the Disbursement Handbook, which will be made available to the NPCU. The handbook is also available on the IFAD site <http://www.ifad.org/pub/basic/index.htm>.

As stated in the LTB and the LDH, four standard disbursement procedures may be used for withdrawal of financing:

Procedure I. Advance withdrawal (using imprest accounts or revolving funds with replenishment to a bank account(s) designated to receive financing resources in advance). This modality is used to advance and/or replenish funds to a bank account as designated by the borrower. IFAD may place a limit on the amount to be advanced and/or replenished. Relevant details on the modality – which is project specific – are agreed between the borrower and the Fund, and detailed in the **LTB**.

Procedure II. Direct payment. This modality is used for eligible project expenditures to be paid directly by IFAD, generally for large contracts, to suppliers, contractors, consultants or third parties, as authorized by the borrower. ii) The Direct Payment procedure should only be used only for payments of above USD 200,000 equivalent. Programme expenditures below the USD 200,000 threshold should be paid from the Programme's Designated or operational accounts

Procedure III. Reimbursement. This is applicable when eligible project expenditures, reimbursable under the financing, have been pre-financed by the borrower. Such reimbursements are expected to be claimed no later than 90 calendar days from the date of payment by the borrower. –

(Ixx) 9.5 Use of Statements of Expenditures (SOE) and SEO Thresholds

The statement of expenditure (SOE) procedure is normally used for those expenditure types where it is impracticable or unduly burdensome to require submission of full documentation. However, the supporting documentations for the Statements Of Expenditures must be maintained by the NPCU and made available for review by IFAD supervision missions upon request and to external auditors during their annual review of project accounts to enable issuing of an independent audit opinion.

The following are the SOE thresholds:

- i) for all expenditure items up to a threshold of USD 100,000 pertaining to all Expenditure Categories;

The SOE thresholds above may be amended by IFAD during the course of project implementation. Each SOE shall clearly specify which source of Financing has been utilized for the relevant expenditure.

(Ixx) 9.6 Minimum withdrawal amounts.

In order to minimize transaction costs, the minimum withdrawal amounts are set as follows:

- Withdrawal Applications requesting replenishments of the Designated Accounts should at least cover a minimum amount of thirty per cent (30%) of the initial advance.
- Direct Payment method should only be used for payments of US\$200 000 and above while expenditures below US\$200 000 should be financed from the Designated Account if possible and claimed through the replenishment of the Designated Account.

(Ixxi) 9.7 IFAD withdrawal application forms

The withdrawal Application forms are outlined in the IFAD disbursement handbook.

(Ixxii) 9.8 Foreign exchange conversion in accounting

When claiming expenditures in local currency in Withdrawal Applications (forms 101, 102 and 104) or preparing a financial report, it is important to use the prevailing rate (historical exchange rate) at the time of transfer of funds from the Designated Account (denominated in USD/EUR) to the local currency account. This type of conversion is also called the First in First out (FIFO) basis.

In particular, to avoid exchange rate differences, the historical exchange rate/FIFO basis of converting is to be used in the following two cases in particular:

- When preparing a designated account reconciliation as part of a WA or a financial report, the closing balance of the local currency account(s), and any expenditures already incurred in local currency but not yet claimed must be converted to the denomination currency of the designated account using the historical exchange rate/FIFO basis of converting.
- When preparing withdrawal applications (form 101 and 102) the expenditures incurred in local currency (or any other currency than the denomination currency of the designated account) and claimed in the WA, must be converted to the denomination currency of the designated account using the historical exchange rate/FIFO basis of converting.

(lxxiii) 9.9 Supporting Documentation

The supporting documentation listed below must be retained for all expenditures incurred by the programme and securely located to enable inspection by IFAD representatives and auditors and kept for a period of at least 10 years after the Programme Completion Date, in accordance with article VIII of the IFAD General Conditions.

The supporting documentation listed below must also be furnished (one copy only) in support of each expenditure item above the SOE threshold and claimed under form 101 as part of the Withdrawal application submitted to IFAD. It is not necessary to furnish original documents, a photocopy will suffice.

- (i) For all cases described in (ii) through (vi) below:
 - ✓ The signed contract or confirmed purchase order – showing the specified amount that is due to be paid;
 - ✓ The bank guarantee for advance payment, as specified in the contract documents;
 - ✓ The bank guarantee for performance, as specified in the contract documents;
 - ✓ Copies of communications sent by the IFAD country programme manager to the lead project agency providing the 'no objection' (whether post or prior) to the contract award; and
 - ✓ Evidence of payment.
- (ii) For payment of goods, in addition to (i):
 - ✓ Supplier's invoice, duly certified for payment by the Project coordinator – specifying the goods, their quantities, and prices;
 - ✓ Bills of lading or similar documents; and
 - ✓ As appropriate, the certificate of delivery (to include condition of goods on delivery).
- (iii) For payment of consultants' services and other services, in addition to (i):
 - ✓ The supplier's or consultant's claim, duly certified for payment by the Project coordinator and showing sufficient detail. If such services relate to the importation of goods (for example, freight and insurance payments), adequate reference should be given to enable the Fund to relate each of these items to specific goods whose cost has been or is to be financed by the financing closing date; and
 - ✓ As appropriate, a certificate of delivery of satisfactory services. If the consultant provided training it should be specified how many workshops/people trained together with a list of participants. If the Consultant developed a manual or a study this study should be attached or indicated in the certificate, etc.
- (iv) For progress and retention payments of civil works, in addition to (i):

- ✓ The claim of the contractor, including a financial progress report, stating the work performed and the amount due;
 - ✓ A certificate – signed by the project consultants or owner’s representative, if any, or by the borrower’s chief engineering officer or resident supervising engineer assigned to the project, to the effect that the work performed is satisfactory and the payment claimed is due in accordance with the terms of the contract; and
 - ✓ A copy of the contract payment monitoring form.
- (v) For payment of credit lines/grants etc.. in addition to (i):
- ✓ Duly certified financial reports;
 - ✓ Copies of the sub-agreements with the MFIs;
 - ✓ Approved minutes of the technical committee (if applicable); and/or
 - ✓ Payment requests from the MFI and evidence of payment.
- (vi) For payment of Trips, fuel, stationary and other expenses in addition to (i):
- ✓ Supplier invoices;
 - ✓ Evidence of payment;
 - ✓ Back to office report;
 - ✓ Travel authorization; and/or
 - ✓ Expense reports by the traveller (including invoices).

(lxxiv) 9.10 Designated Account Reconciliation

- a) Together with each WA received for replenishment to the designated account, the project must submit Form 104 (A or B) - Designated Account Reconciliation Statement for the same reporting period in which the eligible expenditures are being claimed.
- b) This form shall be accompanied by bank statement(s) of the designated account, and that of any other operating accounts, ensuring that the closing bank balances for all these accounts correspond to the balances at the end of the same reporting period as indicated in the WA period.
- c) As previously provided, it is recommended that, during periods of increased cash flow requirements, requests for replenishment where the imprest account is applicable (i.e. Form 104/A) be submitted more regularly to ensure sufficient project liquidity.
- d) In cases where the revolving fund is applicable (Form 104/B), the reconciliation statement shall report cumulative advances as received, over time.
- e) Sample templates for the reconciliations, as applicable, are provided in Annex (Designated Account Reconciliation Statement) and described by option.

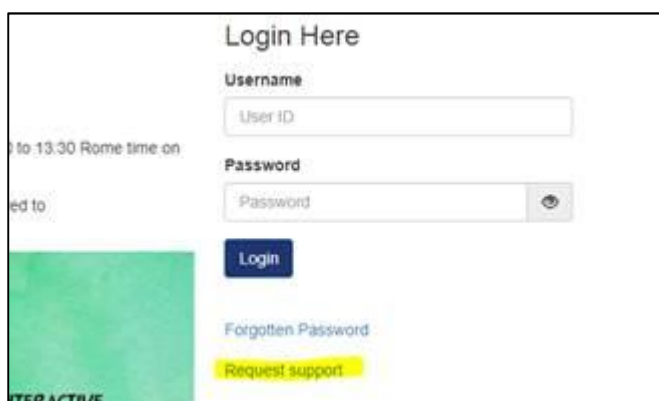
9.11 Submission of WAs using IFAD client portal and asking for support

The IFAD client portal (ICP) allows the project to submit Withdrawal applications electronically to IFAD while the hardcopies are maintained by the project for audit purposes.

ICP also allows the project and ministry staff to access real time financial reports on the project performance or debt servicing reports of ongoing and closed projects.

If you face any technical problems, or you want to raise issues or queries you can contact the ‘ICP dedicated help-desk by filling up a basic form in the ICP portal itself. This can be done in two places:

- On the ICP login page, below the area where you enter your username and password, there is a link ‘Request Support’:



- Alternatively, if you have already logged into the ICP, you can find another 'support' button on the top right-hand side of the page (picture below). Clicking either of these will take you to a basic form where you can enter your enquiry.

It is important to note to use the ICP support function for any ICP related issues or queries as it is the quickest and most direct way to have issues reviewed and escalated by the IFAD support team. On the other hand if you should require guidance on how to fill in a Withdrawal application or run a report, you can find detailed quick cards by clicking on the "Help" button just next to the support button (picture below).



Section 10: Processing of payments

(Ixxv) 10.1 General instructions

All payments are prepared by the accountant and authorized by the Project coordinator after the review and clearance of the Financial Controller.

- a. Expenditures which the project shall be involved shall result in the following payments:
 - i. Invoice related payments
 - ii. Travel related payments, and
 - iii. Personal Reimbursements
 - iv. Expenditures incurred by implementing partners
 - v. Matching grants
 - vi. Financing of Sub Projects through Business Plan/Matching Grants
- b. No expenditure of Project funds shall be incurred or committed unless:
 - i. The expenditure item is part of the approved Work plan and Budget
 - ii. Funds are available under the relevant IFAD category and the expenditure is within approved Work plan and Budget
 - iii. The proposed expenditure is an eligible expenditure under the Financing Agreement

- iv. The proposed expenditure is supported by adequate supporting documentation as defined in the IFAD disbursement hand book and letter to the borrower.
 - v. The expenditure to be incurred is in line with approved Project policies and procedures, and
 - vi. The CPM's No Objection (NO) has been obtained for expenditure above the prior review threshold or where applicable, as determined by IFAD.
 - vii. The expenditure is in line with the disbursement schedule of the sub-agreement (if applicable).
- c. The following shall however be observed by the Financial controller before clearing the payment:
- i. The expenditure is included in the approved work-plan and budget. Any item not in the budget that becomes necessary for project implementation shall only be undertaken with approval of the IFAD CPM and subsequent modification of the AWPB.
 - ii. All expenditures must fulfil the eligibility requirements listed in section (XX) .
 - iii. Payments shall receive the clearance of appropriate NPCU officer (e.g. a component/sectional head or technical officer) before they are authorized by the Programme Coordinator.
 - iv. There must be evidence that the activity to which the payment is related has completed before the programme completion date with the exception of winding up expenditures that may be incurred after the completion date but before the closing date.
 - v. The expenditure must be supported by necessary supporting documentation as per IFAD Letter to the borrower and disbursement handbook.
 - vi. If the expenditure item is part of a contract, the invoice must be in line with the disbursement schedule of the relevant contract.

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10.2 Invoice Related Payments

- a. The programme shall enter into contracts for the procurement of three major items
 - i. Goods (mainly fixed assets, on-farm equipment and equipment for seed producers)
 - ii. Works (mainly small works in form of)
 - iii. Consultancy services (for training, audit, etc.); and

General Guidelines for Invoice Related Payments:

- a. All invoices shall be addressed to the Programme Coordinator
- b. When an invoice is received with the supporting documents at the NPCU, the accountant shall conduct an initial review and ensure that the documentation is in order and complete after which the documents are forwarded to the component/technical head for review.
- c. The Component/Technical Head shall review the documentation. If the payment is in order, the affected Component/Technical Head within the NPCU shall make recommendation to the PC for payment.
- d. After the technical review, the project FC shall ensure that the payment meets all the eligibility criteria and that the supporting documentation is complete before clearing the payments.

- e. After the FC's clearance the payment will be forwarded to the project coordinator who shall validate the checks and then authorize the invoice for payment.
- f. The approved Invoice with related documents shall be sent to the FM Unit for processing and issuance of appropriate instruction for mandate/cheque preparation.
- g. The Programme Accountant will carry out an internal check and ensure that the documentation is authentic and complete before approving the Invoice/Bill for settlement.
- h. If the documents are found to be in order, a Payment Voucher (PV) will be raised by the Project accountant.
- i. The PV and the supporting documents required by IFAD and outlined in the LTB/disbursement handbook, including the CPM No Objection, will be sent to the FC who will ensure that the correct account codes as well as the appropriate Project fund have been indicated on the PV.
- j. Where the FC is satisfied with the internal checks, the PV will be approved for mandate/cheque writing and the appropriate instruction for writing a mandate/cheque will be issued to the Project accountant
- k. Otherwise it will be returned to the Project Accountant with the appropriate query, who shall endeavour to correct the error noticed or forward the invoice and the (queried) documents back to where it originated, depending on the nature of the observation(s).
- l. Confirmation letters will be written to the banks for all cheques/mandates, drawn on Project accounts before payment can be effected.
- m. Approved PV together with the mandate/cheque, bank confirmation letter and the supporting documents will be forwarded to the FC who will review and if satisfied will sign his portion of the PV, the confirmation letter and the Cheque/mandate and immediately send them to the PC.
- n. The PC will equally review immediately and if satisfied shall sign his portion of the PV, the confirmation letter and the cheque and return them to the Project Accountant for documentation and release.
- o. Signed cheques/mandates will be recorded in the Cheque Issued /mandate Register (Appendix) before collection.
- p. The turnaround time for settlement of invoices shall not exceed 3 working days. Before releasing the cheque to the payee, the accountant will ensure that the beneficiary signs the PV and Cheque Issued/Mandate Register.
- q. Official receipts shall be obtained for all payment. Proforma invoices are not acceptable.

10.3 Travel related payments

The project will be involved in activities that will make it necessary for project staff and others involved in project implementation to travel outside project office locations. The project will advance project staff and individuals in project implementation for necessary and reasonable transportation and travel related expenses incurred in connection with project business travel

To mitigate the risk of:

- i) unretired travel advances and provision of inadequate or inappropriate/fraudulent documentation to justify the travel advances and
- ii) unjustifiable claims for travel not undertaken,

the project will undertake steps listed below which are aimed at arresting any such eventuality.

The steps are as follows:

- The Ministry of Finance shall establish a standard allowance rate to be used in all IFAD assisted projects in respect of local travel. These rates shall also be applicable to this project.
- In respect of overseas/foreign travel, the applicable allowances shall be the UNDP rate published at the beginning of each month which normally involves lump sum payment for hotel and DSA.
- **Reduced DSA rates.** When accommodation and/or meals are provided free of charge to the traveller during local or foreign travel, the following DSA/allowance rates shall be applied:

Situation	<u>% reduction</u>	<u>Reduced DSA/ allowance rate</u> (As a % of full DSA rate)
Free accommodation	50%	50%
Free meals:		
Breakfast	6%	94%
Lunch <u>or</u> dinner	12%	88%
Breakfast <u>and</u> lunch or dinner	18%	82%
Lunch <u>and</u> dinner	24%	76%
All meals free of charge	30%	70%
Free accommodation and meals		
Accommodation and breakfast	56%	44%
Accommodation and breakfast or dinner	62%	38%
Accommodation and breakfast + lunch	62%	38%
Accommodation and breakfast + dinner	62%	38%
Accommodation, lunch and dinner	74%	26%
Accommodation and all meals	80%	20%

- where actual travel days fell short of the local or foreign travel days for which the advances were paid, the official will be required to reimburse the difference.
- Air tickets will continue to be reimbursed or paid on actual basis and used air tickets and boarding passes will need to be submitted as evidence of travel.

In order to justify the travel advances the following supporting documentation must be attached to the travel expense claim (as applicable):

- i. Hotel accommodation (in case of rates higher than DSA)
- ii. back-to-office report (signed and dated)
- iii. Air ticket receipt and boarding passes
- iv. Fuel receipts
- v. Excess luggage
- vi. Passport / Visa fees / Airport taxes
- vii. Medical certificate fee (Consultants only) and/or vaccination cost
- viii. Other expenses (e.g. room or equipment rental, secretarial services, purchase of office suppliers, Telephone, Fax or Internet charges etc.)

Only after the expense report and the full supporting documentation (as applicable) has been submitted can the expenditures be recorded in the accounting software and claimed from IFAD. Until a proper justification has been completed, the travel related expenditure has to be considered as an advance to the staff member.

Any unjustified travel advances will need to be reimbursed to the project by the traveller within three months after the travel date or the amount will be deducted from the payroll.

(Ixxvii) 10.5 Transfer of Funds from NPCU to implementing partners

Under some activates, the NPCU may transfer funds from the project Account or the designated account to the implementing partners to implement project activities. From an accounting point of view the funds transferred to the IPs tracked as advances under receivables account and will need to be justified by the IP.

When using implementing partners the Financial controller is to pay attention to the following:

- The operating costs/overheads of the IP (if any) must be reasonable and kept as low as possible. These should be evenly spread evenly out through the year to ensure they have an incentive to implement the activities. Paying all the operating costs in the beginning of the year is not allowed.
- Before the beginning of the next financial year, the NPCU should organize a one day workshop where the AWPB and disbursement rules above and associated templates are clarified to the IPs.
- In certain cases, the NPCU may decide not to advance funds to the IP but instead reimburse funds to the IP based on duly certified financial reports and supporting documentation.

When funds are advanced to the IPS will be advanced to IPs following the guidance below:

No funds will be transferred to the IPs after the following conditions have been met:

- The NPCU has conducted a due diligence on the operational and financial management capacity of the IP.
- The sub-agreement or equivalent has been duly signed by both parties and it has received IFAD's no objection. The sub-agreement must contain a disbursement schedule outlining the disbursement triggers and the necessary supporting documentation.
- The IP has opened a separate account to receive an advance from the NPCU and the account details have been communicated to the NPCU together with information who is authorized to operate the accounts.
- The AWPB of the IP has been duly approved.
- The IP has submitted to the NPCU a payment request duly certified by the IP accountant and the IP business manager or equivalent.
- The size of the advance should be equal to cover 3 or maximum 6 months average expenditures as defined in the AWPB. The size of the advance depending on the Financial Management capacity and past performance of the IP. The better the capacity and the past performance the larger the advance can be.

The advance will be replenished by the NPCU upon receipt of monthly replenishment requests by the

IPs. When submitting monthly replenishment requests the IP:s must submit the following reports:

- A payment request duly certified by the IP accountant and business manager or equivalent
- Summary sheet detailing the expenditures by the main expenditure type. The summary sheet must be duly certified by the IP accountant IP business manager or equivalent.
- Statement of expenditure by type (investment cost, incentives or operating cost) certified by the IP accountant IP business manager or equivalent, disclosing the details for each expenditure items separately. The SOE should include at least the following information: i) item number, ii) name of the contractor/supplier/service provider/employee/beneficiary, and full address iii) amount of the expenditure, iv) date of payment and v) evidence of payment (check number or equivalent) and reference to the relevant budget activity/budget line as per the approved AWPB.
- Account reconciliation form showing the opening balance, inflows, outflows and closing balances supported by a statement from the bank.
- Full supporting documentation must be duly attached to the replenishment application and systematically filed. A full list of supporting documentation listed in the section below:

The amount to be replenished will be based on the amount that has been duly justified. If the supporting documentation for an item is missing this amount will be deducted from the replenished amount, but may be paid as part of the next replenishment once the supporting documentation has been provided.

Any amounts determined as ineligible due to lack of supporting documentation or other reason, IP must refund this amount to the NPCU.

All payment requests by the IPs and supporting documentation to be retained, reviewed and filed by the NPCU for audit and inspection during IFAD supervision missions.

10.6 Financing of Sub Projects Matching Grants

The financing of subprojects/matching grants will follow the steps outlined below:

- i. Eligible beneficiaries/grantees are identified and selected according to the selection criteria outlined in the matching grants manual.
- ii. The qualified applicant applies to the financial institution of his/her choice using the letter from AVDP and a minimum 10% equity contribution to complement the loan application.
- iii. If the financial institution approves the loan, the qualified applicant will open a current account at the financial institution and deposit his/her 10% equity contribution;
- iv. The financial institution will conditionally disburse at least 50% of the loan amount to the qualified applicant's current account (this cannot be withdrawn prior to the following three steps);
- v. The financial institution (CBO/FSA) will contact the AVDP Rural Finance Officer and forwards documentary evidence of the approved loan, and the balance held in the qualified applicant's current account and requesting AVDP to provide the matching grant up to max 40% of the total financing. The banking details must be duly disclosed in the request. The documentation package should contain the following documents:
 - a. Matching grant request form from the CBO/FSA
 - b. Copy of the sample matching grant application form By the client
 - c. Copy of the matching grant fund offer letter provided by AVDP
- vi. The Rural Finance Officer reviews the request, and if found in order and provides a technical clearance after which the documentation package is forwarded to the Financial controller who

reviews the accuracy and completeness of the documentation, and confirms the availability of funds etc.. and if found in order forwards it to the Project coordinator for approval;

- vii. The Project Coordinator instructs the Financial Controller to transfer the authorized MG to the qualified applicant's current account; and
- viii. The financial institution disburses the loan by purchasing the appropriate asset and causing the asset to be made available to the qualified applicant.

Section 11: Records Management

Financial records must be created and preserved for every financial transaction performed under the project. Financial records are defined as any financial information including written, computer data, internal forms, e-mails, or any other form of storage information originated from the NPCU such as internal forms, journal vouchers financial reports (Monthly & quarterly) copies of checks and withdrawal applications etc. or received by the NPCU such as supplier invoices and receipts, bank statements, IFAD documents etc. within the framework of the project's official activities. The objective of this procedure is to preserve the financial records and files for further official use by the Lead project agency, for financial audit and for review by IFAD during the supervision missions. The projects financial records are the property of the LPA (MoA) and cannot be removed or destroyed.

It is important to note that in accordance with the IFAD general conditions, the recipient/borrower has to maintain the original records for a minimum 10 years after the project completion.

11.1 Filing of the financial records

The accountant is responsible for filing the financial records created or received by the project. To fulfil this responsibility, the accountant must maintain chronological files in which the financial documents have to be filed for future reference. Filing should be performed daily to prevent the accumulation of papers and to ensure that the financial records are maintained in an up-to-date manner at all times. Each financial record should be filed under its code in a chronological order, with a sequential number assigned to every document. Any kind of additions or amendments to the financial document should be filed in a chronological order immediately following the principal document.

11.2 Storage of financial records

The financial records of the project should be stored by MoA for a minimum 10 years after the project completion. The data should be stored within the accounting software, as paper copies, as scanned copies and as computer disc copies. The Financial Controller should allocate an appropriate storage area for the financial records in paper format and maintain them in locked cabinets, safe from water and fire, to which access is controlled and limited. The Financial Officer should also classify the financial records as "Confidential", or "General". All important correspondences should be filed.

11.3 Archiving of financial records

In order to prevent an unnecessary pile-up of files in a limited office space, the Financial Controller should make sure that the financial records are archived on a regularly basis. Once a year, the Financial Controller should make sure that the completed or inactive files are archived in a manner that will allow for easy retrieval of the files in case they are required at some future date.

11.4 Back- up procedures

To avoid the loss or damage of financial data, the information should be kept in two copies: i) at the computer server of the NPCU/MoA and ii) in the locked cabinets of the NPCU office. Only the Project Coordinator, the Financial Controller and the accountant are allowed to access the financial records without authorization. The access of external persons is prohibited except for the auditors & IFAD staff. The finance manager must make weekly back-ups of all accounting data and store it on an external hard-drive.

Section 12: Fixed Asset Management (including farming inputs)

Fixed asset management is an important process that seeks to track fixed assets for the purposes of financial accounting and to ensure preventive maintenance, and theft deterrence. Adequate fixed asset maintenance also increases the sustainability of the project as instead of buying new ones, the project's assets may be used for other development projects or activities as assigned by the lead project agency.

There are four elements in fixed asset management that require the attention of the Financial Controller

- Purchase of equipment to be used by the project staff and farming inputs to be delivered to beneficiaries
- Insuring the assets according to sound commercial practice.
- Setting up and maintaining an asset register including annual verifications/inventories
- Setting up a plan for disposal and/or handover of the asset once the project is completed

12.1 Purchase of Equipment and inputs

All procurement and payments for project equipment will be processed in line with the guidance provided in the procurement procedures manual.

The accountant or financial officer should assign a unique, sequential asset number to all furniture and equipment items purchased (excluding minor items such as stationary). This must be clearly labelled on each item. Each item of equipment including vehicles must be recorded in the fixed asset register maintained in the fixed asset module of the accounting software.

Similarly any received, and delivered farming inputs or equivalent should be tracked by the project in the asset register of the accounting software under a separate heading "labelled farming inputs or "inventory of farming inputs" so they can easily distinguished from other fixed assets used by the project.

12.2 Input storage, accountability and reconciliation

Farming inputs are prone to misuse, theft and loss due to poor storing conditions. When AVDP purchases or receives inputs (seeds, fertilizers etc..), these should be stored in secure locations.

The following documentation must be produced duly produced, signed by the store manager and the AVDP technical staff member and filed:

- i. When a inputs are received: a confirmation of received goods/good receipt detailing the value, quantity and condition of the inputs.
- ii. When and input is delivered to beneficiaries: a confirmation of handover/ distribution note signed also by the representative of the beneficiary.

- iii. On a continuous basis: An input reconciliation statement showing the opening inventory, any increases in the inventory (new purchases/receipts), decreases in the inventory (input delivered distributed), any loss or thefts and the closing inventory.

Input	Fertilizers	Tools	seeds	Etc..	remarks
Opening inventory	AA	AA	AA	AA	
Receipts of input	+BB	+BB	+BB	+BB	
Distributed input	-CC	-CC	-CC	-CC	
Theft/loss	-DD	-DD	-DD	-DD	
Closing inventory	EEE	EEE	EEE	EEE	

(farming input reconciliation statement)

Any loss (due to expired inputs etc.) or theft must be duly reported to the NPCU and will need to be verified by the component head. All thefts must be duly supported by a police report.

12.3 Insurance of assets

All project assets must be insured in accordance with sound commercial practice.

12.4 Fixed Asset Register and Asset Verification Review

The accountant must maintain a register of all (material) project fixed assets and farming inputs in its possession. This will be recorded on the asset management module of the accounting software.

The fixed asset register should record at least the following information for each individual piece of equipment in the possession of the project: 1) Asset description, 2) Serial number of the item, 3) person responsible for asset, 4) Location, 5) Purchase value of the asset 6) Funding source of asset (IFAD, government etc..), 8) Date of purchase; and 7) Condition of the asset.

The fixed asset register must also separately record all the farming inputs, in the possession of the project including the following information: 1) type of input (seeds, fertilisers, etc..), 2) location of storage, 3) quantity, 4) value, 5) person responsible, and 6) date of receipt

The Financial Controller must ensure that a verification count of all projects assets including farming inputs is performed at least once a year. Preferably either in the beginning or the end of the year. This should include the following checks:

- Verify that all assets are still held in the location recorded in the fixed asset register; and
- Check that equipment is still in a reasonable condition and safe to use.
- Verify that the farming inputs are held in the reported location, in reported quantities and that the inputs have not expired, gone bad or been subject to theft.
- Discrepancies between the verification exercise and the fixed asset register should be investigated. Stolen assets should be reported to the police and the police report should be duly filed. Where assets are missing or seriously damaged, they should be removed from the asset register. Any removal of an asset should be formally documented and approved by the Financial controller and the project coordinator.

As part of the verification exercise, an inventory report will be issued summarizing the following:

- i. the value of the fixed assets owned by the project as well as any material changes (increases/ decrease)that took place in the past year and the reason for it (e.g. the project bought new vehicles, computers etc. or disposal of old vehicles).
- ii. The value and quantity of farming inputs including of a reconciliation of farming inputs in the possession of the project during the year. The reconciliation should include the opening

quantity of assets by type any new purchases/receipts, delivered /distributed inputs, loss/disposal of input and the year-end inventory.

- iii. Any loss or disposal of assets/inputs should be separately listed in the narrative together with a the reason and method of disposal and if any funds was received by the project for the asset (old car sold, etc..). Any loss or theft must also be disclosed and duly supported by a police report

The inventory report should be duly signed by the financial controller and addressed the project management and will be provided to the auditors as part of the annual audit exercises.

The verified fixed asset register to be included in the project financial statements and will include a brief narrative based on the inventory report outlined above.

12.5 Vehicle Maintenance and Fuel

The drivers are required to record all trips and fuel refills in a logbook and collect all the supporting documentation (invoices, receipts etc.). The vehicle logbook provides control over the use of the cars as well as fuel consumption. Fuel distribution is handled by the accountant. Fuel is purchased on an as-needed basis by giving coupons to the drivers who must use the selected fuel station. The NPCU is billed by the station twice a month. Unused coupons are kept in the office safe in the custody of the Accountant. For official missions, a special cash provision is given to mission leaders to allow them to purchase fuel (at reputable gas stations) during the trip.

The safety of cars is the responsibility of the recipient staff members and drivers assigned to the vehicles. Consequently, they must ensure that the cars are parked in a secure area when not in use or outside working hours. The drivers are required to monitor the maintenance of their assigned vehicles under the supervision of the NPCU. The drivers must notify the NPCU of maintenance needs so that the cars can be serviced on a timely basis. The cars must always be taken to the selected NPCU garage for repairs and maintenance

The accountant should on a monthly basis review the mileage and fuel usage as well as any undertaken service as reported in the log book of each car and compare these with the official invoices and travel authorizations etc. to make sure the numbers are accurate.

An insurance policy must be taken by the NPCU to ensure all cars and passengers against all risks, including damage, theft, fire, as well as injury and property damage to third parties. The insurance must also cover the same risks when the cars are used by the recipient staff members outside of normal working hours.

12.6 Disposal of assets

The programme coordinator may, after consultation with IFAD and approval of MAF , decide to dispose of a capital asset which is in surplus, damaged, obsolete, missing or stolen. The Programme Manager is authorized to dispose of items valued at less than USD 2,000. A disposal form is used to explain the reason for the disposal, make a proposal for further use of the asset (if possible) and propose the mode of disposal. It also contains all the details pertaining to the asset; it is prepared by the FC and signed by the programme coordinator.

For items valued at USD 2,000 or more, the disposal form must be submitted to IFAD for advice and to MAF for approval. In the case of vehicles, a technical expert's report justifying the decision must be attached to the disposal form submitted to IFAD and MAF. Once approved, the asset may be disposed of using one of the three modes described below (write-off, donation/redeployment or sale). The FC alone has the authority to remove an asset from the asset register in the TOMPRO system.

Assets are written off when it is established that they are missing, lost/stolen or damaged beyond repair. Obsolete or surplus assets may also be written off when their current value is nil and/or it is established that they cannot be sold or donated. Discarding assets as waste shall be done according to local practice and taking into account any environmental considerations, for example possible ozone depleting agents in old refrigeration units.

Programme assets may be donated /redeployed to a governmental agency or a NGO with the agreement of MAF. Any shipment, handling or related costs are borne by the receiving party.

When sale is the retained option, the asset generally is disposed of through sale by public auction. Notice of the auction shall be posted in a conspicuous public location (e.g. at MAF offices) and/or advertised in the local press. The notice must list all assets being sold together with a deadline and location for receiving sealed bids on those assets. The auction should be without reserve. Bids must be a fixed price for each asset (no percentage bids) and received by the deadline. Assets must be available to all at an identified time for inspection before the auction.

All sales are final and assets are sold "as is", without any warranty as to title or fitness. Payment for the assets must be in cash upon delivery. Assets must not be turned over to any buyer prior to payment in full. Where assets were imported duty free by the NPCU, there may be taxes payable upon the sale. Any taxes should be determined by the NPCU and communicated to the potential buyers in advance of the auction. Staff responsible for the auction, including the NPCU and MAF staff, may not submit bids, either directly or indirectly. Other staff, however, are free to participate

All NPCU assets become the property of the GoSL (represented by MAF) at the end of the project. Upon project completion, the MAF decides in which manner the projects assets shall be disposed of (reform, transfer, write-off, etc.) as well as to which recipients, if applicable.

12.7 Asset handover and disposal plan

In order to maximise the sustainability of the project, it is important to ensure that: i) all assets are handed over to the lead project agency at the end of the project instead of disappearing with individuals, and ii) any asset that is not in acceptable condition or beyond repair a properly disposed of. Therefore, as part of the winding up activities, the financial controller must together with the lead project agency develop an asset handover and disposal plan. The plan should include brief report outlining the following:

- The value of all the assets bought under the project
- Summary of the current condition of the assets,
- To which entity, will the assets be transferred to and on which date and for what purpose.
- List the assets that will be disposed and the reason for being disposed.

The up to date fixed asset register should be attached to the handover and disposal plan and it should clearly specify for each assets to which entity it will be handed over or disposed.

The handover and disposal plan should be signed by both the project management and a representative of the lead project entity and a copy should be shared with IFAD and the project auditors conducting the final audit.

Section 13: Financial Reporting

Financial reports are required to assist in managing and monitoring the Project activities. The financial reports should provide information that will be useful to all the stakeholders including the Project management, the lead project agency and line ministries as well as IFAD. As a result, the project will prepare quarterly- and annual financial reports.

(lxxviii) 13.1 Quarterly interim Financial Reports

The NPCU will prepare quarterly Interim Financial Report (IFR) and submit them to IFAD within four weeks after the end of each quarter. The IFR is to include the following reports:

- 1) Statement of sources and uses of funds by category and by financier (e.g. disclosing separately the income and expenditures for the IFAD loan and grant funds, and other financiers;)
- 2) Statement of Sources and uses of funds (by component and financier (e.g. disclosing separately the expenditures for the IFAD loan and grant funds, and other financiers);
- 3) Statement of actual vs planned expenditures (variance report) by component and category -Any significant variances should be explained.
- 4) Commitment report listing all the commitments (contract signed and executed but not paid) by expenditure category and component.
- 5) Statements of Designated Account/programme account Reconciliation (separate reconciliations for all accounts under the programme);
- 6) SOE-Withdrawal Application Statement showing all the WAs submitted to IFAD;
- 7) Report of funds advanced and to and expenditures incurred by implementing partners
- 8) Register of contracts
- 9) Fixed Asset Register

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(lxxx) 13.3 Annual Financial statements

The Annual Financial statements are to be prepared by the NPCU and submitted to IFAD preferably within 8-10 weeks after the end of the fiscal year but no later than four months after the end of the fiscal year. The Project financial statements should include the following:

1. Project Information and performance,
2. Statement of project management responsibilities,
3. Statement of sources and uses of funds by category and by financier (e.g. disclosing separately the income and expenditures for the IFAD loan and grant funds, and other financiers;)
4. Statement of Sources and uses of funds (by component and financier (e.g. disclosing separately the expenditures for the IFAD loan and grant funds, and other financiers);
5. Statement of actual vs planned expenditures (variance report) by component and category -Any significant variances should be explained
6. Commitment report listing all the commitments (contract signed and executed but not paid) by expenditure category and component.
7. Statements of Designated Account/programme account Reconciliation (separate reconciliations for all accounts under the programme);
8. SOE-Withdrawal Application Statement ;

9. Detailed Statement of cash payments by category and funding source
10. Report of funds advanced and to and expenditures incurred by implementing partners
11. Fixed Asset Register
12. Notes to the Financial Statements disclosing the used accounting standards, breakdown of other income received (if any), break down of matching grants and subsidies provided.

Section 14: Internal Audit Process

There is no internal audit Unit at the NPCU level. However, the projects will be included in the annual audit plan of the Internal audit department of MAFS. In order to avoid the risk of over- auditing, during implementation the MAF IA will be recommended to focus on activities undertaken in the field including: delivery of trainings, identification of civil works sites, performance of contractors, distribution of equipment, performance of implementing partners, matching grants, etc. and the related internal controls and segregation of duties. The internal audit reports will be shared with the NPCU for management's response before being finalized and submitted to MAFS and IFAD.

(lxxxi) 14.1 Recommended Internal audit cycle

The internal auditor in the NPCU will ensure that the following internal audit cycle is followed:

- An audit work plan is produced two months before each calendar year.
- Checks are performed according to the audit work plan. In addition, past years audit recommendations are followed up on
- Methodology: document review, interviews with project staff and field visits.
- Quarterly reports are produced and the draft report is shared with management for comments
- Finalize the report –quarterly audit reports to be shared with project management for managements response within 6 weeks after the end of each quarter and then with IFAD within 8 weeks after the end of each quarter.

(lxxxii) 14.2 Recommended Internal audit checks

It is recommended that the IA will undertake the following checks:

- Expenditures supported by adequate documentation - Note down any ineligible expenditures
- Adequate filing system and Proper data back up
- Payroll checked monthly
- Monthly reconciliations of accounts including petty cash.
- Regular Financial reports produced by the accounting software and used by management, variances adequately analysed
- Adequate segregation of duties and authorization levels,
- Financial Procedures Manual up-to-date
- Asset management: Up to date fixed asset register, Annual inventory exercises undertaken and reports issued stolen asset reported to the police, all assets insured etc..
- M&E systems: Are the programme monitoring and evaluation systems working and up to date? Are physical vs financial progress being monitored?

Through Field visits:

- Focusing on seeds, fertilizers and equipment distributed, ward offices and constructed feeder roads.

- Verify delivery and distribution notes for seeds, tools and fertilizers, as well as handover notes for assets and lack of identification boards next to project sites.
- Works completed as per the agreement, identification boards next to project sites?
- Project sites adequately tracked by NPCU using GPS coordinates and stored in a database?
- Participation in training and capacity building (participation list maintained) quality of the training.
- Physical progress in line with the reported financial progress?

14.3 Recommended structure of the internal audit report.

All the internal audit reports submitted to the NPCU are recommended to follow the following structure:

Part A: Brief details of the Auditee and Audit:

Part B: Executive Summary

Part C: Compliance to previous Audit Reports

Part D: Serious Observations: Observation, Risk, Recommendation(s), Management's Response

Part E: Other Observations: not serious in nature, but nonetheless require the attention of the Project

Annex 1: Summary table of the status of past Audit recommendations.

All IA reports must be to be shared with project management for managements responses within 6 weeks after the end of each quarter and then with IFAD within 8 weeks after the end of each quarter.

Section 15: External Audit

The project audit is an ex-post review of financial statements, records of transactions & financial systems; It examines the adequacy of accounting systems & procedures, capacity to maintain appropriate accounts & documentation of the project/grant expenditures. The objective of the project audit is to provide credibility and assurance of accountability.

In accordance with the IFAD general conditions and the IFAD Handbook for Financial Reporting and Auditing for IFAD Financed Project, the NPCU must have its financial statements audited by an external auditor acceptable to IFAD in accordance with internationally acceptable audit standards (ISA or INTOSAI/ISSAI). The Audited financial statements must be sent to IFAD no later than 6 months after the end of the fiscal year. The detailed instruction regarding project audit are outlined in the IFAD Handbook for Financial Reporting and Auditing for IFAD Financed Projects available at: <https://www.ifad.org/documents/38711624/39421009/IFAD+Handbook+for+Financial+Reporting+and+Auditing+of+IFAD-Financed+Projects/133b165d-15c7-4f79-8217-aef95b79dd67>

IFAD is committed to the use of country's financial management systems whenever these are deemed to meet IFAD's minimum requirements. Consequently, the project will be annually audited by the Audit Service of Sierra Leone (ASSL).

(lxxxiii) 15.1 The Audit Cycle and Appointing the Auditor

The complete audit cycle can be divided into the three main roles carried out by the NPCU/Financial controller, the Auditor and IFAD:

The NPCU and the financial controller will:

- Timely prepare TORs of the Audit submit the TORs to IFAD for no objection annually,
- Ensure that the project has been included in the audit work plan of the ASSL for the relevant year.
- Prepare the financial statements for reporting period within two months after the end of the fiscal year.

- Agree on the formation of Audit Tors, the composition of the audit team, and the audit costs (if any) as well as logistics.
- Formalize the audit Arrangement with ASSL.
- Make available all the financial information necessary to the auditors.
- NPCU should respond to the audit findings and recommendations.
- Submit the audit report to the fund no later than 6 months after the end of the project fiscal year.

The Auditor (ASSL) will:

- perform the audit work in accordance with the agreed TORS including the three audit opinions
- Indicate any ineligible expenditures
- Provide a management letter with observations and recommendations

The Fund will:

- Provide a non-objection to the auditors TORs
- Monitor timely submission and review of audit reports
- Follow up on remedial action\apply sanction and /or remedies if relevant including suspension of disbursement and or cancellation of loan balance (Legal Notice is sent to the MOA/MoF after 3 months of delay. Suspension of disbursement to the project after 6 months delay.)

15.2 Composition of the audit team. The Audit team assigned to perform the audit should include from three to maximum five qualified auditors with an internationally recognized professional accounting qualification, excellent knowledge in International Standards of Supreme Audit Institutions (INTOSAI/ISSAI) or International Standards on Auditing (ISA) and have previous experience in project audits.

15.3 Compensation of costs and logistics. In line with the adopted practice by other International Financing Institution, IFAD is in favour of having the project cover all reasonable incremental cost associated with the audit. In this regard, the audit costs may be eligible for IFAD financing in accordance with the following:

- (i) The SAI has an established practice for billing auditees, i.e. the SAI has regular billing processes, charge-out rates, procedures, etc;
 - (ii) The SAI has subcontracted or delegated the audit to private audit firms or auditors to conduct the audit, in which case, the cost is considered as an incremental cost associated with the audit;
- and/or
- (iii) The SAI can bill for incremental costs, such as travel costs, DSA for field visits etc. associated with the audit.

It is advised that the cost estimates for the audit are prepared and agreed between ASSL and the project well in advance. It should also be noted that IFAD expects fully that field visits will be carried out during the course of the audit, to be planned in advance in collaboration with project in order to facilitate logistics.

15.4 Training in IFAD financial management procedures. In order to enhance the assigned audit team's knowledge in IFAD procedures and financial management practices applicable to its programmes, it is recommended that all members of the audit team complete the IFAD Financial management e-learning course: A guided overview of IFAD financial management practices and procedures available at https://www.ifad.org/topic/resource/tags/financial_management/1957778. The E-learning course will help the assigned audit team to better understand the IFAD Financial Management procedures throughout the project cycle.

15.5 Sample audit ToRs

See annex 1 of this manual.

Section 16: IFAD Supervision

The project will be subject to extensive supervision from IFAD during the whole implementation period to ensure that the NPCU fiduciary requirements are completed on time and to minimise the project's fiduciary risk.

If financial arrangements of the NPCU are deemed acceptable, IFAD will rely on them to provide assurance that the financing proceeds are being used for the intended purposes. In the case that IFAD identifies weaknesses in the financial arrangements, it will require the NPCU/MoA to take the appropriate measures to mitigate those risks e.g. changing the design and operation of internal control processes or modifying the disbursement arrangements for an operation.

The IFAD supervision of the project includes the following measures:

- Monitor of timely submission of audit reports and review of these reports
- Verify compliance to audit recommendations and recommendations made by past supervision missions.
- Monitor the submission of timely periodic financial reports and review of these reports
- Monitor disbursements rate and the quality of the received Withdrawal Applications
- Annual or semi-annual financial management supervision missions.

(lxxxiv) 16.1 Supervision missions by IFAD

Throughout project implementation, IFAD will conduct annual financial supervisory missions to develop financial management ratings and ensure compliance with the IFAD's requirements. During the supervisory missions, IFAD will assess and monitor the adequacy of the NPCU financial management arrangements such as accounting, budgeting, internal controls, flow of funds, financial reporting and the auditing practices. The key findings and recommendations of the mission will be captured in the Aid Memoire.

When preparing for and during an IFAD supervisions mission, the necessary supporting actions by the Finance controller generally will include the following:

- Update and make available for the mission, the project financial information and especially the incurred expenditures by component, by category and by financier as of the last day of the preceding month.
- Update and make available reports on the status of counterpart funding (has the Borrower/Lead Project Agency made available financing proceeds to the Project as planned?)
- Provide a walk through of the existing accounting system including its main modules, budgeting, accounting, financial reports, fixed asset register as well as the security settings in use.
- Facilitate checking of the internal controls, by system "walk through" to ensure that approved procedures are consistently being followed.
- Make available Withdrawal Applications, Statement of Expenditures and all supporting documentation regarding expenditures claimed under the SOE thresholds to facilitate the verifying of adequacy, completeness and validity of claims.

- Make available evidence of qualifications and educational background of the financial staff including, organogram of the NPCU, CVs, TORs of each position and NPCU training plan.
- Update and make available a complete a fixed asset register and facilitate sample test check of physical existence of the asset.
- Make available written procedures regarding financial operations such as processing of transactions, financial administration manual, accounting manual, fixed asset maintenance and records management as well as the lead project agency's anticorruption policy and whistle blowing procedures.
- Prepare and make available the updated bank account reconciliation statement and bank account statements for all designated and project accounts.
- Arrange meeting with the auditors and any other selected party requested by the mission.
- Make available all necessary documentation and contracts regarding procurement not subject to prior review.
- Provide an update on the actions taken regarding past audit recommendations as well as action points outlined in the past aide memoires.
- Make available the most recent AWPBs, annual and Interim Financial reports

Section 17: Financing completion and Closing

The closing of the IFAD 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. Please also refer to section 1.3 of the IFAD Disbursement Handbook.

The financial controller must ensure that all activities

(lxxxv) 17.1 Recovery plan

To ensure that the designated account is completely and timely justified, the financial controller/ NPCU 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 6 months before the completion date or when the outstanding balance (amount still undisbursed by IFAD is less than the double of the authorized allocation.

(lxxxvi) 17.2 Financing Completion

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 considered as ineligible expenditures and can therefore not be financed by the IFAD funds. Similarly any payments that have been done after the closing date will be determined ineligible.

After the completion date but no later than the closing date (six months after the completion date) the NPCU 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, NPCU maintenance cost, project completion workshop.

(lxxxvii) 17.3 Financing Closure

IFAD requires the following to be provided by the NPCU in order to close the its financing:

- Full recovery of any IFAD advances to the project.
- Confirmation of last withdrawal application

- Submission of final audit report

- Submission of project completion report

It is important to note that all WAs must be submitted to IFAD by the closing date to be eligible for IFAD financing.

The Final Audit Report has to cover, the final project year up to the final material expenditures and it can be paid from the loan available balance by using for example direct payment or Reimbursement of pre financed expenditures. It is important to note that the payment must be made before the closing date to be eligible.

(lxxxviii) 17.4 Handover of assets

As part of the closure of the project it is it important that the project undertakes a final stock take of all fixed asset under the project and formalizes a handover plan with MAFS/MOFED attaching the final verified fixed asset register. A copy of the handover plan should also be sent to IFAD.

ANNEX 1: ToRs of FM STAFF

ToRs of – Financial Controller

Under the direct supervision of the project coordinator , and within the framework of projects appraisal reports and loan/grant agreements, responsible for the financial and administrative management of the NPCU , including accounting, budgeting , financial reporting, internal controls, auditing arrangement, flow of funds and the efficient management of projects resources. Specific duties:

- Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD guidelines for project audits, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
- Consolidate and prepare together with the project coordinator the Annual work plan and budget and the budget and financing plan.
- Develop and maintain an efficient accounting system and reliable internal control procedures (including authorization levels, segregation of duties etc..) and guidelines for financial reporting and recordkeeping.
- Responsible for the preparation, review and monitoring of projects budgets including financing plan, procurement plan (together with the Procurement Officer), and staff development plan (together with the training focal point)
- Prepare/verify all withdrawal applications for submission to IFAD, and ensure the availability of funds for all planned activities. Manage the projects bank accounts, approve and co-signs all payments.

- Ensure payments are authorized, and recorded in the accounting system correctly and in a timely manner.
- Ensure all expenditure item: i) meet the eligibility criteria as defined in the IFAD financing agreement, ii) are supported by adequate documentation (invoice, contracts, evidence of payments etc..).
- Ensure all project records are properly filed in a systematic way and that proper back up is maintained.
- Ensure the timely preparation of quarterly and annual financial reports in agreed format including timely submission to the Project steering committee, Lead Project Agency and IFAD.
- Ensure monthly bank account reconciliations are prepared in a timely manner and reconciliation items are promptly followed up on.
- Lead the process of contracting an external audit firm to conduct an independent audit of the annual project accounts, ensuring that annual audits are carried out within the specified timeframe and ensuring the project auditors have access to all necessary files.
- Monitor the financial performance of the implementing partners including i) justification of advances, reporting of expenditures, Financial reporting, audit process and audit findings.
- Supervise and coordinate the work of staff placed under his/her direct authority.
- Review and regularly update the Financial and Administrative Manual of the NPCU.
- Develop together with the accountant the accounting manual of the NPCU.
- Responsible for the organization and supervision of the NPCU office, assets, including tagging of all assets, maintaining an up to date Fixed asset register and conducting an annual inventory exercise .
- Undertake any other activities assigned by the Project Coordinator.

ToRs of – Accountant

Under the direct supervision of the Financial Controller; specific duties include:

- Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD guidelines for project audits, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
- Assist the Financial Controller in the implementation of a sound financial management system as described in the Financial Procedures Manual.
- Prepare transaction vouchers, input all transactions into the NPCU accounting system before submission to the Financial Controller for approval and make sure all necessary supporting documentation is made available and filed in a systematic way;
- Process all payments, ensuring that NPCU procedures are strictly adhered to;
- Process monthly payroll, payment of salaries to staff and project contributions;
- Manage and report on the use of Petty Cash in accordance with the approved procedures;
- Assist the Financial Controller in the preparation of withdrawal applications;
- Prepare cash flow forecasts as required;
- Monitor financial returns from Implementing Partners, including periodic visits to their offices;
- Assist in the preparation and monitoring of annual operational budgets
- Prepare quarterly and annual financial reports in agreed format for submission to the Project steering committee, Lead Project Agency and IFAD.
- Maintenance of a well organized and up-to-date filing system for accounting and financial records as well as an fixed asset tagging system;
- Perform physical inventory of project assets each year;
- Assist the Financial Controller in the preparation of the accounting manual of the NPCU
- Provide assistance to the external auditors as required;
- Undertake any other activities assigned by NPCU management.
- Make sure all expenditure items: i) meet the eligibility criteria as defined in the IFAD financing agreement, ii) are supported by adequate documentation (invoice, contracts, evidence of payments etc..).
- Ensure all project records are properly filed all project records in a systematic way and maintain proper back up.
- Ensure the timely preparation of quarterly and annual financial reports in agreed format including: i) sources and uses of funds statement, including incurred expenditures by component, expenditure category and financier, ii) variance report (actual vs budgeted expenditures), iii) designated account reconciliation statement, iv) Withdrawal application-statement of expenditure,

- v) fixed asset register, vi) contract register for submission to the Project steering committee, Lead Project Agency and IFAD.
- Prepare monthly bank account reconciliations are prepared in a timely manner and reconciliation items are promptly followed up on.
 - Assist in the annual audit process and facilitate that the project auditors have access to all necessary files.
 - Liaise with the implementing partners including i) justification of advances, reporting of expenditures, Financial reporting, audit process and audit findings.
 - Undertake any other activities assigned by the Project Coordinator and the Financial Controller.

ANNEX 2: AUDIT TERMS OF REFERENCE

AUDIT TERMS OF REFERENCE

The following are the terms of reference (TORs) on the basis of which the (lead project agency) agrees to engage the auditor to perform an audit and to report in connection with the agreement with the International Fund for Agricultural Development (IFAD) concerning [insert the name of the project and financing numbers]

1. BACKGROUND

[Provide a brief description of the project, its components, targets and financing structure]

These Terms of Reference (TOR) relate to the audit of the financial statements for year 2XXX, of the [Name of the Project] . The effective date of first disbursement was DD/MM/YYYY and the date of completion of Project implementation activities is DD/MM/YYYY.

2. OBJECTIVE

The objective of this audit is to enable the Auditor to express an opinion on whether the financial statements (including additional disclosures as outlined in Section 5.), present fairly, in all material respects, the financial position of the [Name of the Project] at the end of each fiscal year and its cash flows for the years then ended in conformity with the IPSAS Cash basis of accounting standards.

The Project books of accounts and records provide the basis for preparation of the financial statement and have been maintained to reflect all financial transactions in respect of the Project by the Rural Enterprises Project.

The audit will be carried out in accordance with the International Standards of Auditing (ISA) and will include such tests and reviews, as the auditor considers necessary under the circumstances. Special attention will be paid to establishing that:

- All external funds have been used in accordance with the conditions stipulated in the financing agreements, with due attention to economy and efficiency, and solely for the purposes for which the financing was provided. The relevant financing agreement is the [Name of the Project] Financing Agreement between the Republic of Sierra Leone and the International Fund for Agricultural Development (IFAD) – Financing NO. XXXX
- Counterpart funds have been provided by Government of Sierra Leone and used in accordance with national or organisational financial regulations, with due attention to economy and efficiency, and solely for the purpose for which they were provided;
- Goods, consultancy and other services, and civil works financed out of Project funds have been procured in accordance with stipulations in the financing agreement and/or government regulations;
- All necessary supporting documents, records and accounts have been kept in respect of all Project ventures, including expenditures reported via Statement of Expenditures (SOEs) or Designated Accounts (DAs);
- The Designated Account has been used in accordance with the provisions of the financing

agreement and LTB; and

- The Project accounts have been prepared in accordance with consistently applied International Standards of Auditing and give a true and fair view of the financial status of the Project at the end of the fiscal year and of resources and expenditures for the year ended on that date.

3. The responsibilities of the Lead Project Agency (LPA) through the AVDP Project coordination unit (NCPU)

i. General

- Provide financial statements for the activities financed by the IFAD loan which is reconcilable to its records and accounts.
- Provide the auditor with access to all legal documents, correspondence with consultants, contractors and other persons or firms engaged by the project and any other information associated with the project and deemed necessary by the auditor.
- Ensure that the accounting policies are consistently applied and disclosed.
- Ensure that appropriate internal controls are implemented to prevent misstatements and susceptibility to fraud.
- Ensure compliance with all relevant laws and regulations that pertain to the entity as well as the financing agreement between the Borrower and IFAD.
- Provide the financial statements to the auditor within a reasonable time and to be available for any queries that the auditor may have.

• 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 agreement;
- Annual progress report;
- Project implementation manual;
- 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 project design document, the annual work Project and budget, and the Letter to the Borrower, if available.

ii. Financial statements

The LPA through the NPCCU shall:

- Prepare financial statements covering the reporting period of each fiscal year in accordance with IPSAS Financial Reporting under the cash basis of accounting. In addition, the following specific disclosures will be included in the financial statements:
 - i. Yearly and cumulative statements of sources and application of funds, which should disclose separately IFAD's funds, other donors' funds and beneficiaries' funds;
 - ii. Yearly and cumulative SOEs by withdrawal application and category of expenditures;
 - iii. Reconciliation between the amounts shown as received by the project and those shown as being disbursed by IFAD should be attached as an annex to the PFSs. As part of that reconciliation, the auditor will indicate the procedure used for disbursement (DA 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;
 - iv. Cumulative status of funds by category;
 - v. Reconciliation of DA account statement;
 - vi. A statement of comparison between actual expenditures and budget estimates;
 - vii. Notes accompanying the PFSs; fixed assets;
 - viii. Full disclosure of cash balances; and

- ix. Other statements or disclosures relevant to the project, e.g. financial monitoring reports, credit lines, etc.

4. The responsibilities of the auditor

The auditor refers to the auditor who is responsible for performing the agreed procedures as specified in these TORs,

i. Auditing standards

- The auditor is responsible for the formulation of:
 - i.* an opinion on the financial statements in accordance with ISA auditing standards
 - ii.* **A separate opinion on the flow of funds to Project beneficiaries** – whether the funds reached the intended beneficiaries, particularly funds released through the District Assemblies to the Rural Technology Facilities and the Business Advisory Centres.

In addition the 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 project;
- Whether the provisions of the financing agreement are adhered to;
- Whether procurement has been undertaken by the project 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 project purposes;
- Whether the project has an effective system of financial supervision or internal audit at all levels; and
- Whether the expenditures claimed through SOEs are properly approved, classified and supported by adequate documentation.
- whether staff payroll-related payments are made in line with contractual terms; calculation of monthly pay is based on the appropriate exchange rate; appropriate authorization of monthly payroll; calculation of deductions, payments of variations are accurately calculated; and expense claims are supported and paid in line with policy.'

ii. General Principles

By agreeing these terms, the Auditor confirms that:

- The firm is independent from the project, its staff and activities, in accordance with international best practices.;
- The firm is not providing consultancy services to the project or preparing its project financial statements (have done so in the previous two years).;
- The Auditor is suitably qualified and a member of a professional body affiliated with the International Federation of Accountants (IFAC).;
- The auditor can conduct the audit in line with auditing standards acceptable to IFAD as per 4.1.;
- The firm can assign an audit team to the audit which has the necessary competence and skills.;
- The firm has a proven track record in conducting audits of a similar nature and complexity.;

iii. Management letter

The *management letter* is an integral part of the audit package which documents accounting and internal control issues identified by auditors. The management letter should:

- Outline the auditor's recommendations to improve identified accounting and internal control issues;
- Include project management's responses to the identified control issues and their proposal to address the issues identified within a specific time period.
- Where applicable, follow up on the issues identified in the previous year's management letter.

iv. Reporting

The Auditor is required to deliver an audit package which includes:

- The audited financial statements, including additional disclosures as outlined in 3.2;
- An audit opinion on the financial statements, considering the scope as outlined in 5. "Scope of the financial audit";
- Report on factual findings, considering the scope of agreed upon procedures as outlined in section 6 "Scope of the agreed upon procedures". Ineligible expenditure identified should be clearly mentioned. In this regard please refer to appendix 1 (IFAD eligibility criteria) and appendix 2 (Required Supporting documentation) which are attached to these ToRs.
- A management letter, including information as outlined in 4.3;

The audit report should sufficiently detail the nature and extent of the procedures performed by the auditor.

The Auditor is required to:

- Provide the audit package by no later than End of May of each year].
- Provide the audit package in English.
- Deliver the audit packages in 2 separate files⁵⁷:
 - File 1: audited financial statements including the auditors' report
 - File 2: management letter

5. Scope of the financial audit

In performing the audit, the auditor shall, at a minimum:

- Obtain an understanding of the internal controls related to the financial reporting process, to identify and assess any weakness in internal control that might result in misstatements whether due to fraud or error;
 - Design and conduct audit procedures in response to weaknesses identified in the internal controls relating to the financial reporting process, to obtain audit evidence that the financial statements are fairly presented and free from material misstatements in accordance with the applicable accounting framework;
 - Verify whether expenditure incurred in the name of the project is in line with the terms of the financing agreement(s) and incurred for the purposes intended in this agreement. Consider both IFAD and 3rd party funding;
 - Verify that inventory and fixed assets held by the entity exists, are complete, and are properly accounted and used for the project purposes;
 - Note any control weaknesses in the internal control environment and in the financial reporting process and communicate those in the management letter.
-
- The auditor shall undertake this engagement in accordance with these TORs and with:

⁵⁷ This requirement will assist IFAD in meeting its disclosure requirements as outlined in Section 7. Public Disclosure. The management letter is not subject to disclosure and should be provided in a separate file.

- International Standards on Auditing (ISAs) to perform agreed procedures regarding financial information as promulgated by IFAC;
- The Code of Ethics for Professional Accountants issued by IFAC. Although the International Standard on Related Services 4400 provides that independence is not a requirement for agreed procedures engagement, IFAD requires that the auditor also complies with the independence requirements of the Code of Ethics for Professional Accountants.

- Terms and conditions of the agreement:

The auditor verifies that the funds provided by the agreement were spent in accordance with the terms and conditions of the agreement.

- Planning, procedures, documentation and evidence

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 Project 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.

6. Scope of the agreed upon procedures

The auditor is required to perform the following specific procedures and report on factual findings as required in 4.4 "Reporting".

i. Withdrawal application summary

The Auditor is requested to obtain the individual withdrawal applications submitted to IFAD as summarised in the withdrawal application summary and develop testing procedures to:

- Determine whether the designated account currency equivalent was determined using the historical exchange rate of transfers to the operating account;
- Determine whether goods and services have been purchased through the SOE mechanism in line with the SOE threshold stipulated;
- Determine whether the expenditures claimed through SOE procedures were properly appropriately authorized, classified⁵⁸ and supported by audit documentation;
- Identify any ineligible expenditure;

ii. Designated account statement and reconciliation

The Auditor is requested to review the activities of the designated account(s) associated with the project, including the initial advance, replenishments, interest that may accrue on the outstanding balances, and the year-end balances. The Auditor is requested develop testing procedures to:

- Check the accuracy of the designated account reconciliation(s)
- Confirm that the designated account(s) have been maintained in accordance with the provisions of the financing agreement;

7. Public disclosure

IFAD promotes public disclosure of project financial information to enhance the level of transparency and accountability. IFAD will publish project audit reports, as appropriate, in line with the Fund's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD. In agreeing to the terms of reference, the auditor explicitly acknowledges IFAD's right to publicly disclose audit reports (audited financial statements and audit opinion) and will issue reports without a limitation of use clause.

ANNEX . - PETTY CASH REQUEST FORM

Date: _____ Requested by _____ : _____
Name

Mode of payment _____
Signature

- Reimbursement

⁵⁸ The threshold for SOE transactions will be stipulated in the letter to the borrower.

☐ Advance

Description of purchases (goods/services)	Unit price	Quantity	Total cost**	V. Budget/ VI. Activity code	VII. Explanation / Comments
TOTAL AMOUNT*					

A. Approved by

Financial Controller

Processed by

Receptionsit/Logisitics Assistant

Payment received by

* Total amount cannot exceed Le 240,000.

** Attach supporting document (invoice, receipt, etc.).

ANNEX . - PETTY CASH RECONCILIATION FORM

PROJECT _____ **Date of reconciliation** _____

PART I. PETTY CASH RECONCILIATION

PETTY CASH BALANCE BROUGHT FORWARD (A) _____
 REPLENISHMENTS DURING THE CURRENT MONTH (B) _____
 TOTAL PETTY CASH BALANCE (C = A + B) _____
 DISBURSEMENTS DURING THE CURRENT MONTH (D) _____
 PETTY CASH BOOK BALANCE (E = C – D) _____
 CASH COUNT BALANCE (F) – see PART II. below _____
DIFFERENCE (G = E – F) _____
Explanation of difference

PART II - CASH COUNT

DESCRIPTION	QUANTITY	TOTAL AMOUNT
BANK NOTES		
500		
1 000		
2 000		
5 000		
10 000		
COINS		
TOTAL IN LEONES		

Counted/reconciled by (Financial Accountant) _____ Reviewed by _____ (FC)

Date _____

ANNEX. - TRANSACTION VOUCHER

PROJECT _____
 Journal _____ Date _____ Voucher n° _____
 Type of transaction _____ Source document reference _____
 Description _____

 Contract n° _____ Name of recipient _____ Check/Transfer n° _____
 Due date _____ Exchange rate _____ Transaction amount in USD _____

Account n°	Transaction Amount			Transaction coding					Amount allocated
	Debit	Credit		Funding source	Expense category	Budget	Sub-component*	Activity	
TOTAL									

* Also indicates the component number.

VERIFICATION PROCEDURES :

Expenditure request signed Certification of payment request
 Mathematical accuracy Completeness of pack (exp. request, payment request, etc.)
 Payment not previously made
 Financial Accountant _____ Financial Controller _____

Approved by Project coordinator _____
 (for payments only)

ANNEX . - CHECKLIST FOR ACCOUNT CLOSING

PROJECT _____ MONTH _____ YEAR _____

TASK	DEADLINE	Done
Monthly closing		
Physical inventory of supplies	Last day of month M	
Petty cash closing, petty cash count and reconciliation between cash journal and cash count	1 st day of M+1	
Posting of outstanding transactions	2 nd day of M+1	
Checking of transactions per accounting records against journals and payment documents (check stubs, bank transfer orders, cash receipts, etc.)	4 th day of M+1	
Bank reconciliation for all accounts	5 th day of M+1	
Input of adjusting and correction entries	7 th day of M+1	
Chronological filing of accounting records	8 th day of M+1	
Printout and filing of accounting and financial reports	8 th day of M+1	
Analysis of the monthly budget statement and preparation of the AWPB execution report	10 th day of M+1	
Reconciliation of the Special Account / Grant bank Account	As part of preparation of WA	
Reconciliation of IFAD loan status and project accounts for each expense category	Upon receipt of IFAD reimbursement	
Update of monitoring schedule for WA and IFAD reimbursements	Upon receipt of IFAD reimbursement	
Year-end closing		
Preparation of detailed schedule for year-end closing and distribution to all NPCU staff	1 st December N	
Physical inventory of assets and supplies	31 st December N	
Monthly closing procedures for the month of December (see above)	20 th January N+1	
Printout of balances and general ledgers ; review and justification of each account balance	25 th January N+1	
Estimates for year-end accruals and deferrals	30 th January N+1	
Input of year-end adjusting and correction entries	30 th January N+1	
Printout of accounting and financial statements and reports	31 st January N+1	
Review and analysis of the AWPB financial execution for the year and preparation of contribution to the annual progress report	31 st January N+1	
Preparation of annual financial statements	15 th February N+1	
Preparation of documents and files for the annual external audit	28 th February N+1	

M: month for which accounts are being closed
N: fiscal year for which accounts are being closed

NOTE: For the year-end closing, both monthly and year-end procedures listed must be carried out.

ANNEX . - VEHICLE LOG

Vehicle registration number _____

Assigned driver _____

DATE	TIME		MILEAGE		TRIP		FUEL PURCHASE		Driver signature	Responsible staff
	Departing	Arrival	Departing	Arrival	Destination	Purpose	Mileage	Quantity		

ANNEX 4.i. - VEHICLE HISTORY RECORD

Vehicle registration number _____

Assigned driver _____

DATE	REPAIRS			SERVICE & MAINTENANCE			INSURANCE			FITNESS TESTS	
	Description of repair	Garage	Cost	Description of service	Garage	Cost	Type	Period covered	Cost	Checked by	Cost

Report accidents in the space below, providing all relevant details for each occurrence:

Date

Place

Name of driver

Circumstances

Damage to NPCU vehicle

Damage to other vehicles

Injuries (indicate name of victims and describe injuries and Insurance settlement)

ANNEX - ASSET DISPOSAL FORM

Asset description: _____

Serial number: _____

Tag number: _____ Assigned location: _____

Date of purchase: _____ Acquisition value: _____

Reason for disposal: _____

Possible further use: _____

Proposed disposal mode: _____

VI. Module 4: Procurement Procedures

Introduction

1. In the Public Procurement Benchmarking exercise conducted by the World Bank in 2016, the Sierra Leone public procurement framework was found to have a functioning life cycle and an effective basis for the preparation, submission and evaluation of bids, award of contracts and availability of complaint and reporting mechanisms. The IFAD COSOP provides additional material on the wider country programme management and risks of doing business in Sierra Leone. The procurement assessment for AVDP is based on the legal and regulatory framework under which procurement operates, the capacity of the procurement staff generally, as well as the ability of the government institutions to regulate, manage and supervise procurement and handle and administer complaints.

Country procurement framework assessment

2. Public Procurement in Sierra Leone is practised, managed and regulated by the Public Procurement Act 2004 (amended in 2016, PPA 2016), the Public Procurement Regulations 2006 (PPR 2006) and the Public Procurement Manual 2006 (PPM 2006). The PPA 2016 is based on the UNCITRAL Model Law and therefore covers the full framework of the procurement practices, processes and control mechanisms. In addition, it is consistent and congruent with the IFAD Procurement Guidelines and IFAD Procurement Handbook.

3. The PPA 2016 stipulates the functions of the National Public Procurement Authority (NPPA) which is the body corporate responsible for regulating, promoting, developing and harmonizing public procurement and also tasked with managing capacity building of procurement staff. The Act also establishes the Independent Procurement Review Panel (IPRP), a body responsible for handling protests and complaints made by bidders, and has as its Secretariat, the NPPA. NPPA provides and updates standard bidding documents for the procurement of Goods, Works, Non-consulting and Consulting Services. These include templates for Request for Quotations (Goods, Works, Non-consulting Services), Request for Proposals (Consulting Services), Request for Bids (Goods, Works), and a Procurement Plan template. The PPR 2016 provides detailed institutional arrangements for procurement, delineating the responsibilities of the different actors, and establishes the bases on which bidders are considered qualified and eligible, and showcases the procurement process based on methods and bidding document type.

4. The PPM 2006 breaks the procurement process set in the Regulations into detailed procurement procedures. Together, the three documents (and the structures within which they operate) lay down the framework for effective procurement management.

5. It is recommended, therefore, that the legal and regulatory framework of public procurement in Sierra Leone – which includes the Act, Regulations, Manual, Standard Bidding Documents and other instruments – be used for all procurement activities in AVDP, with the exception of International Competitive Bidding (ICB) for which the World Bank guidelines and framework apply. It is also recommended that the Procurement Plan to be used by AVDP be based on the version in the IFAD Procurement Handbook, not the one in the NPPA.

AVDP procurement procedures

6. **Procurement Planning** will be part of the annual work planning process and the AWPB shall be content-consistent with the Procurement Plan (PP). The procurement planning process shall be congruent with Module E of the IFAD Procurement Handbook, and the PP format to be used shall be consistent with the templates shown in Module E1 of the Handbook, with the inclusion of an initial column that has the AWPB reference. The initial plan shall be for 18 months and thereafter for 12 months. IFAD will also accept a rolling 12-month procurement plan after the initial 18 months. The rolling plan is a single plan that runs through the life of the entire project with required updates and upgrades being made and completed items being represented on a separate worksheet. The procurement plan shall be in Microsoft Excel format.

7. **Packaging of procurements:** As best as possible, procurements – especially for goods and works – shall be packaged in common groups and procured as packages or lots. Splitting potential packages into smaller procurements to avoid prior reviews and no-objections are considered unethical (and may be illegal to the extent that this is unjustified). It is encouraged that packaging of procurement of goods (for like items) and for works (for similar items or for geographical reasons) be implemented by the project.

8. **Bidding Documents:** All bidding documents for the procurement of goods, works and services shall be prepared by the Procurement Unit. These bidding documents may be one or more of the following: Request for Expressions of Interest, Request for Bids, Request for Proposals, Request for Qualifications and Request for Quotations. For the procurement of goods and works under ICB and consulting services under Quality and Cost-Based Selection (QCBS), the project shall use the templates provided by the World Bank, with appropriate edits. For procurements to be undertaken under National Competitive Bidding (NCB) and Shopping, the standard bidding documents (SBDs) provided by NPPA suffice. For all other bidding documents for bespoke procurements, the project shall liaise with the IFAD to identify appropriate bidding document templates. For all other documents and reports, IFAD shall recommend appropriate templates from time to time if these documents and reports submitted by the project are not fully compliant or effective.

9. **Procurement Management Information System (PMIS):** For management of the planning process, TOMMARCHE is recommended as the PMIS. TOMMARCHE is an open-source customized system that has worked well in many countries and makes the procurement process - especially the planning and the PP – more seamless to manage. Once IFAD establishes a NOTUS (No Objection Tracking System), this can be customized and configured for the project too.

10. **Filing/Record Management System:** Based on lessons learned, one of the challenges has been the filing system (or absence thereof) in IFAD funded projects in Sierra Leone. AVDP shall follow Module C of the IFAD Procurement Handbook which provides a list of documents/record to be filed, the filing method and an overview of correspondence and communication.

11. **Contract Administration:** The IFAD Procurement Guidelines and Handbook, like the Sierra Leone legal and regulatory framework for procurement does not have comprehensive guidelines for contract administration and management. The recommended framework for contract administration in AVDP is as follows:

- i. The Procurement Unit is the first port of call for issues relating to Contract Administration.
- ii. The Procurement Unit is responsible for ensuring that bid, advance payment and performance securities are properly monitored and administered (even if safekeeping is the responsibility of the finance staff).
- iii. The Procurement Unit automatically acts as Contract Manager for all goods to be procured, ensuring that goods delivered match the specifications, quantities and packaging stipulated in the contract or purchase order.

iv. The project shall ensure that each Works contract has a Contract Manager who is an Architect, Engineer or someone with the technical acumen to supervise the works; this could obviously include use of staff from a relevant ministry or agency. For Works exceeding USD 500,000 however, it is advised that the supervisor be a consultant hired solely for this purpose.

v. For Consulting Services contracts, the project should designate in-house or hire elsewhere a Contract Manager to supervise the assignment.

12. **Evaluation:**Based on lessons learned, procurement evaluation and evaluation reporting require considerable improvement in Sierra Leone. For Goods, Works and Non-Consulting Services, the Procurement Unit shall facilitate the Compliance Evaluation Method where only pass-fail values are used. For Consulting Services, the Merit Point Evaluation Method shall be utilized, with the use of numerate values. Evaluation reports shall consist a plethora of tables that commences with a tabular description of bids or proposals submitted, and ends with the recommendation for award table, as applicable. Evaluation Reports for all prior review items must seek IFAD's No Objection before proceeding to the next step. Evaluation Report templates for all the procurement categories are attached to this Module for the use of the project.

13. **Reporting requirements for procurement:**The Procurement Unit shall report to the National Programme Coordinator. The following reports shall be submitted by the Procurement Unit:

- i. Procurement Plan – regular updates every 3 months
- ii. Procurement Plan – upgrades, whenever necessary
- iii. Contract Register - regular updates every 3 months

14. **Procurement Arrangements:**

15. Staffing Structure. Procurement activities shall be handled by at least a Procurement Officer and a Procurement Assistant. The Procurement Officer shall have a relevant degree and a minimum of 8 years in the field of public procurement, half of which should be for projects funded by multi-lateral development banks. The Procurement Assistant shall have a minimum of 4 years' experience in public procurement.

16. Procurement Method. The following procurement methods shall be used for the categories of procurement, as follows:

a. Goods/Works/Technical Services: ICB, NCB, Limited International Bidding, National/International Shopping, Direct Contracting. The definitions for and applications of these methods shall be consistent with the IFAD Procurement Handbook.

b. Consulting Services: QCBS, Quality-Based Selection (QBS), Fixed Budget Selection (FBS), Least Cost Selection (LCS), Selection Based on Consultants' Qualifications (CQS), Sole Source Selection (SSS) and Individual Consultants. The definitions for and applications of these methods (except IC) shall be consistent with the IFAD Procurement Handbook. The definition and application for IC shall be consistent with the World Bank procurement guidelines.

17. Procurement Thresholds. While the specific thresholds for procurement financed under the project will be stipulated in the Letter to the Borrower, the general recommendations are as follows:

- Goods estimated to cost more than USD 200,000 equivalent per contract may be procured through the ICB method using the World Bank's applicable SBDs. Goods estimated to cost between USD 20,000 and USD 200,000 equivalent per contract may be procured through NCB. Goods estimated to cost less than USD 20,000 equivalent per contract may be procured through the National/International Shopping method.

- Works and Technical Services estimated to cost more than USD 300,000 equivalent may be procured through ICB method using the World Bank's applicable SBDs. Works estimated between USD 50,000 and USD 300,000 equivalent may be procured through NCB. Works estimated below USD 50,000 may be procured through National/International Shopping method.

- Consultancy services estimated to cost more than USD 50,000 equivalent for firms and USD 25,000 equivalent for individuals will be on the basis of QCBS method. However, the specific nature of the assignment will determine the method of procurement to be followed and will be pre-determined in each annual procurement plan.

18. Prior Review Thresholds. The following, which may be modified by IFAD during the course of project implementation, shall be subject to prior review by IFAD:

- a. Procurement of any goods and equipment estimated to cost USD 50,000 equivalent or more;
- b. Procurement of any works estimated to cost USD 100,000 equivalent or more;
- c. Procurement of a firm for consulting services estimated to cost USD 50,000 equivalent or more;
- d. Procurement for individual consulting services estimated to cost USD 30,000 equivalent and more; and
- e. All procurements performed through direct contracting or sole source selection.

Attachment M4.1: Sample evaluation Report for Goods

NAME OF PROJECT

**EVALUATION REPORT
and
RECOMMENDATION FOR AWARD OF CONTRACT**

Contract Name:

Date:

Table 1: Identification

1.1	Name of project	
1.2	Purchaser	
(a)	name	
(b)	address	
1.3	Contract number (identification)	
1.4	Contract description	
1.5	Cost estimate	
1.6	Method of procurement	
1.7	Prior review required	
1.8	Domestic preference allowed	
1.9	Fixed price contract	

Table 2: Procurement Process

2.1	Standard Bidding Document	
(a)	title, publication date	
(b)	date of IFAD no-objection	
(c)	date of issue to bidders	
2.2	Number of firms issued documents	
2.3	Amendments to documents, if any	
(a)	list all issue dates	
(b)	date(s) of IFAD no-objection	
2.4	Date of pre-bid conference, if any	
2.5	Date minutes of conference sent to bidders and IFAD	

Table 3: Quotation Submission and Opening

3.1	Quotation/Bid submission deadline	
(a)	original date, time	
(b)	extensions, if any	
3.2	Bid opening date, time	
3.3	Record of bid opening, date sent to IFAD	
3.4	Number of bids submitted	

Table 4: Bid Prices (as submitted/read out)

No	Name of Firm	Submitted/Read Out Price	Remarks
1.			
2.			
3.			
4.			
5.			

Table 5: Preliminary Examination

Bidder	Verification ⁵⁹	Eligibility	Bid Security	Financial Capacity	Substantial Responsiveness
(a)	(b)	(c)	(d)	(e)	(f)

Table 6: Technical Evaluation

Compliance Evaluation: Yes (or Y) for each compliant line item or No (or N) for each non-compliant line item. A final NO indicates a non-acceptance for Price Evaluation.

#	DESCRIPTION	DETAILED SPECIFICATIONS	COMPLIANCE				
			SUPPLIER 1	SUPPLIER 2	SUPPLIER 3	SUPPLIER 4	SUPPLIER 5
A.	System	CPU: Intel dual core	Yes	Yes	Yes	Yes	Yes
		RAM: between 1GB and 2GB	Yes	Yes	Yes	Yes	Yes
B.	Internal Hard Drives	HDD Interface: SATA to SATA II	Yes	Yes	Yes	Yes	Yes
		Capacities per bay: 4TB	Yes	Yes	Yes	Yes	Yes
		Nos. of hard drive slots/bay: 4 bay	Yes	Yes	Yes	Yes	Yes
		Total capacity: 16TB	Yes	Yes	Yes	Yes	Yes
		Nos. of hard drives: 4 units of 4TB (7200 rpm – must include)	Yes	Yes	Yes	Yes	No ⁶⁰
C.	Interface: LAN	Connector type: RJ45	Yes	Yes	Yes	Yes	Yes
		Nos. of ports: 2	Yes	Yes	Yes	Yes	Yes
		Data transfer: 10/100/1000 mbps	Yes	Yes	Yes	Yes	Yes
D.	Interface: USB	Standard Compliance: USB 2.0 & 3.0	Yes	Yes	No ⁶¹	Yes	No ⁶²
		Connector Type: USB Type A	Yes	Yes	Yes	Yes	Yes
		Number of ports: 2 x USB 2.0 and 2 x USB 3.0	Yes	Yes	No ⁶³	Yes	No ⁶⁴
E.	Supported OS	Windows 7	Yes	Yes	Yes	Yes	Not indicated
		Windows Server 2008	Yes	Yes	Yes	Yes	Not indicated
F.	Protocol Support	Networking: TCP/IP	Yes	Yes	Yes	Yes	Not indicated
		File Sharing: CIFS/SMB, AFP, HTTP/HTTPS, FRP/SFTP, NFS	Yes	Yes	Yes	Yes	Not indicated
		Transfer data from cloud server via FTP. Active Directory Support, Energy save, Apple Time Machine,	Yes	Yes	Yes	Yes	Not indicated

⁵⁹ Verification refers to presence of the Bid Submission Form, Bid Security, the Power of Attorney, the Impediments document, Tax returns, etc.

⁶⁰ Supplier offered 4 units of 600GB, less than the 4TB required

⁶¹ Supported only USB 2.0, not USB 2.0 and 3.0 as required

⁶² Supported only USB 2.0, not USB 2.0 and 3.0 as required

⁶³ Supported only USB 2.0, not USB 2.0 and 3.0 as required

⁶⁴ Supported only USB 2.0, not USB 2.0 and 3.0 as required

		iTunes Server, Web Access, DLNA Media Server					
		Should support flexible RAID configuration, RAID 0/1/6	Yes	Yes	Yes	Yes	Not indicated
G.	Software Requirement	Should run/be compatible with the proposed hardware	Yes	Yes	Yes	Yes	Not indicated
		Should support data transfer from/to cloud environment	Yes	Yes	Yes	Yes	Not indicated
		Can transfer via FTP	Yes	Yes	Yes	Yes	Not indicated
		Supports Windows 2012 R2	Yes	Yes	Yes	Yes	Not indicated
H.	Acceptance for Price Evaluation	YES	YES	NO	YES	NO	

Table 7: Price Evaluation Summary

#	Bidder	Corrected Price (Country Currency)	Price (VAT Exclusive)	Conversion into USD	Rank
1.					
2.					
3.					

Table 8: Award Recommendation

#	Supplier	Description	No. Of Items	Total
1.				

Annexes

1. **Signed Consensus/Aggregated Evaluation Sheets:**
2. **Quotations submitted:**
3. **Exchange Rate Publication:**

Attachment M4.2: Sample Evaluation Report for Services

Name of Project

Technical Evaluation Report

Name of Services

Identification Number:

Date of Submission:

Table 1: Identification

i.	Country	
i.	BORROWER Entity	
i.	Name of Project	
v.	Employer	
	(a) name	
	(b) address	
v.	Procurement number (identification)	
i.	Procurement description	
i.	Procurement Plan Estimate	
i.	Procurement Category	
k.	Method of Procurement	
k.	Anticipated Contract Duration	
i.	Domestic preference allowed	
i.	Fixed unit price contract	

Table 2: Advertisement and Issue

i.	General Procurement Notice	
	(a) Portals	
	(b) Newspapers	
i.	Prequalification, if required	
	(a) number of firms prequalified	
	(b) date of IFAD's no-objection	
i.	Specific procurement notice	
	(a) Portals	
	(b) Newspapers	
	(c) number of firms notified	
v.	Request for Proposals (RFP)	
	(a) date of IFAD's no-objection	
	(b) date of issue to bidders	
v.	Number of firms issued RFP	
i.	Amendments to documents, if any	
	(a) list all issue dates	
i.	Date of Pre-Proposal conference, if any	
i.	Questions and Answers	
	(a) Number received	
	(b) Number responded to	
	(c) Date Q&A sent to Proposers	

Table 3: Proposal Submission and Opening

3.1	Proposal submission deadline	
	(a) original date, time	
	(b) extensions, if any	
3.2	Technical Proposal opening date, time	
3.3	Record of opening of Technical Proposals, date sent to Proposers	
3.4	Number of Proposals submitted	
3.5	Proposal validity period (days or weeks)	
	(a) originally specified	
	(b) extensions, if any	

Table 4: Proposal Evaluation Framework

4.1 Evaluation Method	<u>Compliance Method (used for Administrative Compliance)</u> <u>Merit Point System (used for Technical Evaluation; scoring system explained below)</u>
4.2 Scoring System	<p>i. The application and allocation of scores by the TEP was based on (first, an individual, then later a collective) professional assessment of the technical merits of the proposals, with them being measured solely against the Request for Proposals and the Terms of Reference incorporated therein.</p> <p>ii. Comments on the technical evaluation and issues for negotiations were encouraged in the TEP's submission of their individual final reports.</p> <p>iii. Strengths and weaknesses refer specifically to technical achievements that surpass (strengths) or fail to attain (weaknesses) the provisions in the Terms of Reference and RFP.</p>
4.3 Criteria Weights	<p>A. Experience, Past Performance and Capability: XX</p> <p>B. Approach and Methodology: XX</p> <p>C. Key Professional Staff: XX</p>
4.4 QCBS Weights	<p>Technical: 70/80%</p> <p>Financial: 20/30%</p> <p>Minimum Technical Points required to pass: XX</p>
4.5 Technical Evaluation Panel (TEP) Members	
4.6 Evaluation Process (a) Start Date (b) End date (c) Duration	

Table 5: Proposal Opening Checklist

	Name of Consultant (in order of submission)	City, Country	Outer Envelope sealed	# of originals of TechPro	# of copies of TechPro	FinPro Sealed & Present
1.						
2.						
3.						

Table 6: Administrative Compliance

#	Bidder	Technical Proposal Form & Registration Docs.	Authorization/POA	Tax Clearance	Other	Other	Acceptance
1.							
2.							
3.							

Table 7: Financial Capacity Evaluation

#	Bidder	Submission of Audited/ Certified Fin. Statements	Financial Capacity Verified	Acceptance
1.				
2.				
3.				

Table 8: Consensus Technical Evaluation

		Points	Weights	STRENGTHS	WEAKNESSES
Criteria A - Experience, Past Performance and Capability					
A2i	Minimum 10 years experience in independent verification and validation (IVV) services of independent software testing services				
A2ii	Minimum 10 years experience in software design, development and implementation				
Total Sub Criteria A2 - General Experience & Past Performance		0.00	15.00		
Sub-Total CRITERIA C		0.00	50.00		
GRAND TOTAL		0.00	100.00		

Table 9: Consensus Technical Evaluation Summary

#	Description	FIRM 1		FIRM 2		Weight
		Final Scores	Points	Final Scores	Points	
Criteria A - Experience, Past Performance and Capability						
A2i	Minimum 10 years' experience in independent verification and validation (IVV) services of independent software testing services					10.00
A2ii	Minimum 10 years' experience in software design, development and implementation					5.00
Total Sub Criteria A2 - General Experience & Past Performance			0.00		0.00	15.00
Total CRITERIA A			0.00		0.00	40.00
GRAND TOTAL			0.00		0.00	100.00

Table 10. Recommendation

The Technical Evaluation Panel (TEP) recommends the opening of the Financial Proposals of the following XX firms who attained the minimum technical score of XX required to pass:

XXX

Annexes

1. Advertisements: Newspaper and Web
2. Administrative Compliance and Eligibility Documents
3. Financial Capacity Evaluation Attachments
4. Signed Consensus Evaluation Forms

VIII. Module 6: Monitoring and Evaluation

The draft Monitoring and Evaluation Plan presented here will need to be revised during the final design stage of the project.

Background

6. AVDP will benefit from being able to utilise the existing structure and staff of the M&E Unit within the NPCU Office from where all IFAD projects are managed. These projects are GAFSP, RCPRP and even the Climate Change Project. The M&E Unit will facilitate the development and consolidation of an AWPB for each project year, on the basis of the project's design and components.

7. The AWPB will include: (a) a detailed description of planned project activities during the coming project year, and the sources and uses of funds thereof; (b) an 18-months procurement plan for items to be procured through IFAD financing, and (c) indicators and associated targets extracted from the logical framework. The draft AWPB will be submitted to the National Steering Committee for clearance and then submitted to IFAD for comments and final non-objection. If required, the M&E Unit in concert with senior management may propose adjustments to the AWPB during the relevant project year.

VIII. The principal duties of the M&E Unit will be to undertake routine monitoring but this time in greater concert with the Project Monitoring and Evaluation and Statistics Department (PEMSD) of MAF. The AVDP logical framework will form the basis for measuring outputs, outcomes and impacts of the project. The final results of the project (together with other donor programmes focusing on agriculture) will then feed into MAF own subsector contribution to the national plans for agricultural change. The AVDP M&E system will take targeting of women and youth into account by, as a minimum, disaggregating data by gender and age. Indicators will undergo continual review to measure results of specific activities targeting the most vulnerable segments of the target population (youth, women, poor smallholder farmers and other types farmers as described in the Targeting section).

IX. The monitoring of commodity and value chain institutions (i.e. ABCs, cooperatives, businesses etc.) will be the responsibility of the M&E Unit. Household data will be collected by PEMSD. The rationale for this is that PEMSD carries out both routine and periodic data collection through their M&E offices in each district for social, household and food security information as a matter of routine. This reinforces the objective of not creating new bodies to do the work required. PEMSD will be asked to disaggregate their data for the specific areas where the project will be implemented.

X. Baseline data will be collected prior to project implementation to set in place starting point information. The established and functioning M&E system will need its own developed Project Monitoring Plan (PMP) specified to ensure that indicators are closely monitored and feed into management to make better decisions and continuously improve outreach, relevance and effectiveness of the interventions.

XI. The use of an electronic system, first used in 2016 and into 2017 called ODK (based on a hand held device system), is now well known by the M&E Unit and the supporting monitoring staff in each of the six GAFSP districts where it has been functional. AVDP will support the adoption of the system in the additional 10 districts. It is anticipated that this will not be a real challenge as the PEMSD within MAF is already using this. A clearly structured data repository will be created especially for the purposes for regular data analysis and monitoring for management.

XII. It is envisaged that the following surveys will be undertaken: (a) baseline survey, including RIMS (contracted out); (b) midterm review (MTR) survey; and (c) terminal or end of project survey of beneficiary households (including socio-economic indicators), complementing such effort with existing secondary data. Other smaller surveys may be conducted from time to time for which a budget with sufficient funding will be allocated.

XIII. PEMSD is in possession of an Agricultural Market Information System (AMIS) which is used to collect market data on volume, price, and commodity flow and cross border trade. Given the importance of at least two of the three commodities (cocoa and oil palm) it seems sensible to provide some assistance to PEMSD to continue this function with the proviso that the information is freely

available on call to the AVDP M&E Unit. AMIS provides a database on a food basket of food crops at local markets, which can be used for measuring changes in volumes, and sales of food (such as rice) to be used as a proxy for measuring increased availability of staples for the household.

XIV. AVDP will apply IFAD standard reporting procedures during implementation. M&E indicators have been developed during project design.

The Monitoring Framework⁶⁵

XV. A Monitoring Framework can be an effective tool to enhance the quality of project planning and management. The Framework spells out the detailed plan by which a project management unit frames out the entire monitoring system in terms of data collection, analysis and generation of information.

XVI. This guide is a step-by-step process of using the AVDP Monitoring Framework. It is expected that it will be used in different ways by the different stakeholders and at different stages of the strategy development and implementation process. The Monitoring Framework is a response to the need for monitoring and evaluating information expressed by all the stakeholders in the implementation of the AVDP. It implements processes to ensure monitoring of the annual planning, the monitoring and evaluation of the activities conducted by the various components and the evaluation of performances, results and impacts. Its implementation and the management of its results will provide all actors and stakeholders with appropriate information and tools to improve the implementation process of AVDP and promote on-going learning.

XVII. Various stakeholders have the responsibility for providing the overall monitoring of the activities within their scope. Being involved in the implementation of the project, they will have a clearer perception of the effectiveness and efficiency of their action and will integrate, if necessary, improvements as well in the implementation process as in the Monitoring Framework.

XVIII. The Monitoring Framework will contribute to management based on the results and impact of the Project. Since no Monitoring Framework can claim perfection, the AVDP Monitoring Framework will be revised periodically to take account of the new needs identified with the participation of all implementation actors in order to better meet their expectations and reach the goals. Lessons learned from these exchanges will make it possible to improve the framework so that it remains focused on the needs and outcomes identified. The framework is living document.

XIX. The objectives and purpose of the Monitoring Framework are as follows:

- Ñ Accurately reflecting the performance of LFM Project in an effective way and
- Ñ Collecting the right information to make the best decision.

Monitoring and Evaluation Definition

Monitoring

XX. Monitoring is the routine checking of information on progress, so as to confirm that progress is occurring against the defined direction. It commonly involves monthly or quarterly reporting, on outputs, activities (training sessions, seminars conducted etc) and use of resources (e.g. beneficiaries, time, money, and materials). It is used to ensure that what has been planned is going forward as intended and within the resources allocated.

Evaluation

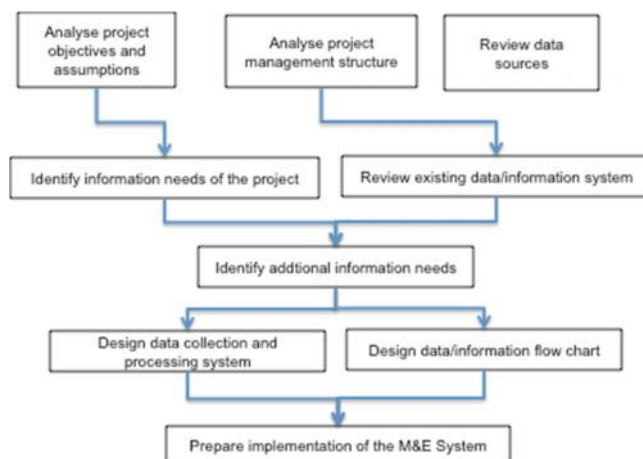
XXI. Evaluation is used to ensure that the direction chosen is correct, and that the right mix of strategies and resources were used to get there. It can typically be formative (helping to develop learning and understanding within stakeholders) or summative (i.e. indicating the degree of achievement). It typically focuses on impacts, outcomes and their relationship with outputs.

⁶⁵ This section of the Module is largely based on the existing M&E Framework Document for SCP-GAFSP but has been modified for the purposes of AVDP. It will need to be further updated during the second design.

Conceptual Framework of the AVDP Monitoring System

XXII. **Error! Reference source not found.** depicts the design of the monitoring process of AVDP.

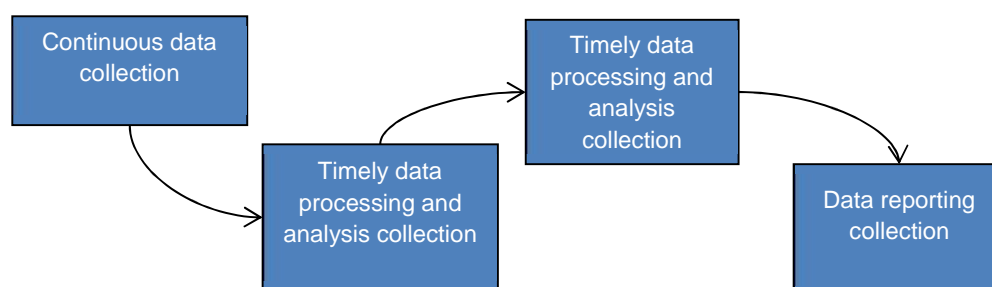
Figure M6.1: The monitoring process



Monitoring Data Flow Chart

XXIII. A monitoring flow chart presents the various stages involved in the project monitoring process. Data are collected in the field on continuous basis. These are processed into information, analysed and reported to the project management unit for dissemination to stakeholders. Figure M6.2 depicts the monitoring flow chart of AVDP, supported by details in Figure M6.3.

Figure M6.2: Monitoring data flow chart



Data Management and Communication

XXIV. A data management system is concerned with the data collection, analysis, reporting/ dissemination, storage, security and privacy.

Data collection

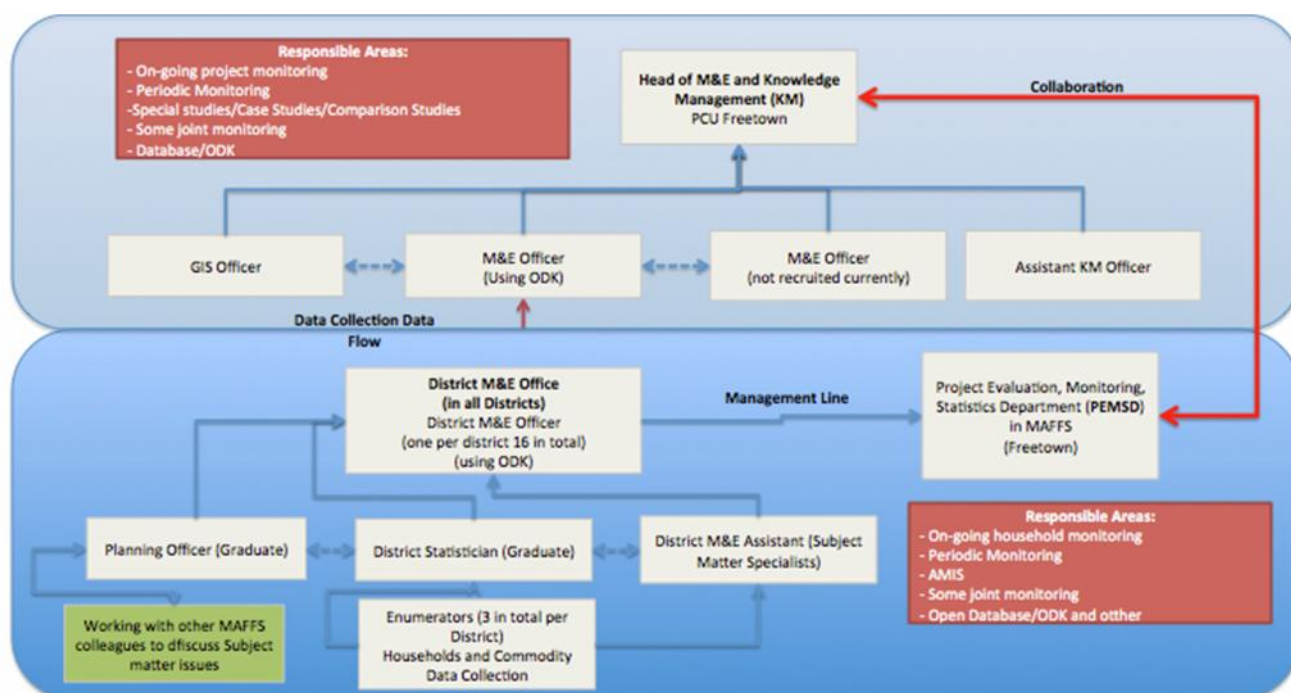
XXV. Data collection is effectively the first stage of information management. The methods of collecting data must be determined once the indicators have been decided upon. This involves several decisions including the type of data that best relates to the indicator, the frequency of collection, collectors, and how will it be collected. Data for monitoring (inputs and outputs) is basically collected as part of everyday activities. The methods of data collection AVDP will apply are interviewing and focus group discussion.

XXVI. **Interviewing:** AVDP will select from three basic types of the interview tool:

- Individual (or household) interview is done with people selected because of some specific involvement in the project;
- Key Informant Interview (KII) is done with person(s) who have a special knowledge of the subject matter; and

- Focus Group Discussion (FGD) is done to collect data on specific topics.

Figure M6.3: M&E structure showing relationship between AVDP M&E Unit and PEMSD – includes flow of data



Direct observation means systematically observing project activities, participants, and anything that relates to the project, and carefully recording what is seen. Observation is a good way to cross-check information obtained during interviews, group discussions and similar activities. Direct observation is important when conducting MTR or ex-post project evaluation. Data will be collected on mobile application and sent to the cloud system through internet connection. This data will automatically be upload into the browser for analysis.

Data analysis and presentation

XXVII. Analysis of the data will depend on the nature of the data collected. Where it is quantified, statistical analysis is possible. The methods of analysis would be identified as part of the process of preparing to gather data. The sort of analysis that might be undertaken would be for associations and relationships, for trends, for significant changes, even the more simple calculations such as average (or mean), maximum/minimum and range can be invaluable despite their simplicity.

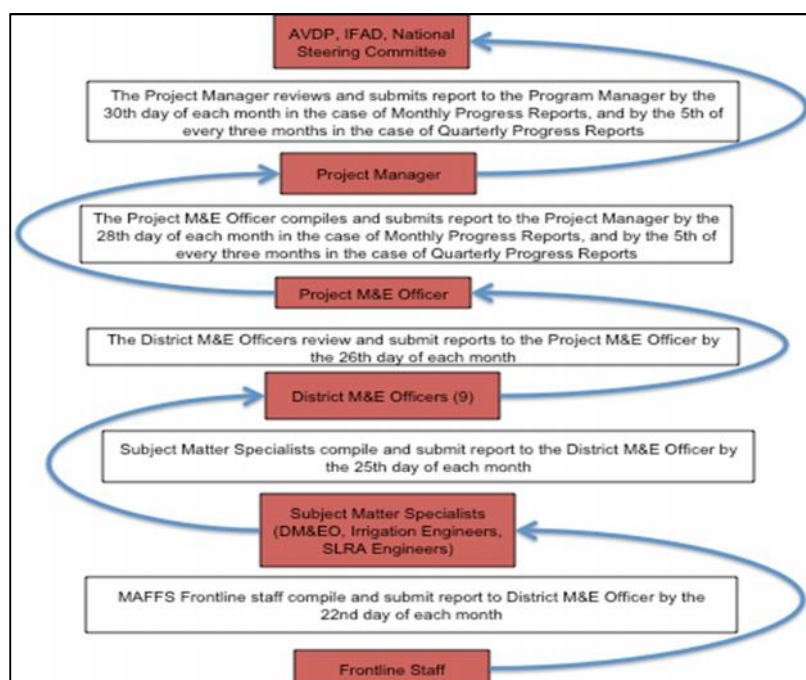
XXVIII. SPSS and Access will be used to analyse survey data. Data collected during routine field visits will be analysed using Microsoft Excel. Simple tables, pie charts, graphs, diagrams, as well selected photographs will be used to present data.

Data reporting

XXIX. The Monitoring Framework incorporates reporting on the level of completion of milestones. It is normally adequate for the monitoring of actual activities versus planned activities on a quarterly as well as annual basis. Quarterly and Annual Reports will record the activities undertaken, presenting changes in status over the reporting period and highlight any issues arising.

XXX. Even though most projects report on impact indicators at the endline, AVDP will conduct annual reviews on its three impact indicators. This will help direct the goal of the project to make sure activities are in line with achievement of the desired impacts. Figure M6.4 depicts the data flow pattern of the AVDP.

Figure M6.4: Flow of data and reporting



XXXI. Continuous data reporting on the various activities is conducted at all levels of the project implementation. Data collected from activities of FFSS, FBOs, and ABCs are channelled to the District M&E Officer. The District M&E Officer compiles all the data and submits to the District Agriculture Officer for review and subsequent submission to the Project M&E Officer. The Project M&EO analyses the data and reports to the National Programme Coordinator (NPC). The NPC reviews and disseminates the reports IFAD and the National Steering Committee for decision-making.

Data storage

XXXII. Data will be stored as soft copy in databases and backed up on MAF Servers and on hard drives kept by the project management team. Hard copy data will be file shelves in the office. In order to ensure security of the data, soft copies will be protected with password while hard copies will be locked in.

Data security and privacy

XXXIII. All project data will be stored in an “area” with restricted access other than those who need access. This will help ensure security of the data. Hard copy data will be stored in paper files and locked in cabinets while soft copy data will be stored in hard drives and locked under password. Hard copy data will be stored for a minimum of five years after the completion of the Project. Project data will be made available to the project management team and MAF for strategic decision-making. Others will need to request access with NPCU approval.

Roles and responsibilities

XXXIV. Various stakeholders will be involved in data collection, management and/or reporting. Table M6.1 depicts the different roles and responsibilities associated to data collection and reporting:

Table M6.1: Roles and responsibilities in data management under AVDP

Role	Responsibilities
Monthly data collection on agronomic activities	This involves monthly data collection by frontline staff on the status of the various Project activities. Frontline staff and the various subject matter specialists in MAF will collect data from the field
Data Quality Assessment (DQA)	<ul style="list-style-type: none"> Data Quality Assessments are conducted on monthly, quarterly and annual basis. Routine DQAs are conducted on daily and monthly basis by District M&EOs and DAOs. Quarterly DQAs are conducted by members of the PMU Six monthly DQAs are conducted by the IFAD Supervision Missions, PEMSD Directors, Chief Agricultural Officers and Honourable Ministers.

Role	Responsibilities
	<ul style="list-style-type: none"> Spot checks are conducted in cases where there is suspicion that the quality of data is compromised.
Compilation of draft progress reports	Compilation of quarterly progress reports is the responsibility of the Project M&EO in collaboration with subject matter specialists working with the Project
Reviewing draft reports	This is performed by the NPC
Making decisions based on data	This is carried out by the NPC and MAF
Baseline survey	This will be conducted by PEMSD in collaboration with the Project M&E Officer
Endline survey	This will be conducted by PEMSD in collaboration with the Project M&E Officer
Annual surveys	These are conducted by PEMSD in collaboration with the Project M&E Officer
Annual Studies	These are conducted by PEMSD in collaboration with the Project M&E Officer

Use of Open Data Kit (ODK)

XXXV. AVDP will use an open source application called Open Data Kit (ODK) and extend its capabilities to address the challenges facing data collection, availability and transmission. ODK is an application with very extensive capabilities in terms of data collection and management. A web-based system will be established that allows electronic data collection tools to be designed on a word processor, sent wirelessly to standard entry level mobile phones, and then used in data collection. Data completion will take place offline where there is no network coverage and be uploaded once access is permissible.

XXXVI. Completed surveys are automatically uploaded to the host server. If there is no mobile network coverage, completed surveys are stored securely until a signal is found at which time completed surveys are uploaded. All survey data would be encrypted, thus maintaining the confidentiality of responses. Access to the web-interface is protected by passwords. In the current system, access to the data would be restricted to the project Management Unit and web administrator. The mobile phone, together with the web-interface, allows the project management to monitor work rate, attendance, commencement of work, and cessation of work. One of the major advantages of the mobile phone data collection method is in the real-time detection of probable data falsification.

Performance Indicator Reference Sheets (PIRS)

XXXVII. Table M6.2 will be used or modified for the purposes of deciding how each indicator will be measured and monitored and is already familiar to the PCU

Table M6.2: Performance indicator reference sheet

Indicator IM1	To be filled in during the next design stage
Indicator Type	
Definition	
Unit of measure	
Purpose	
Baseline	
Target	
Data Collection	
Tool	
Frequency	
Responsible	
Reporting	
Quality Control	

Field Data Collection Schedule

XXXVIII. Table M6.3 shows a suggested data collection schedule. It will need to be updated and developed further.

Table M6.3: Suggested data collection schedule

Activity	Frequency	Responsible
Conduct routine visit to AVDP sites at district level	Monthly	DAO, District M&E Officer
Conduct routine field visit to AVDP sites in all districts	Monthly	Project M&E Officer
Conduct field visit to selected AVDP sites in selected districts	Every 2 months	NPC, Senior PEMSD staff
Conduct field visit to selected AVDP sites in selected districts	Every 6 months	Ministers, CAO, Deputy

		CAO
Conduct field visit to selected AVDP sites in selected districts	Every 6 months	IFAD

Risk and Mitigation Plan

XXXIX. Implementing an M&E Plan is not without risk or uncertainties. While not every risk has been identified here, Table M6.4 presents some of the major issues that could occur, for which a risk mitigation plan should be considered. The table includes some activities to minimise risk.

XL. Risks can change and these have to be examined frequently. Some risks will never materialise and others will appear during the course of implementation. Some risks will be large have deep impact if it occurs. Other risks can be dealt with and removed but being aware of these and putting in a place a general plan to deal with them will help keep surprises to a minimum.

Table M6.4: Risks and mitigation measures for AVDP M&E

Risk	Level of Impact	Mitigation
Quality of data collection is poor and insufficient	High	Continual checking and cross examination of data through triangulation
Collaboration with partners and other stakeholders identified responsible for data supply	High	Continual dialogue to ensure that all partners understand the importance of accurate data and continuous need to supply the information which needs to be as useful for them as it is for the project. Share findings and results which will demonstrate that the information has a value and is considered important for project management and decision making.
ODK system not functioning	Low	Keep an open dialogue with ODK service providers in times of non-functioning system
Data storage issues	Low	Ensure that data storage/online/cloud based systems have sufficient capacity for all storage needs.
Surveys are sufficiently statistically reliable	Low	In planning surveys or other KPI reviews work closely with statisticians to ensure that the sample size and approach is suitable for the needs of the project.
<i>Others to be added during follow on design....</i>		

IX. Module 7: Communication and Knowledge Management

The draft Communication Plan presented here will need to be revised during the final design stage of the project. It will form a stand-alone Communication and Knowledge Management Plan and Strategy for AVDP.

Background

XLI. Knowledge management (KM) is central to the approach of IFAD's scaling up agenda and important for current and future projects. However, IFAD-supported projects in Sierra Leone have only recently been picking up momentum in this area, and will need to define their KM strategy or plan for product communication and targeting from the start. AVDP will develop its own KM strategy and implementation plan and outline of activities, as well as assigned roles and responsibilities of project staff, to ensure that data collected through the M&E system is not lost. This body of knowledge will form the basis for in-depth analysis and the creation of knowledge products to build the evidence-base for contributing to a policy dialogue on the commodity subsector performance and overall agricultural transformation.

XLII. In addition to the KM plan a Communications Plan will be needed to clearly show what will be produced, when documents, monographs and other project "products" will be produced by whom, for whom and in what format. These Plans are living documents and should be updated as needed. What is important is that a plan for special studies, monographs, periodic reviews by sector are planned and undertaken not purely by the KM officers but in partnership with technical staff who will need to be directed by the Team Leader to include this responsibility in their TOR.

XLIII. In addition to the above KM Plan with KM products identified (case studies, research, models for each target group (including farm models) and so on, a Gender Mainstreaming and Youth Strategy (forming a part of the Project Implementation Manual (PIM)), a Mobilization and Participatory Plan will also need to be developed to be used for informed decision-making and monitoring. A matching grant implementation manual will also need to be developed.

XLIV. The Head of M&E within GAFSP and RCPRP (due to complete) who also takes on the role of KM Officer will be responsible for all M&E activities. However it is envisaged that an assistant to the Head of M&E for KM will be needed as the workload will quickly build. A draft set of TOR for this post is provided below.

The Communication and Knowledge Management Plan (C/KM Plan)⁶⁶

XLV. A communication strategy should help plan for and implement communication activities in a structured manner. To have an impact and lasting results, communication processes will require resources and commitment to a long-term process. A comprehensive communication programme would allow AVDP to learn from its operations and extract stories from activities in the field. Communication is more than simply creating products: it helps set the strategic direction of a project. People need to be aware of what has been happening, what is happening and what is planned for the future with little room for *ad hoc* activities.

XLVI. The development of this communication strategy was based on the existing strategy used by the NPCU for RCPRP and RFCIP (developed in 2013). Key aspects of the AVDP C/KM Plan, which will return throughout the document, are:

- It is beneficiary centred, meaning that communication products and channels are chosen to suit the characteristics and preferences of beneficiaries; but also that beneficiary voices are included in the content of the communication of all AVDP activities.
- Involving staff and other stakeholders in supplying content for communications is encouraged by systematically incorporating programme-wide documentation activities. The communication plan will be fully embedded in AVDP operations' *modus operandi* and be part of the project team's work and not an additional activity but as a way of working.

⁶⁶ This section of the Module is largely based on the existing Communication and KM Plan for SCP-GAFSP but has been modified for the purposes of AVDP. It will need to be further updated during the second design.

XLVII. Based on the specific objectives of AVDP, this document includes an analysis of and suggestion for:

- main target groups;
- communication objectives and main messages the project wants to share;
- a comprehensive set of communication products and channels;
- a general timeframe for all activities.

Target Audience

XLVIII. The communication strategy is directed at four types of audience, for different purposes:

- **Beneficiaries:** for them to understand how they can benefit from the programme;
- **General public:** to justify public expenditures;
- **IFAD, MAF and other supporting stakeholders:** to help them understand the programme's benefits and help speed up processes and become aligned with its ethos and purpose; and
- **internal:** to motivate staff and implementing partners, again helping to speed up the process.

XLIX. Collectively, the four types of target audience include project beneficiaries; farmers' organizations, petty traders; programme staff and IFAD staff; government officials and policy makers, especially parliamentarians and decentralised authorities, local councils; bilateral and multilateral donors; development partners and research institutions; leaders of civil society and importantly the private sector.

L. Communication activities towards all different groups of audiences can be developed, but the main area that AVDP chooses to focus should be driven by a need to keep beneficiaries fully informed. It is essential that value chain players and stakeholders understand why the project is working in their areas and what can be achieved.

LI. Part of communicating with beneficiaries is establishing a long-term relationship between them and the project: project staff will need to follow up on previous activities, allowing the target beneficiaries to be aware of the presence of the project. This would also allow for more feedback mechanisms that have been missing in the past.

LII. Further audience mapping will be needed and a matrix of their profile, needs and interests and type of KM product will be identified.

Communication objectives

LIII. AVDP's communication strategy will aim to:

- Raise national and international awareness on the project, its strategy and its activities and positioning the project as a major player in rural development and poverty alleviation in Sierra Leone;
- Increasing the visibility of AVDP work and achievements in the country;
- Highlight the central role played by the project to support the fight against rural poverty by promoting its impact among the rural population;
- Exchange information and experiences in order to collect, document, disseminate promising practices and encourage learning and knowledge sharing;
- Support the development of partnerships with media houses to publicize projects' work in the field of economic rural change, value chain development, rural finance, climate change, agriculture and other areas such as trade, quality and process; and
- Develop partnerships with other development projects, specialised agencies, media houses and communities concerned by the activities of AVDP.

Proposed messages

LIV. AVDP communication activities should disseminate messages that match the objectives and ideologies of the project. Specifically, they aim to communicate that:

- Food production will have to increase 70% by 2050 – and output in developing countries will have to double – in order to feed a growing population.
- The project focuses on the intensification, diversification and commercialisation of smallholder agriculture in order to improve food security and socio-economic growth.
- Rural women play a central role in agriculture and in rural economies in Sierra Leone as it is in most developing countries.
- Rural areas are rapidly changing, presenting new challenges for people who live there (natural resource base, climate change, volatile food prices, change in agricultural markets, etc.).
- Agriculture is and will continue to be the main economic driver in rural economies. Success in agriculture remains a route out of poverty for many rural people, as well as an important first step out of poverty for many others.
- The project's operations are, on the whole, contributing positively to sustainable rural livelihoods.

LV. In addition, communication activities should highlight the innovative features of AVDP such as:

- Project activities implemented through existing institutions;
- Working with the financial sector and the formation of agricultural platforms to promote exchange and business linkages;
- Taking a holistic view of the entire value chain; and
- The promotion of women and youth to become entrepreneurs.

LVI. This list is not exhaustive: communications, M&E and implementing staff should keep an eye out for unexpected innovations that emerge during the project and which are worth sharing.

Strategies and activities

LVII. Communication is a social process, and communication technology and media are only tools to facilitate the process. Interpersonal communication remains essential. The suggested strategy will combine several media channels, both modern and more traditional ones, to improve the efficiency of the process. Sometimes simpler, more traditional communication technologies such as radio broadcasting can provide the most effective solution to information sharing. But perhaps social media channels can offer an opportunity to interact with target audiences including both colleagues and beneficiaries. This section covers a package of potential communication products and channels, including their visibility, content and management.

Project visibility

Visual identity

LVIII. The project will need to have a visual identity on its own through a logo or other such branded image and which can be used through and in all KM products. The project can consider doing it internally or externally. Templates should also be developed to ensure consistency for presentations, roll-ups, posters, booklets, brochures, calendars, greeting cards, etc. The following IFAD communication guidelines should be considered and adhered to.

Visibility within IFAD/AVDP and Government

LIX. Visibility within IFAD would help improve international appreciation and support for project activities. Moreover, sharing experience-based stories within IFAD can help improve practices in other project – as well as in Sierra Leone itself. Communicating interesting relevant experiences from other IFAD projects throughout the world with AVDP staff and management can help improve the project's practices as well. Close work with RFCIP may be advisable.

Website

LX. The Internet is a powerful tool to raise the project's profile, especially at a global level and to communicate and share knowledge. Particularly for international communication, a website is essential for sharing at least the basic information about the project, including project components, objectives, timelines, etc. Importantly, it offers an easily accessible and manageable platform to

showcase short event descriptions, activity results and impact stories. The website needs to be updated regularly, with (written and photographic) content contributions from staff as well (see below).

Communications products

LXI. There is a good range of communication strategies and products developed and used by the staff from other projects such as SCP-GAFSP such as radio and TV talk shows, newsletter, brochures, stickers, roll-ups, press articles, etc and experience should be tapped into.

LXII. Two-way communication approaches should be developed, for instance making use of social media or organising or participating in face-to-face learning events, seminars, workshops and other venues for knowledge sharing and testing.

Newsletters and print media

LXIII. A newsletter can be developed to strengthen communication by making available and accessible to all partners the missions, the activities and various project-related information and news. The objectives of the newsletter would be to:

- Develop working relations among staff and strategic partners;
- Exchange information on the activities carried out in the field;
- Provide staff with the information they need to work effectively and efficiently;
- Support knowledge sharing and disseminate best practices; and
- Publish success stories.

Radio

LXIV. Radio has the potential to reach a wide audience base. It remains the most widely available and popular channel of communication for the poor, especially those in isolated areas. In some rural areas, it is the only source of information about agricultural innovations, weather and market prices. Radio suits the oral culture of Sierra Leone, and caters to illiterate populations. Community radio provides a unique form of access to information and can voice the view of the rural poor. It can enable neglected communities, such as women, to be heard and to participate in democratic processes within societies. It can reflect their interests, and play an important role in reinforcing cultural expressions and identity as well as local languages. To strengthen this potential of radio communication, AVDP featuring newly trained Community Gender Journalists on the weekly radio talk show programme “Farm for Business Hour”, can be used to “simulcast” out to ten community radio stations countrywide.

Television programmes and video production

LXV. Under SCP-GAFSP a weekly 35-minute TV-programme, “Inside de Farm”, was shown on three TV channels. This programme has helped connect the general public to the activities of the programme, gaining more popular support. This programme features sections that are also available as stand-alone videos. AVDP could capitalise on the work already done and further programmes related to the value chains of focus can be developed.

LXVI. The use of online platforms such as Youtube and other forums should remain a focus of the C/KM Plan.

LXVII. The use of the beneficiary-centered approach under the Community Gender Journalism concept, could be built into the plan including participatory video approaches, where community members learn to make simple video documentaries themselves. This is an approach that both empowers the community and provides the project with unique communication material.

Visual communication

LXVIII. Other visual material such as ‘comics’ or other types of illustrated stories, photo stories, info-graphics or short animated videos, offer added benefits of being (mostly) free from large pieces of text, making them suitable for a less literate audience. Most of these materials could be shared in the newsletter, on the website, in the TV programme (short animations) or through social media.

Mobile phones

LXIX. One of the most interesting developments for communication with rural people in recent years has been the increased accessibility to mobile phones, and in particular to smartphones. Mobile phones are making a real difference for poor rural people previously without communication with the outside world. The communication unit makes use of mobile phones during radio talk shows.

LXX. AVDP will certainly need to explore ways of using text message services, and social media apps such as Facebook or Whatsapp to help push key messages. The relevance of this is felt particularly for Component 2 as the use of e-platforms and trading is a key part of the capacity building and changes in the way value chain players are connected.

Face-to-face learning events

LXXI. AVDP communication can continue and further develop face-to-face learning events where champion beneficiaries, service providers or staff can share experiences and priorities directly with each other and other stakeholders. Events such as national and international conferences and workshops, exchange visits to successful Agricultural Business Enterprises, sister projects in the region and successful projects of other donors, and participation in fairs, the World Food Day and similar events will be important forums for reinforcing learning and information sharing. At these events, printed, audio and audio-visual materials can be shared as well.

Internal communication

LXXII. Internal communication is vital and component heads of staff will be encouraged to share their knowledge, findings and other experiences within the team. Weekly meetings with staff will be important to promote internal awareness. Staff will be encouraged to make presentations and case analysis from time to time.

Type of KM products

LXXIII. A suggested list of KM products and their purpose is presented in Table M7.1 and Table M7.2.

Table M7.1: List KM products and audience types

Type of KM Product	Format	Responsible	Location	Audience Type
Research Document/ Case Study	Paper/ Softcopy	Communication/KM Officer as well as Subject Matter Specialist	Website/Subject Matter	Researchers/Other Projects/Government/ Donors
TV/Radio Programme	Virtual/digital – for radio	Any member of AVDP	TV/radio station/Website	Beneficiaries Private Sector
PowerPoint Presentations	Paper/ Softcopy	Any member of AVDP	Website	Researchers/Other Projects/Government/ Donors
Short Papers	Paper/ Softcopy	Any member of AVDP	Website	Researchers/Other Projects/Government/ Donors
Hand Outs	Paper/ Softcopy	Communication/KM Officer as well as Subject Matter Specialist	Website/Hard copy at seminars/ workshops	Participants

Table M7.2: Summary of types of publications and their use:

Electronic Publications	Print Publications	Interactive Sessions
NPCU (AVDP Website)	IFAD and AVDP publications	Stakeholder workshops
IFAD online databases	Project reports & summarised briefs (public)	Larger regional/international workshops & conferences
Industry knowledge portals e.g. Access to Global Online	Academic, research & peer-review journals e.g. The	Online workshops & learning platforms e.g.

Research in Agriculture (AGORA) ⁶⁷	International Journal of Trade and Global Markets	SDC e+i network for Private Sector Development ⁶⁸
Email distribution; subscriptions and direct online requests for data	Internal project reports (confidential)	Internal/closed-door meetings and workshops

Repository of KM products

LXXIV. It will be vital that the C/KM Officer manage the volume of information and products being produced. Setting up a product management system on line and recorded bibliography will be key to ensuring that information is properly accounted for and easily accessible. There are a number of online systems to allow for this take place including those which allow shared access, enhanced search abilities, are cloud based and either free or very affordable.

Sourcing information

LXXV. As different pathways for communicating the project's messages are developed, it is equally important to work on building the content of these messages. The information and knowledge that is being shared does not *originate* from the communications unit: is most often sourced from the project management, staff, partners and beneficiaries. Some staff are very responsive and contribute to communication activities regularly, while others experience restrictions in time and confidence (and skills) to contribute. Therefore, it is important to capacitate these people to identify, collect and develop the messages that are being shared.

a) Documentation by staff and service providers

LXXVI. Staff contributions are important – both for sharing knowledge that only they possess, but also for the acknowledgement that their work and their words matter. AVDP will continue the work of SCP-GAFPS in terms of staff capacity building among PMU and district M&E staff and service providers, training them in documentation and further promote the importance of collective responsibility for KM produce development and its presentation to AVDP audiences.

LXXVII. Staff members need institutional support in terms of time (to collect information and write), mandates/job descriptions, encouragement to look for stories, and incentive by making sure their work is read or seen by others. Encouraging staff, M&E and field staff/service providers, to also contribute such qualitative stories, personal narratives, interesting observations, etc., will help build up a rich repository of quality content for communicating internally and externally.

LXXVIII. Within NPCU projects, it has only been towards the end of the projects that the component heads were asked to share innovations and lessons from the projects. AVDP learning from this will continue the work towards such documentation much earlier in the project. The institutional culture of documentation and learning from practice will help the sourcing of communication content to become more effortless. It will help to continuously find the 'hidden' stories that are not immediately visible from official project documents, but that give life to communicating on the project.

b) Community Gender Journalists

LXXIX. AVDP will build on the work of SCP-GAFSP which started training groups of programme beneficiaries to become Community Gender Journalists. These community-based women and men were trained in the documentation approach, supporting them in building a story, and in basic journalism skills (packaging information for interesting stories, interviewing skills, and ethics in journalism), allowing them to tell the story. By using drawings, rather than writing, the trainings have become more inclusive to less literate beneficiaries. The training was built on the conviction that the voices of beneficiaries need to be central in the communication of the IFAD-funded projects. It strengthens the skills and confidence of these beneficiaries to share their experiences and opinions nationwide.

⁶⁷ <http://www.aginternetwork.org/en/index.jsp>

⁶⁸ <https://dgroups.org/sdc/privatesectordevelopment>

LXXX. A first round of trainings has taken place throughout the country. The new skills of the Community Gender Journalists were to have been put into practice straight away, as the communication unit calls upon them in their weekly radio programme. Using a Closed User Group with the mobile telephone services, the Community Gender Journalists have been able to contribute to the radio programmes directly. The improved information gathering and reporting skills of the Community Gender Journalists can be used by the project M&E officers and technical staff to gain more insight in the problems and needs of the beneficiaries as well as other value chain players.

LXXXI. The Community Gender Journalism activity originated from the experience of documenting stories with GALS facilitators. Combining the beneficiary-centered communication approach specifically with gender has several reasons. First, those trained in GALS have a distinct advantage resulting from their experience with analytical thinking, their position in the communities, and commitment to the IFAD-funded projects. The GALS methodology itself helps people reflect on what is happening in their lives and communities, which is key for good reporting. Secondly, the programme has been dedicated to improve gender relations and the position of women in the communities where it works. Reinforcing this in the Community Gender Journalism activity has the potential to not only change perceptions among the journalists themselves, but also increases awareness among the whole audience of the radio programmes on gender-specific issues in their country.

Capacity Building Communication Team

LXXXII. Under SCP-GAFSP a communications officer was recruited to handle most communication activities. He has been supported by a communications team of four others. Although there is a range of skills present within the team, it is important to keep improving and diversifying these skills, and experimenting with new types of communication and apply these skills to AVDP.

LXXXIII. It will be important to diversify the communications unit to include more women. Currently, the entire communications team is made up of men. The gender-composition of the team will reflect in the communicated content. In addition, it would be good to diversify the team in terms of skills present, particularly concerning video skills and graphic/visual skills.

LXXXIV. It is also necessary to strengthen the capacity of the communication staff (if they work on AVDP) and further improve the quality of all communications products. It is recommended to improve some of the video and graphic design skills, as well as the skills for producing visual stories (comics, illustrations, simple animations). Look for external support if necessary (at country level and at IFAD).

Planning, monitoring and evaluation

LXXXV. Yearly plans are made for the communication activities, which are should be evaluated every year. The communication plan follows the annual activity plan for the programme. Resources needed to implement the proposed communication activities are indicated in the communications plans as they are developed for each project by the communications unit.

LXXXVI. To more easily evaluate current efforts, feedback mechanisms can be put in place, focusing specifically on the communication objectives defined previously. This includes asking for feedback on the quality of products produced, the usefulness of the products, and the access that the channels did (or did not) provide to the products. Such feedback mechanisms can include tracking broadcasts or newspaper mentions, supplying formal online feedback forms, or doing informal surveys and observations when meeting the target audience (have they received the intended messages, what did they do as a result, is there evidence that they received and used the information, etc.). The communications team can also specifically ask for feedback as part of the product, for instance by encouraging newsletter readers to write back.

Risk and Mitigation Plan

LXXXVII. Implementing a Communication and KM Plan is not without risk or uncertainties. While not every risk has been identified here, Table M7.3 presents some of the major issues that could occur, and some activities to minimise risk. It is suggested that a mitigation plan be considered. Risks can change and these have to be examined frequently. Some risks will never materialise and others will appear during the course of implementation. Some risks will be large have deep impact if it occurs. Other risks can be dealt with and removed but being aware of these and putting in a place a general plan to deal with them will help keep surprises to a minimum.

Table M7.3: Risks and mitigation measures for communication and KM

Risk	Level of Impact	Mitigation
Quality of data information is poor, insufficient, uncertain and incomplete	Medium	Continual checking and cross examination of data through triangulation
Audience needs change and KM products are unsuitable	Medium	Continual dialogue with varying audience types will help ensure that products planned remain relevant and more useful for the target user groups. Undertake "customer satisfaction surveys" of KM products developed and disseminated.
Development of KM products can take a lot of time to produce and refine.	Medium	Use templates and other standard forms or presentations which can save time and be moderately adjusted each time.
Website becomes out dated and unusable	Low	Continually monitor the quality of the website and its use. Install a visitors counter and encourage users to provide their views on the site. Update the website at least monthly. Ensure that all features of the website are usable including up load and download functions.
Project is not widely known	Low	Under road shows of the project, hold/host seminars, workshops, ensure that branding of the project is complete and standardised.
<i>Others to be added during follow on design....</i>		

Appendix 7: Integrated Risk Framework (IRF)

1. The integrated risk framework is presented as follows building on the narrative of section 3 of the main report.

IRF	
Risk Categories	Rating (H, M or L)
1. Political and governance	High
2. Macroeconomic	High
3. Sector strategies and policies	Medium
4. Technical design of project or program	Medium
5. Institutional capacity for implementation and sustainability	Medium
6. Fiduciary	Medium
7. Environment and social	Medium
8. Stakeholders	Medium
9. Climate	Low
Overall	Medium

Appendix 8: Environmental and Social Management Framework



Republic of Sierra Leone

Agriculture Value Chain Development Project

Environmental and Social Management Framework



Photo credit: Mohamed Ajuba Sheriff

Sept 2018

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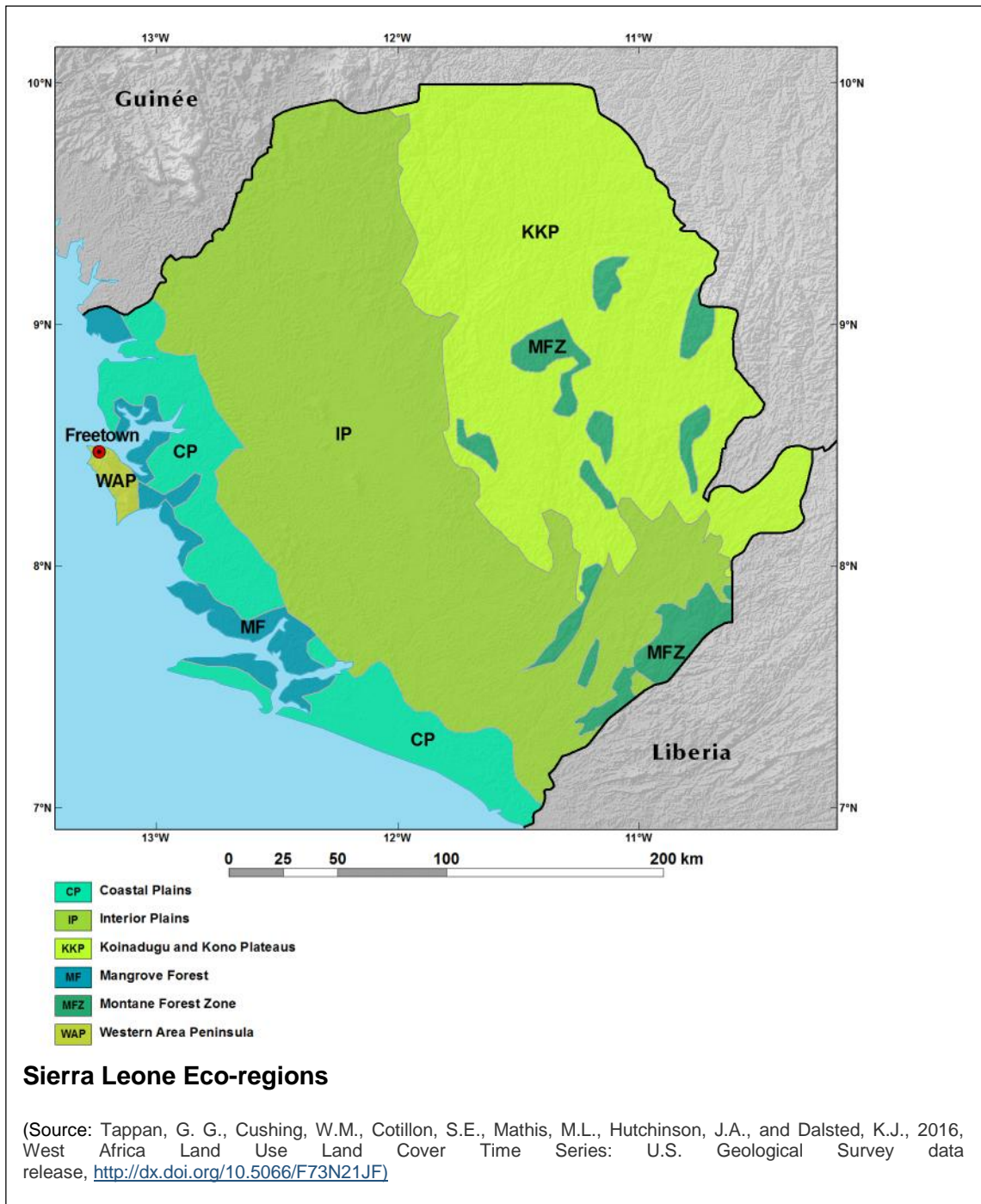
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Abbreviations and Acronyms

- ABC
- ADP
- AF
- AVDP
- AWPB
- C/KM
- COSOP
- DAO
- DSF
- EIA
- ENRM
- EPA-SL
- ESIA
- ESMF
- ESMP
- FAO
- FBO
- FFS
- FO
- GALS
- GEF
- GDP
- GHG
- IFAD
- IVS
- KM
- Km
- MDA
- MEA
- M&E
- MAFFS
- MTR
- (S)NAP
- NPCU
- NSC
- NRM
- PEAR
- PDO
- PDR
- QE/QA
- RCPRP
- SCADeP
- Agribusiness Centre
- Agricultural Development Program
- Adaptation Fund
- Agriculture Value Chain Development Project
- Annual Work Plan and Budget
- Communication and Knowledge Management
- Country Strategic Opportunities Program
- District Agricultural Officer
- Debt Sustainability Frame work
- Environmental Impact Assessment
- Environmental and Natural Resource Management
- Environmental Protection Agency of Sierra Leone
- Environmental and Social Impact Assessment
- Environmental and Social Management Framework
- Environmental and Social Management Plan
- Food and Agriculture Organization
- Farmer Based Organization
- Farmer Field School
- Farmer Organization
- Gender Action Learning System
- Global Environmental Facility
- Gross Domestic Product
- Greenhouse Gas
- International Fund for Agricultural Development
- Inland Valley Swamp
- Knowledge Management
- Kilometre
- Ministries, Departments and Agencies
- Multilateral Environmental Agreements
- Monitoring and Evaluation
- Ministry of Agriculture, Forestry and Food Security
- Mid-term Review
- (Sierra Leone) National Action Plan
- National Programme Coordination Unit
- National Steering Committee
- Natural Resource Management
- Preliminary Environmental Assessment Report
- Project Development Objective
- Project Design Report
- Quality Evaluation/Quality Assurance
- Rehabilitation and Community-based Poverty Reduction Project
- Smallholder Commercialization and Agribusiness Development Project

- SCP- Smallholder Commercialization Programme - Global Agriculture
- GAFSP and Food Security Programme
- SECAP • Social Environmental and Climate Change Procedures
- SLRA • Sierra Leone Road Authority



Executive Summary⁶⁹

Introduction

Sierra Leone has a landmass of about 72,368 square kilometres and a population of around 7.4 million (40 per cent youth), growing at 2.2 per cent annually.⁷⁰ Environmental degradation and Poverty are widespread but are particularly acute in the rural areas where 59 per cent of the population live. Agriculture, the largest sector in the economy, accounted for 59 per cent of GDP⁷¹ in 2015, 62 per cent of the labour force⁷², and 22 per cent of export earnings.⁷³ Cash crops produced for export include cocoa and coffee, while oil palm is produced for domestic consumption and some export. The focus commodities identified on a national basis are: rice, cassava, oil palm, fisheries (especially artisanal) and non-timber forests products. These are widely managed by the poorest but with potential for growth and contribution to poverty reduction and food security.⁷⁴ The key agricultural sector challenges include: expert crisis, declining soil fertility, low technology input, agricultural infrastructure, value chain and value additions, input and output marketing, and financial services. Others are: technology access and farmer empowerment, formal farmer based organisation, access to land, tax structure, investment policy, fisheries, weak sector coordinating mechanism, gender and youth in agriculture, nutrition diversification, and farmer health.

AVDP Project targeting and implementation

The Agricultural Value Chain Development Project (AVDP) will be implemented in the current 16 districts of Sierra Leone. AVDP targets about 33,000 direct beneficiaries drawn from smallholder farmers, Farmer-based organizations (FBOs) including cooperatives, partnering financial institutions, small scale rural entrepreneurs, women and rural youth (18 – 35 years). Geographic targeting will be applied specially in the selection of the districts and communities to be supported for oil palm and cocoa production, taking into account the climate change impact, potential for further deforestation, and the legacy factor from previous IFAD-assisted interventions. AVDP will mainstream gender sensitive approaches and farmer-led innovations using the GALS methodology and promote gender equity as well as the participation of women and youth in all the value chain activities.

The Ministry of Agriculture, Forestry and Food security National Steering Committee (MAFFS-NSC) will provide oversight, direction and advice for project implementation. The existing IFAD NPCU will implement AVDP in partnership with the District Government/District MAFFS, partner private sector entities and FBOs/Cooperatives. The Adaptation Fund will strongly support climate resilience of smallholder farmers and other value chain actors through additional non-co-financed climate adaptation activities to improve resilience at the community and national levels.

Risk categorization and Key environmental issues

The AVDP is rated as **Category B in Environmental and Social** risk and **High** in terms of **Climate** risk due to maximum temperature increases and the generally low adaptive capacity in Sierra Leone. The key climate issue for AVDP is the maximum temperature rise with increased risk to cocoa production. In terms of the environment, deforestation remains a chronic problem with the Savanna increasing from 40.5% of the total area in 1975 to 46% in 2013⁷⁵. Sustainable development in a largely agrarian economy is heavily reliant on the sustainable use of biodiversity and natural resource management. Farmers have been reported to have continued to apply too much fertilizer and at the wrong time which increase waste, indirect GHG emissions risk of pollution and reduce productivity. The construction of feeder roads under past projects overlooked their environmental impacts by obstructing IVS drainage areas thus causing waterlogging of rice fields. Land

⁶⁹ The ESMF draft was produced by Mayowa Fasona (Natural resource management specialist in the Department of Geography, University of Lagos, Nigeria) with field assistance from Mr Denis Lansana (Environmental Specialist on the SC-GAFSP). Special thanks to Rich Pelrine and Amath Pathe Sene of IFAD for guidance and support received.

⁷⁰ World Bank data, 2016

⁷¹ Economic Intelligence Unit, Country Report 4th Quarter, 2016

⁷² International Labour Organization (ILO) et al, Sierra Leone 2014 Labour Survey Report, 22 September 2015

⁷³ World Bank, Sierra Leone, 2015

⁷⁴ National Sustainable Agriculture Development Plan 2010-2030: Sierra Leone's Comprehensive African Agriculture Development Programme. Version Adapted by CAADP Compact 18th September 2009, Freetown

⁷⁵ Tappan, G. G., Cushing, W.M., Cotillon, S.E., Mathis, M.L., Hutchinson, J.A., and Dalsted, K.J., 2016, West Africa Land Use Land Cover Time Series: U.S. Geological Survey data release, <http://dx.doi.org/10.5066/F73N21JF>

tenure rights for the rural poor are weak. Farmers are frequently pushed-off by landowners after land improvement interventions have taken place. Gender inequality in Sierra Leone rates among the worst globally. Women have little land rights and are underrepresented in land decision-making institutions.

Environmental and Social Management and Monitoring Plans

Several legal and regulatory frameworks were reviewed to set in context the ESMF for the AVDP. These documents include the: Constitution of the Republic of Sierra Leone, as well as the Environmental Protection, Meteorological and Forestry Acts. Institutional and policy regulatory frameworks including the Sierra Leone's national land policy, environmental policy, national agricultural development plan and Environmental Protection Agency (EPA) guidelines for agriculture development, among others, were also reviewed. IFAD safeguard policies including SECAP, climate change strategy, environment and natural resource management policy and the COSOP for Sierra Leone 2010-2015 were also reviewed.

The QE for the AVDP PDR raised serious concerns about possible deforestation resulting from Oil Palm cultivation, as well as wetland degradation resulting from rice cultivation in the coastal swamp and mangrove areas. It also raised environmental issues about the construction and rehabilitation of market-connected farm roads. In addition, other environmental impacts identified for AVDP include: land degradation and pollution from agrochemical use, earthen dam construction, and climate change issues (including dry spell and increasing rainstorm and windstorm, and GHG emission from rice paddies). The major social impacts identified include: land tenure and access issues, social exclusion and gender inequality, unsafe and non-healthy working conditions, managing expectations and conflicts resurgence, and elite capture. The health concerns include waterborne disease from IVS, high cholesterol from oil palm consumption and dust effects from road construction and rehabilitation. The Sierra Leone Environmental Protection Agency (EPA-SL) requires levels of screening ranging from registration, Preliminary Environmental Assessment Report, to Mandatory EIA for agricultural projects depending on scale (small, medium and large) and the extent of the likely environmental impacts. As a result, the AVDP requires the development of an environment and social management framework (ESMF), detailing the environmental management and monitoring plans to guide AVDP subprojects' implementation. The environmental and social management plan for the identified impacts was developed with input from a broad range of government ministries, department and agencies consulted during the ESMF field mission in Freetown. The plan indicates a significance rating and geographical extent/prevalence of each impact, and recommended mitigation measures. It also identifies who is responsible for implementation of the mitigation measures, how implementation can be verified, and the frequency for each of the potential overall impacts.

Mitigation measures were also recommended for specific value chain enterprises including oil palm, cocoa, rice and cassava, sweet potato and groundnut farming. Mitigation measures for impacts of market infrastructure including: construction and rehabilitation of feeder roads and farm tracks and culverts and bridges, rehabilitation of Agro Business Centres (ABC), land development activities and small scale (earthen) dams and irrigation schemes in the IVS were also recommended. Apart from the strategy for a robust and effective grievance/ complaints management mechanism to reduce conflicts set out in the ESMF, AVDP will also rely on IFAD complaints procedure to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of its environmental and social policies and the mandatory aspects of its Social, Environmental and Climate Assessment Procedures in the context of IFAD-supported projects.

Funding the Environmental and Social Monitoring Plans

A total of USD 775,082.00 (1.2% of the total estimated project cost) has been estimated for the environmental and social monitoring plans for the AVDP. A successful mainstreaming of climate change and the ESMF into implementation of the AVDP project requires adequate sensitization and the strengthening of institutional capacities, in particular those Farmers Organization, Agricultural Development Program (ADP), and Women Organizations. It also requires context-specific, in-situ training sessions for farmers and other actors in the value chain to mainstream climate-smart agricultural value chain and improve their resilience. The total training cost to achieve this is estimated at USD 398,689 which represents about 0.62% of the project cost. The Adaptation Fund (AF) will support the cost for implementing the Environmental and Social Monitoring Plans and the associated capacity building to mainstream climate resilience into the AVDP.

1. INTRODUCTION

1.1 Background

Sierra Leone has a total landmass of 72,368 square kilometres and a population of around 7.4 million (40 per cent youth), growing at 2.2 per cent annually.⁷⁶ Environmental degradation and Poverty are widespread but is particularly acute and concentrated in the rural areas where 59 per cent of the population live⁷⁷. About 59.7 per cent of rural households in Sierra Leone are food insecure, compared with 25.1 per cent in urban areas.⁷⁸ Food expenditure for the rural household averages 63 per cent of total household expenditures. Ironically, food insecurity is highest in households living in livelihood zones dominated by food crop production. It is also more visible in households headed by women, and highest during the months of August to October when rural married women bear the brunt of caring for the home when the husbands migrate to the diamond mines in search of employment. Although the Sierra Leone economy grown substantially since the end of the civil war in 2002, it suffered two major shocks in 2014/2015 – the Ebola epidemic and the collapse of iron ore prices, with GDP growth shrinking to -21 per cent in 2015. Although economic growth resumed following new investments in mining, agriculture and fisheries, with a GDP growth of 4.3 per cent in 2016, Sierra Leone remains at the bottom of the Human Development Index (HDI) (with 0.420 in 2015, ranking 179th out of 188 countries⁷⁹).

Agriculture, the largest sector in the economy, accounted for 59 per cent of GDP⁸⁰ in 2015, 62 per cent of the labour force⁸¹, and 22 per cent of export earnings.⁸² Cash crops produced for export include cocoa and coffee, while oil palm is produced for domestic consumption and some export. The focus commodities which has been identified on a national basis are: rice, cassava, oil palm, fisheries (especially artisanal) and non-timber forests products. These are commodities widely managed by the poorest but with potential for growth and contribution to poverty reduction and food security.⁸³ The key agricultural sector challenges include: expert crisis, declining soil fertility, low technology input, agricultural infrastructure, value chain and value additions, input and output marketing, and financial services. Others are: technology access and farmer empowerment, formal farmer based organisation, access to land, tax structure, investment policy, fisheries, weak sector coordinating mechanism, gender and youth in agriculture, and nutrition diversification and farmer health⁸⁴. However, Sierra Leone's agriculture contributes to widespread environmental degradation through poor management practices due to slash and burn practices and most farmers are not aware of the linkage between farm practices and environmental degradation. The management and control of pesticides in Sierra Leone is also weak⁸⁵.

1.2 Rationale and Objectives of the ESMF

The Sierra Leone Environmental Protection Agency (EPA-SL) requires levels of screening ranging from registration, Preliminary Environmental Assessment Report, to Mandatory EIA for agricultural projects depending on scale (small, medium and large) and the extent of the likely environmental impacts. The Agricultural Value Chain Development Project (AVDP) has been rated as a category B project during the IFAD Social Environmental and Climate Assessment Procedures (SECAP) analysis, indicating that the project may have reduced adverse social impacts on human populations or environmentally significant areas. The project has also been rated as highly vulnerable to the impact of climate change, largely due to the rain-fed nature of

⁷⁶World Bank data, 2016

⁷⁷Statistics Sierra Leone, 2015 Population and Housing Census, December 2016

⁷⁸Government of Sierra Leone, WFP and FAO, State of Food Security in Sierra Leone 2015

⁷⁹United Nations Development Programme (UNDP), 2016 Human Development Report, August 2017

⁸⁰Economic Intelligence Unit, Country Report 4th Quarter, 2016

⁸¹International Labour Organization (ILO) et al, Sierra Leone 2014 Labour Survey Report, 22 September 2015

⁸²World Bank, Sierra Leone, 2015

⁸³ National Sustainable Agriculture Development Plan 2010-2030: Sierra Leone's Comprehensive African Agriculture Development Programme. Version Adapted by CAADP Compact 18th September 2009, Freetown

⁸⁴ National Sustainable Agriculture Development Plan 2010-2030: Sierra Leone's Comprehensive African Agriculture Development Programme. Version Adapted by CAADP Compact 18th September 2009, Freetown

⁸⁵ EIA Guidelines for the Agricultural Development, Sierra Leone Environmental Protection Agency

agriculture in Sierra Leone, the rising trend in maximum temperature which could negatively impact cocoa production, and the generally weak adaptive capacity in Sierra Leone. The project design mission has proposed additional fund from the Adaptation Fund (AF) to mainstream climate resilience into the agricultural value chains, market infrastructure and improve climate support services.

The agri-enterprises and related infrastructure projects supported under AVDP will be implemented in locations/communities within all the 16 districts that are not yet known. As a result, the AVDP requires the development of an environment and social management framework (ESMF) to guide subprojects implementation.

The main objectives of the ESMF as per the terms of reference of this study, are to:

- Identify potential impacts of the AVDP project and to prepare a generic Environmental and Social Management Plan for the direct and indirect impacts, as well as incremental impacts as they relate to land use changes, deforestation and soil degradation, soil erosion and flooding, dust emissions, noise pollution, agrochemical usages resulting from AVDP. It also addresses mitigations for issues related access and social relations, benefits sharing and settling of grievances, among others.
- To formulate an Environmental and Social Management Framework (ESMF) including any standards and procedures, specifying how unidentified subprojects whose location are unknown will systematically address environmental and social issues in the screening for environmental and social impacts and categorization, site selection criteria, mitigation measures, design, implementation and operational phases as well as maintenance of the subproject lifecycle;
- For infrastructure related projects, to formulate Environmental and Social guidelines for construction firms to be recruited as contractors. These guidelines shall be recommended for incorporation in contractor's bids and contract documents.

1.3 Approach and Methodology and Stakeholders Consultation

The first design mission for the PDR of the AVDP was completed in late 2017, and ready for QE as at 30 April 2018. Component 1 (Climate Resilient and Smart Agricultural Production) of the AVDP is expected to strengthen organizations and support increased production and productivity of rice, cocoa and oil palm, by training the farmers on good agronomic practices, supporting their access to inputs, equipment and infrastructure, and linking them to markets. From the logical framework, the goal is to improve the livelihoods and climate change resilience of rural farming households in Sierra Leone. The core indicators related to component 1 include: percentage of persons/households reporting adoption of environmentally sustainable and climate-resilient technologies and practices; percentage of persons/households reporting adoption of new improved inputs technologies or practices; and number of hectares of land brought under climate-resilient management.

The AVDP is expected to be supported by the Adaptation Fund (AF) to the tune of 9% to achieve the objectives and key targets of Component 1. The Government of Sierra Leone is, therefore, applying to the AF for a request for project funding from the Adaptation Fund to the tune of USD 9.9m. The overall objective of this additional climate finance for adaptation is to reduce vulnerability and increase adaptive capacity to respond to the impacts of climate change, including variability at local and national levels. It will also assist in addressing the resilience of natural resources critical for sustaining agricultural production and increasing food security. Specifically, the additional AF fund is expected to: Climate-proofed agricultural value chain (production, post-harvest and marketing) and climate resilient livelihood diversification (AF component 1); Enhance Water control, security and management measures (AF component 2); and Enhance climate service infrastructure, delivery and early warning in agriculture (AF component 3).

Social, Environmental and Climate Assessment Procedure (SECAP) notes for the AVDP PDR and the AF Request for Project Financing Proposal have identified a number of key

environmental and climate issues for the project to include: Maximum temperature increases with decreasing climatic suitability for cocoa production; increased frequency of heat waves as well as the extension of dry spells could also lead to a reduction in the production of subsistence crop; increased frequency extreme precipitation events could lead to an increased disruption of market services and infrastructures such as roads; degradation of natural resources as a result of unsustainable agricultural practices (slash and burn, firewood collection, wood harvest for charcoal, logging, etc.); environmental impact of construction of feeder roads; over application of fertilizer; and land tenure rights and gender inequality.

The QE for the AVDP PDR has also raised serious concerns about possible deforestation resulting from Oil Palm cultivation, as well as wetland degradation resulting from rice cultivation in the coastal swamp and mangrove areas in Sierra Leone. It also raised environmental issues about the construction and rehabilitation of market-connected farm roads. This ESMF report builds on the SECAP notes to examine specific issues especially deforestation resulting from Oil Palm and Cocoa cultivation, removal of swamps and mangrove for wetland rice cultivation; effects of construction of earthen dams in the inland valleys; impact of rehabilitation and construction of rural market-connected farm roads on the environment; and land tenure rights and land accessibility, and gender inequality, among others.

In terms of the technical scope, the ESMF reviewed environmental, climate and social impacts, focusing on unsustainable agricultural practices and climate change. It also reviewed a number of legal and policy frameworks related to agriculture, environment, climate, access to land, gender issues in Sierra Leone. These documents include: The Constitution of the Republic of Sierra Leone 1991; The Environment Protection Act, 2000; The Sierra Leone Meteorological Agency Act, 2017; The Forestry Act, 1988; The National Youth Service Act, 2016; The National Land Policy for Sierra Leone, 2015; National Sustainable Agriculture Development Plan 2010-2030; National Environmental Policy (Revised October 1994); Sierra Leone Land Degradation Neutrality National Report; Sierra Leone National Action Plan to Combat Desertification and Land Degradation; EPA-SL EIA Guidelines for the agricultural Development; Sierra Leone's Intended Nationally Determined Contribution; and National Resilience Priorities Report (NRP-AGIR), 2017.

Consultation was also held with officials in the Ministry of Agriculture, Forestry and Food Security (MAFFS), Ministry of Lands, Country Planning and the Environment, Ministry of Works, Environmental Protection Agency (EPA), Forestry Department, and the Sierra Leone Meteorological Agency. In addition, valuable time was spent to discuss with project management officials of the ongoing Smallholder Commercialization Programme - Global Agriculture and Food Security Programme (SCP GAFSP) Project with respect to environmental and social concerns.

The IFAD's Social Environment and Climate Assessment Procedures (SECAP) guidelines, IFAD's Environment and Natural Resources Management Policy, the Gender Equality and Women's Empowerment, and Targeting policies were also consulted in developing this ESMF document.

1.4 Disclosure of ESMF

IFAD's Policy on the Disclosure of Documents (2010) requires full disclosure to the public, and includes information notes on projects being developed for Board presentation, agreements for approved loans and grants, and project/program design documents. This ESMF will therefore be disclosed on IFAD's official website (<http://www.ifad.org>). In addition, the ESMF will be disclosed on the Ministry of Agriculture, Forestry and Food Security's (MAFFS) official website (www.maffs.gov.sl).

1.5 Challenges and Assumptions

The challenges in preparing the ESMF include:

- The specific agri-enterprise projects locations are still unknown, the ESMF has assessed impacts based on likely proposed projects in comparable locations at districts based on

- the knowledge of the environmental conditions;
- Due to time limitations (only 7 days granted for the ESMF Development) and logistical reasons, field consultations were limited to the Ministries, Agencies and Departments (MDAs) which are located in Freetown.

The scope of the subprojects to be supported is still unclear. As at the time of this ESMF, IFAD is still discussing with the World Bank and the MAFFS with the view to make significant changes to the original design of the AVDP Project. However, it is highly likely that the value chain crops to be supported (Rice, Oil Palm, Cocoa, and Vegetables) will remain the same, and the focus on smallholder farmers across the districts will also remain. It is also highly likely that supporting Climate Resilient and Smart Agricultural Production will remain one of the key components, and the support from Adaptation Fund will be pursued.

1.6 Report Structure

Chapter 1 describes the objectives of the ESMF and the key environmental and climate issues for the AVDP and the AF request, as well as the assumptions for the ESMF. Chapter 2 describes the AVDP project area and target groups, project objectives and impact indicators, implementation structure, potential partners, and environmental and social category. Chapter 3 reviews some of the legal, institutional and regulatory framework for ESIA and agri-business in Sierra Leone and how they affect the AVDP. Chapter 4 describes in detail the environmental, climate change and social contexts of the AVDP. Chapter 5 reviews in detail the potential positive and negative environmental, climate and social impacts of the project. Chapter 6 describes the Environmental and Social Management Plan for AVDP and the Stakeholder Engagement, Community Sensitization, Expectation and Grievances management mechanisms. Chapter 7 presents a review of Environmental, Climate, Social Impacts of AVDP Sub-Projects and the Environmental and Social management Framework (ESMF) for Agricultural Value Chain Stages. Chapter 8 describes the framework for Environmental and Social Screening of Sub-Projects. Chapter 9 presents the Environmental and Social Impacts monitoring plans and cost, and Chapter 10 itemizes the capacity building and training for mainstreaming the Environmental and Social Management and Monitoring Plans.

2. DESCRIPTION OF THE PROPOSED PROJECT

2.1 Project Area and Target Groups

AVDP will be implemented in the current 16 districts of Sierra Leone. This will allow further scaling up through the established institutional capacities and available potential for horizontal expansion and improved productivity of the selected crops combined with market infrastructure improvements. Table 1 summarizes some of the characteristics of the districts. Most of the districts have poverty rates of 50 percent to 62 percent, except Western Area Urban with 20.7 per cent, and Moyamba and Tonkolili with 70.8 percent and 76.4 per cent, respectively. The widespread poverty justifies the nationwide coverage by AVDP. Agriculture is the dominant economic activity in the rural districts, followed by mineral mining in some districts.

Table 1: Basic facts about the districts in the project area

Province/ District	No. of chief- doms ¹	Land area		Cropped area under specific major crop (%) ¹			Poverty head- count (%) ²	Prevalence of malnutrition (%) ³
		Total (km ²)	Under crop (ha) ¹	Rice	Oil palm	Cacao		
Eastern	46	15,553	473,925	46	9	18	61.3	
Kailahun	14	3,859	202,131	41	12	23	60.9	n.a.
Kenema	17	6,053	141,837	49	12	17	61.6	5.5
Kono	15	5,641	129,955	50	2	13	61.3	4.5
Northern	54	35,846	494,059	62	7	0	61.0	
Bombali								
Karene	14	7,895	79,681	62	4	0	57.9	4.7
Kambia	7	3,108	79,592	74	5	0	53.9	6.5
Koinadugu								
Falaba	11	12,121	102,387	69	3	0	54.3	5.3
Port Loko	11	5,719	125,625	58	8	0	59.9	6.7
Tonkolili		7,003	106,775	52	13	0	76.4	6.8
Southern	52	19,694	334,338	47	13	2	55.4	
Bo	16	5,219	116,346	48	19	4	50.7	4.3
Bonthe	11	3,468	51,662	30	0	13	51.4	n.a.
Moyamba	14	6,902	85,161	54	4	0	70.8	4.4
Pujehun	11	4,105	81,170	48	15	2	54.1	4.0
Western	12	557	11,272	35	3	1	28.0	
Western Area Rural	4	544	9,406	34	0	2	57.1	2.3
Western Area Urban	8	13	1,724	45	10	2	20.7	1.9
Total (National)	164	71,650	1,313,447	52	9	7	52.9	4.7

Source: 1 Statistics Sierra Leone, 2015 Population and Housing Census, December 2016
2 World Bank, A Poverty Profile for Sierra Leone, June 2013
3 UNICEF, Sierra Leone Nutrition Survey, 2014

AVDP will target about 33,000 direct beneficiaries drawn from smallholder farmers, FBOs including cooperatives, partnering financial institutions, small scale rural entrepreneurs, women and rural youth (18 – 35 years).

Geographic targeting: will be applied specially in the selection of the districts and communities to be supported for oil palm and cocoa production, taking into account the climate change impact and the legacy factor from previous IFAD-assisted interventions.

Gender targeting: criteria have been specified for the selection of beneficiaries for IVS and tree crops development. AVDP will mainstream gender sensitive approaches and farmer-led innovations using the GALS methodology. In conjunction with the MAFFS Gender and Nutrition Unit, AVDP will promote gender equity as well as the participation of women and youth in all the value chain activities.

2.2 Goal, Objectives and Impact indicators

The **overall project goal** is livelihoods, food security and climate change resilience of rural farming households in Sierra Leone improved. The project development objective (PDO) is to promote agriculture as a business for enhanced incomes and reduced rural poverty. The objective feeds directly into the two strategic objectives of the Country Strategy Note 2017-18, of: smallholder

farmers' access to technical skills and market is improved; and rural communities' access to finance is improved.

The core indicators include:

- Goal: Total outreach - number of households receiving services promoted or supported by the project (25,667 at MTR and 34,000 at completion)
- Goal: Percentage of households that experience a reduction of hungry season from 4 to 2 months (50 per cent at MTR and 80 per cent at completion)
- PDO: Number of rural producer organisations engaged in formal partnerships/ agreements or contracts with public or private entities (100 at MTR and 300 at completion)
- PDO: Number of existing regulations/policies/strategies proposed to policy makers for approval, ratification or amendment (one at MTR and two at completion)
- Component 1: Percentage of persons/households reporting adoption of new improved inputs, technologies or practices (40 per cent at MTR and 100 per cent at completion)
- Component 1: Percentage of households reporting an increase in production (25 per cent at MTR and 100 per cent at completion)
- Component 2: Percentage of supported rural producers' organisation members reporting a decrease in post-harvest losses (30 per cent at MTR and 100 per cent at completion)
- Component 2: Percentage of persons reporting improved physical access to market, processing and storage facilities (40 per cent at MTR and 100 per cent at completion)

2.3 Project implementation structure

The MAFFS National Steering Committee (NSC) will provide oversight, direction and advice for project implementation, and in particular, approve the AWP&B of the project as well as its periodic progress reports. The NSC will include representation of key stakeholders including, the ministries for Finance, Economic Development and Planning, Trade and Industry, Local Government, Community Development, Social Welfare, Gender and Children Affairs, Lands, Country Planning and Environment, EPA, Youth and Sports, Directorate of Feeder Roads of Sierra Leone Road Authority (SLRA), the Chief Agricultural Officer/Technical Head of MAFFS, two members of Farmers Associations (one for staple crops and one for tree crops), and two private sector representatives (one for staple crops, especially rice, and the other for tree crops). The National Programme Coordinator of NPCU shall be the Secretary of the NSC for AVDP.

The existing IFAD NPCU will implement AVDP in partnership with the District Government/District MAFFS, partner private sector entities and FBOs/Cooperatives. This responsibility includes project planning, financial management, contracting implementing partners for specific activities and tasks, M&E, communication and knowledge management (C/KM), supervision of project activities at the district level, facilitating linkage with governmental, private sector and development institutions, and integrating project experience into policy dialogue. A small complement of Social Mobilization staff would be added to the NPCU and district level to lead the farmer organization (FO) and mobilization process, facilitate business planning, as well as the interface between the FOs and private sector and extension service providers. A Policy Officer will be recruited as the focal point for policy dialogue for IFAD projects. A matching grant (MG) steering committee will also be established to manage the funds. Staff implementing AVDP will have opportunity for training to enhance their performance. At the district level, the District Agric Officer (DAO) of MAFFS will be responsible for coordinating the implementation of project activities, and is expected to lead the market linkage platforms at the initial stage of development. S/He will be supported by the team of subject matter specialists and extension agents.

IFAD will supervise the project directly and the IFAD Country Office will provide continuous back support and guidance. A baseline study will be carried out in the first year of project implementation to establish future monitoring and impact assessment benchmarks. A Mid-Term review will be carried out jointly with the government to evaluate project progress, identify areas for further improvement and revise project approach, activities and budgets on the basis of MTR findings.

2.4 Adaptation Fund

The Adaptation Fund will strongly support climate resilience of smallholder farmers and other value chain actors in many AVDP activities to complement their income and livelihood sources. The AF will implement additional non-co-financed activities to assist Sierra Leone to meet the costs of adaptation activities and increase resilience at the community and national levels. The activities are:

- Use the University of Njala's FAO sponsored curriculum to train trainers in climate smart agriculture and pilot 642ha plots of land.
- Train Barefoot Women⁸⁶ as solar technicians and install solar electrification in rural villages.
- MoU with MAFFS to plant sustainable Acacia forestry plots for charcoal and furniture, raise awareness against slash and burn, pilot low cost efficient charcoal kilns.
- Support alternative forestry livelihoods: honey bee and snail farming, aquaculture in earth dams and small ruminants.
- Complete the GEF project to support the Meteorological Department by developing a governance management plan to successfully and sustainably operate the automatic weather stations that have already been built, provide capacity building training, install a base station and weather forecasting software, and support the development of an Early Warning System service to farmers. If successful construct more weather stations.
- Support EPA in a climate change awareness raising programme.

The Adaption Fund is also expected to support the cost of mainstreaming the ESMF into the AVDP project implementation.

2.5 Other potential partnerships

The AVDP will be strongly aligned with The World Bank's Smallholder Commercialization and Agribusiness Development Project (SCADeP) being implemented in partnership with the UK DFID. Discussions are already ongoing to align and harmonise SCADeP and AVDP for efficient application and utilization of resources.

A range of public and private sector service providers and implementation partners will be engaged by AVDP to facilitate project implementation at different stages of the value chains and build the capacity of the project target groups towards agriculture as a business. The modalities for the engagement of the service providers are specified in the description of the subcomponents in the PDR.

2.6 Key issues identified on social and environmental management

- Maximum temperature increases threaten increased risk of high yielding cocoa crop production failing.
- Despite FFS training, farmers have been reported to continue to apply too much fertilizer and at the wrong time which increase waste, indirect GHG emissions and reduce productivity.
- Deforestation is a serious and chronic problem for Sierra Leone. There is increasing 'Savannisation' as the Savanna ecosystems increased from 40.5% of the total area of Sierra Leone in 1975 to 46% in 2013. In the same vein the forest area declined from 5% in 1975 to 3.47% in 2013; and woodland decline from 15.4% in 1975 to 8% in 2013⁸⁷. Sustainable development in a largely agrarian economy is heavily reliant on the sustainable use of biodiversity and Natural Resource Management (NRM).
- The construction of feeder roads has been found to have overlooked their environmental

⁸⁶Barefoot Women Solar Engineers is a local NGO that trains illiterate women as solar PV engineers to set up small businesses to install and repair solar electrification in their villages.

⁸⁷ Tappan, G. G., Cushing, W.M., Cotillon, S.E., Mathis, M.L., Hutchinson, J.A., and Dalsted, K.J., 2016, West Africa Land Use Land Cover Time Series: U.S. Geological Survey data release, <http://dx.doi.org/10.5066/F73N21JF>

- impacts by obstructing IVS drainage areas and causing waterlogging of rice fields.
- Land tenure rights for the rural poor are weak to non-existent. Farmers are frequently displaced by landowners after land improvement interventions have taken place.
- Gender inequality in Sierra Leone is one of the worst globally. Women have no land rights and are not, or are underrepresented in land decision-making institutions.

In sum, The AF component will contribute to reduced vulnerability and increased adaptive capacity to respond to the impacts of climate change, including variability at local and national levels as well as on natural resources critical for sustaining agricultural production and increasing food security with respect to:

- Climate-proofed agricultural value chain (production, post-harvest and marketing) and climate resilient livelihood diversification
- Water control, security and management measures
- Enhancement of climate service infrastructure, delivery and warning in agriculture

2.7 Environmental and Social category

The potential environmental and social risks posed by the AVDP project are limited and constrained to feeder road rehabilitation, rice production, small-scale irrigation and drainage, fertiliser usage and agricultural rehabilitation of cocoa and oil palm. The project will not have any negative impacts such as the involuntary taking or restriction on the use of land resulting in physical or economic displacement or negatively affect indigenous peoples or sites of historic, religious or cultural significance. The project is rated as a '**Category B**' project, which means that no formal Environmental and Social Impact Assessment (ESIA) will be required. Further analysis and environmental management plans will however be mainstreamed throughout project design and implementation and be largely covered by the Adaptation Fund funded activities.

In terms of Climate Risk Assessment, the project has been classified as a **High-Risk category**. This classification is based on the fact that Sierra Leone is classified as one of the Least Developed Countries (LDC), least able to adapt to climate change. The project target group is totally dependent on climate-sensitive natural resources such rain-fed agriculture and it is vulnerable to the increase in unpredictable rainfall patterns and increases in temperature, all of which is also predicted to reduce climate suitability of high yield cocoa varieties by up to 40%.⁸⁸ Funding from the Adaptation Fund is expected to assist in addressing some the causes of the elevated vulnerability to climate change.

⁸⁸ Götz Schroth et.al. (2016). Vulnerability to climate change of cocoa in West Africa: Patterns, opportunities and limits to adaptation. *Science of the Total Environment* 556, 231–241

3. LEGAL, INSTITUTIONAL AND REGULATORY FRAMEWORK FOR ESIA AND AGRI-BUSINESS IN SIERRA LEONE

3.1 Legal Framework

3.1.1 The Constitution of the Republic of Sierra Leone 1991

The 1991 constitution of the Republic of Sierra Leone clearly stipulated inclusion stating that ‘the State shall promote national integration and unity and discourage discrimination on the grounds of place of origin, circumstances of birth, sex, religion, status, ethnic or linguistic association or ties⁸⁹. Under the economic objectives, the constitution guarantees the sustainable utilization of natural resources and reliance of the country on agriculture for food security. Although the constitution made no express mention of the environment, the constitution stated that the State shall within the context of the ideals and objectives for which provisions are made in this constitution: harness all natural resources of the nation to promote national prosperity and an efficient, dynamic and self-reliant economy; manage and control the national economy in such a manner as to secure maximum welfare and freedom of every citizen on basis of social justice and equality of opportunity; protect the right of any citizen to engage in any economic activity without prejudice to the rights of any other citizen to participate in areas of the economy; place proper and adequate emphasis on agriculture in all its aspects so as to ensure self-sufficiency in food production⁹⁰.

3.1.2 The Environment Protection Act, 2000⁹¹

The National Environment Protection Board was established by the Environment Protection Act, 2000. The function of the Board include: (a) facilitate coordination, cooperation and collaboration among Government Ministries, local authorities and other governmental agencies in all areas relating to environmental protection; (b) review national and sectoral environmental policies and make such recommendations or proposals it may think necessary to the Minister; (c) review environmental impact assessments prepared pursuant to this Act and make appropriate recommendations to the Director; (d) investigate or cause to be investigated, any activity, occurrence or transaction which it considers is likely to have or result in harmful consequences to the environment and advise on measures necessary to prevent or minimize such consequences. (e) advise the Minister on areas of environmental protection and control requiring special or additional measures, indicating the priorities and specific goals to be achieved; (f) undertake or cause to be undertaken specific studies and research aimed at developing strategies for the protection of the environment and make appropriate recommendations to the Minister; and (g) consider any other matters which may be referred to it by the Minister and make appropriate recommendations or proposals thereon⁹².

According to the Act, projects that require the submission of an Environmental Impact Assessment (EIA)⁹³ report related to the AVDP include sub-projects whose activities involve the following, among others:

- substantial changes in renewable resource use (e.g. conversion of land to agricultural production, forestry or to pasture land, rural development, timber production);
- substantial changes in farming and fisheries practices (e.g. introduction of new crops, large scale mechanization or use of chemicals in agriculture);
- infrastructure (e.g. roads, bridges, airports, harbours, transmission lines, pipelines, railways);
- exploitation of hydraulic resources (e.g. dams, drainage and irrigation projects, water basin development, water supply);

⁸⁹ Section 6(2) of the 1991 constitution of the Republic of Sierra Leone

⁹⁰ Section 7(1a-d) of the 1991 constitution of the Republic of Sierra Leone

⁹¹ The Environment Protection Act, 2000. Supplement to the Sierra Leone Gazette Vol. CXXXI, No 14 dated 2nd March, 2000

⁹² The Environment Protection Act, 2000, Part II (4a-g)

⁹³ See first schedule of the Environmental Protection Act 2000

3.1.3 The Sierra Leone Meteorological Agency Act, 2017⁹⁴

The Sierra Leone Meteorological Agency was established by the Sierra Leone Meteorological Agency Act 2017 to serve as the sole authority for the provision of meteorological and climatological services throughout the country. The responsibility of the agency, among others, include to: Advise government on all aspects of meteorology, climatology, climate change and other climate related issues; Promote the use of meteorology in agriculture, food monitoring and in the monitoring of flood, drought, desertification and other related activities; Monitor the meteorological and climatological components of environmental impact assessment, pollution, degradation and other concentrations; Keep in an appropriate and safe archive all meteorological, climatological, climate change data and information for use on future planning, research and implementation of projects as may be necessary; Provide meteorological information, advice and warnings for agriculture, civil and military aviation, surface and marine transport, operational hydrology and management of energy and water resources in order to mitigate the effects of natural disasters such as floods, storms, and drought and disease outbreak⁹⁵.

3.1.4 The Forestry Act, 1988⁹⁶

The Act stipulates that the duties of the Chief Conservator as the Implementor of this Act shall include, among others: promoting and assisting the practice of forestry in agricultural, pastoral and other areas of the country in order to ensure the continued local supply of forest products and the protection of soil and water resources. According to this Act, no person in a national or community forest shall cut, burn uproot, damage or destroy any tree, remove any timber or other forest produce, clear any land, build any road or structure, take any earth, clay, sand, gravel or stone, cultivate any crop, graze any animal, or conduct any forest operation except pursuant to a concession agreement, contract of sale, licence, confirmed usage right or other authority under this Act. The Chieftom Council of any Chieftom may conclude an agreement with the Chief Conservator providing for the constitution as a community forest of any land within the Chieftom, subject to the approval of the District Officer for the District in which the land is situated. The Forestry Division shall provide all necessary advice and assistance for the management of community forests, including the preparation of a management plan for any community forest which the Chieftom Council may request.

3.1.5 The National Youth Service Act, 2016⁹⁷

The National Youth Service Act of 2016 highlights the importance of youth participation in agriculture and environment sectors which are important to the Sierra Leone economy. The Act stipulated that Service Corps members shall be deployed in the public and private sectors including: agriculture, fisheries and marine resources, mining, environment, education, health and sanitation, social services and community developments, engineering, surveying and mapping and any other sector as or project as the minister may determine⁹⁸.

3.2 Institutional and Policy Framework

3.2.1 The National Land Policy for Sierra Leone, 2015⁹⁹

The new Sierra Leone Nation Land Policy drafted in 2015 has among its objectives: to ensure the security of tenure and protection of land rights to all landholders regardless of their own form of land tenure. As part of the strategy towards guaranteeing and protection of land rights, it requires the government to, among others, address the existing gender inequality and ensure that both men and women enjoy equal rights to land before marriage, in marriage, after

⁹⁴ Sierra Leone Meteorological Agency Act, 2017. Supplement to the Sierra Leone Gazette Vol. CXLVIII, No 64 dated 28th September 2017

⁹⁵ See section 12 (2a-p) of the Sierra Leone Meteorological Agency Act, 2017

⁹⁶ Forestry Act of 7th July 1988. Supplement to Sierra Leone Gazette Vol. CXIX No. 38

⁹⁷ The National Youth Service Act, 2016. Supplement to the Sierra Leone Gazette Vol. CXLVII, No 147 dated 24th March, 2016

⁹⁸ See the National Youth Service Act, 2016 section 34 (a-j)

⁹⁹ National Land Policy for Sierra Leone, November 2015. Ministry of Lands, Country Planning and the Environment.

marriage, and on succession to rights in land as provided for under customary law, and shall ensure the harmonization of the two regimes (freehold/lease in the Western area hold and community ownership in the Districts) under which land is held in Sierra Leone. It also requires government to ensure that women are accorded the same right and equal protection as men in civil law generally, and in law of succession in particular as the customs and traditions permit, including equal capacity to acquire and maintain rights in property, independently or in association with others regardless of their marital status; repeal any law that discriminates against women on the basis of gender or marital status; pass legislation to eliminate customs and practices that discriminate in work, business, public affairs and participation in decision making in matters that affect their rights generally; and institute the right to affirmative action for women for the purpose of redressing the imbalances created by history, tradition and custom.

In terms of land management, the policy mandated government to ensure the sustainability of land for agricultural development programme; and the Ministry of Agriculture shall develop comprehensive training in land-use and capacity assessment for trainers of small farmer organizations to facilitate best practice in land resource management. It also mandated government to promote tree plantation projects in deforested areas, support village community forests development initiatives, and promote re-forestation and conservation measures. It encourages preparation of participatory environmental action plans by communities and individuals living in environmentally sensitive areas, introduce incentives to encourage the use of technology and scientific methods for soil conservation, encourage use of traditional soil conservation methods, put measures in place to control degradation of land through abuse of inputs and inappropriate land-use practices, and put in place institutional mechanisms for conservation of quality of land for environmental conservation purposes.

3.2.2 National Sustainable Agriculture Development Plan 2010-2030¹⁰⁰

The new vision of the Ministry of Agriculture, Forestry and Food Security (MAFFS) is to “make agriculture the ‘engine’ for socio-economic growth and development”. Mainstreaming cross-cutting themes including gender and youth promotion, farmer health care issues (including HIV/AIDS, IVS sicknesses and hazards, malaria, etc.) and natural sustainability is one of the cardinal objectives to achieve the vision which is driven by the National Sustainable Agriculture Development Programme (NSADP). The policy document identified the key agricultural sector challenges to include: expert crisis, declining soil fertility, low technology input, agricultural infrastructure, value chain and value additions, input and output marketing, financial services, technology access and farmer empowerment, formal farmer based organisation, access to land, tax structure, investment policy, fisheries, weak sector coordinating mechanism, gender and youth in agriculture, and nutrition diversification and farmer health.

The policy’s Agenda for Change and Agriculture Sector Vision is anchored on:

- Increasing agricultural productivity (intensification and diversification) in particular among the rural poor smallholders who constitute the poorest segment of society, through a variety of support measures along the entire agricultural value chain, from pre-planting to marketing
- Promoting commercial agriculture through private sector participation
- Improving agricultural research and extension delivery systems
- Promoting efficient and effective sector resource management systems
- Mainstream cross-cutting issues in agriculture including self-sufficiency (e.g. no dependency), gender, youth employment, farmer health (including HIV/AIDS) and environmental sustainability
- Managing and exploiting Sierra Leone’s fishery and marine resources
- Managing and exploiting Sierra Leone’s forestry resources including the importance of conserving the now depleted forests of Sierra Leone.

The focus Commodities which has been identified on a national basis are: rice, cassava, oil palm, fisheries (especially artisanal) and non-timber forests products. These are commodities widely managed by the poorest but with potential for growth and contribution to poverty reduction and food security.

¹⁰⁰ National Sustainable Agriculture Development Plan 2010-2030: Sierra Leone’s Comprehensive African Agriculture Development Programme. Version Adapted by CAADP Compact 18th September 2009, Freetown

Funding remains a formidable challenge as The NSADP/CAADP requires a total outlay of USD 333.5 million for its implementation in the first five years (2010 – 2015) with a funding gap of USD 223million.

3.2.3 National Environmental Policy (Revised October 1994)¹⁰¹

The goal of the National Environmental Policy is to achieve sustainable development in Sierra Leone through sound environmental management. The policy objectives are to: secure for all Sierra Leoneans a quality of environment adequate for their health and well-being; conserve and use the environment and natural resources for benefit of present and future generations; restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere; preserve biological diversity, and the principle of optimum sustainable yield in the use of living natural resources and ecosystems; raise public awareness and promote understanding of the essential linkages between environment development, and encourage individual and community participation in environmental improvement efforts.

The strategies include:

- To establish and/or strengthen environmental protection standards, monitor changes in, and publish relevant data on; environmental quality and resource use;
- To make prior environmental impact assessment (E.I.A) of proposed activities which may significantly affect the environment or use of a natural resource and to provide relevant information, in a timely manner, to persons likely to be significantly affected by a planned activity and to grant them equal access and due process in administrative and judicial proceedings;
- To promote environmental management through the creation of administrative and infrastructural support with appropriate financial backing;
- To coordinate in good faith with other countries and agencies to achieve optimal use of transboundary natural resources and effective prevention or abatement of transboundary environmental protection.

The policy also specifies sector-specific policy direction to land tenure, land use and soil conservation; water resources; forestry and wildlife; biodiversity and cultural heritage; and gender and environment, among others.

3.2.4 Sierra Leone Land Degradation Neutrality National Report¹⁰²

The government of Sierra Leone has remained committed to the UNCCD since it signed and ratified the convention in September 1997. The country has expressed its commitment to set voluntary Land Degradation Neutrality (LDN) targets and identified design and implementation partners (including IFAD) with whom collaboration could be developed. The set targets are:

- Target 1: By 2030, promote reforestation through agro-forestry and sustainable land management practices, and the implementation of alternative livelihood schemes to restore 175 Sq. Km originally forested land in 2000 that has changed or lost its forest cover by 2010.
- Target 2: By 2035, ensure the rehabilitation of 12,237 sq.km of land area suggested as having declined, shown early signs of decline, or stable but stressed conditions in net productivity between 2000 and 2010.
- Target 3: By the year 2030, improve the productivity of 1,864 Sq.km of land area covered by shrubs, grasslands and sparse vegetation through controlled grazing, avoiding overgrazing, and adopting wild bush fire management practices.
- Target 4: By 2030, improve the productivity of 8,464 Sq. km of croplands through sustainable land management practices, agro-forestry and the establishment of green corridors in large scale commercial farms.
- Target 5: By 2035, implement wetlands conservation measures in order to improve 330 Sq. Km of wetlands showing decline, early signs of decline or stable but stressed conditions in net land productivity dynamics.

¹⁰¹ National Environmental Policy Revised Edition 1994

¹⁰² Sierra Leone Land Degradation Neutrality National Report, UNCCD National Focal Point Ministry of Lands, Country Planning and Environment
Environment Division Freetown

- Target 6: By 2023, implement land reclamation and rehabilitation programmes in the dredged mined-out areas degraded by Sierra Rutile mining Company.

3.2.5 Sierra Leone National Action Plan to Combat Desertification and Land Degradation

The first Sierra Leone National Action Plan (NAP) was formulated in November 2004 in fulfilment of the requirements of the UNCCD under the convention's Articles 9 and 10. The NAP was adopted by a broad range of stakeholders including representatives from Ministries, Departments and Agencies, Local Governments Institutions, Civil Society Organizations, Non-Governmental Organizations, Private Sectors and Academic and Research Communities. The Sierra Leone NAP 2014-2018 is formulated in support to the UNCCD strategy 2008-2018 to more effectively implement programs and projects to reverse and prevent desertification and land degradation, and mitigate the effects of droughts in order to contribute to poverty alleviation, improve livelihoods of people and achieve environmental sustainability. The NAP 2014-2018, therefore, is a working document for the synergy among the three Multilateral Environmental Agreements (MEAs) on biological diversity, climate change and land degradation at the country level, and the convergence of actions among Ministries, Department and Agencies (MDAs), local government authorities, the private sector and the civil society organizations (CSOs) to contribute to poverty reduction and environmental sustainability. The short to medium operational plan of SNAP include: creation of livelihood to affected population; sustainable use and management of affected ecosystem; and formulation of a national adaptation platform to climate change for food security and improved resilience.

3.2.6 EIA Guidelines for the agricultural Development

The draft EIA guidelines for the Agricultural Development document was prepared by the Environmental Protection Agency Sierra Leone (EPA-SL) under the Environmental Governance and Mainstreaming Project (EGMP) to guide developments in the agricultural sector. The 63 pages document covered: the screening criteria for environmental assessment for agricultural sector investments; scope of Environmental Impact Assessment (EIA), systematic procedures on Environmental Impact Statement (EIS) preparations, and guidelines on common potential impacts and mitigation measures.

The document recognizes that about 75% of Sierra Leones labour force is engaged in agriculture that is predominantly small-scale (most farms are less than 1.7 ha in size), with farmers that produce over 80% of the agriculture output operating farms using low inputs and rudimentary technologies. It also recognizes that Sierra Leone's agriculture contributes to wide spread environmental degradation through poor management practices due to slash and burn practices and most farmers are not aware of the linkage between farm practices and environmental degradation. The management and control of pesticides in Sierra Leone is weak. The document outlines the basic steps in the EIA process including: registration, screening, scoping, stakeholders' consultation, and detail EIA. Table 3.1 shows the scale of undertaking in agriculture and their level of assessments based on the EPA-SL EIA guidelines.

Table 3.1: Scale of Undertaking in Agriculture and their level of assessment

1.6.1.1.1	Activity/Undertaking	Scale and level of Assessment		
		Small Registration (Permit) ¹⁰³	Medium PEA ¹⁰⁴	Large EIA Mandatory ¹⁰⁵
I. CROP PRODUCTION				
1.	Cereals, (Maize, Rice, Sorghum, Millet). Roots and Tubers (Cassava, Yam, Cocoyam)	<2ha (5 acres)	2-8.3 ha	Above 8.3 ha. (20 acres)
2.	Vegetables (Tomatoes, Garden Eggs, Pepper, Chilli, Water Melon, etc.)	<0.8ha (2 acres)	0.8-8.3ha.	Above 8.3 ha
3.	Horticulture Crops (Pineapples, Citrus, Avocado, Cut Flowers, Mangoes)	<4.2ha. (10acres)	4.2-8.3 ha	Above 8.3ha.

¹⁰³ Registration (Permit): Project not anticipated to result in any adverse environmental impact. Permit could be issued upon registration

¹⁰⁴ PEAR (Preliminary Environmental Assessment Report): Project with limited environmental impacts that can be routinely resolved through application of limited mitigation measures or design changes

¹⁰⁵ EIA Mandatory: Project with the potential for significantly far reaching environmental impacts detailed field study and review

4.	Industrial, Tree/Plantation Crops (Tobacco, Cotton, Kola Nuts, Oil Palm, Coconut, Rubber, Plantain, Banana)	<6.2 (15 acres)	6.2-16.6 ha	Above 16.6ha. (40acres)
5.	Root and tubers	<2 ha.	2-8.3	Above 8.3 ha.
6.	Legumes/pulses	<2 ha.	2-8.3	Above 8.3 ha.
II. OTHER PESTICIDE RELATED ACTIVITIES				
1.	Bulk storage of Pesticides	PEAR at all levels		
2.	Transportation of Pesticide	PEAR at all levels		
3.	Disposal of Pesticides	PEAR at all levels		
i)	Pesticide Containers			
ii)	Unwanted Pesticides	EIA mandatory at all levels		
iii)	Spray Tank Mixture	License required at all levels		
4.	Registration of product	EIA mandatory through Dossier submission and evaluation		
III. IRRIGATION AND DRAINAGE				
1.	Surface Irrigation (Basin, Furrow, Border)	<100 ha	100-1,000 ha	>1,000 ha
2.	Overhead (Sprinkler, Drip) Irrigation	<100 ha	100-1,000 ha	>1,000 ha
3.	Flood Recession (Flood Plain Farming)	<2ha Surface Area	2-10 ha Surface Area	>10 ha Surface Area
4.	Ponds and Impoundments for Irrigation	<2ha Surface Area	2-10 ha Surface Area	>10 ha Surface Area
5.	Dams and Weirs for Irrigation	<5 m Height	5-10 m	>10 m

Source: EPA EIA Guidelines for the Agricultural Development

According to the guidelines, the following areas are considered as environmentally sensitive areas where any agricultural undertaking shall require an EIA¹⁰⁶:

- Wetlands (e.g., Mangroves, Estuaries and Lagoons)
- Ramsar sites or potential Ramsar site (Principally for conservation of birds but also includes wise use of wetland areas)
- Biosphere reserves (Internationally designated site as part of a global network combining both conservation and sustainable use of natural resources)
- Geological conditions (e.g. Earth Quake prone sites)
- National Nature Reserve (Nationally important nature conservation sites for biological or earth science interest)
- Highly erodible and marginally productive cropland (Areas along slopes with critical slope 17% and above with potentially unstable soils prone to erosion)
- Natural flood barriers
- World Heritage Sites (Protection of natural and cultural areas of outstanding universal value or areas of unique historical/archaeological or scientific interests)
- Site of Special Scientific Interest (SSSI) or potential (Special interest by reason of its flora, fauna, or geological or physiographical features).
- National Parks (Protection of wild and beautiful landscapes)
- Marine Nature Reserve (Conservation and protection of marine flora and fauna and sites of geological or physiographical interest).
- Areas which constitute the habitat of any endangered or threatened species of indigenous wildlife (flora and fauna)
- Areas Sacred Grooves/Cultural sites.
- Sources of Water Bodies and areas close to a water body (a minimum distance of 30m, aquifer recharge areas, areas with high water table (wells, boreholes, porous soil, etc.)
- Areas near Apiaries (honeybee sites), wildlife refuges, or parks, and
- Off-Reserves forests (riparian forests, hill forests, fire protection areas and buffers)

AVDP will take all necessary steps to avoid subprojects in environmentally sensitive areas.

3.2.7 Sierra Leone's Intended Nationally Determined Contribution (INDC)¹⁰⁷

Sierra Leone has been ranked as the third most vulnerable nation (after Bangladesh and Guinea Bissau) to adverse effects of climate change with low capacity to adapt and rural population most affected because of high dependence on rain-fed agriculture and natural resource-based livelihoods. Sierra Leone is committed to mainstreaming inclusive green growth in her development process. The implementation of the INDC is expected to support the transition to

¹⁰⁶ These will move the AVDP to Category 'A' in terms of environmental risks. The AVDP will take all steps to avoid sub-projects in environmentally sensitive areas

¹⁰⁷ Sierra Leone's intended nationally Determined Contribution, EPA, Sierra Leone

low-emission development and climate resilient society. The document recognized that Agriculture is the most important source of CH₄ emissions (86.67%), followed by the Land Use, Land Use Change and forestry (LULUCF- 5.631), and the LULUCF sector is the least significant source of CO₂ emissions by up taking 752,748Gg of CO₂ in 2000. Total emissions from all sources and sectors and for all gases, GHG emissions are projected to increase to about 4.8MtCO₂Eq in 2015 and to about 6.6MtCO₂ Eq in 2030. Agriculture and Waste sectors are projected to emit between 95 to 98% of the projected national emissions from 2015 to 2030. Sierra Leone intends to maintain its low emission levels (close to the world average of 7.58 MtCO₂e) by 2035 or neutral by 2050 by reducing her carbon footprint and by following green growth pathways in all economic sectors. This target will only be achieved with the availability of international support that will come in the form of finance, investment, technology development and transfer, and capacity building with substantial donor support estimated to about \$ 900 million.

3.2.8 National Resilience Priorities Report (NRP- AGIR), 2017¹⁰⁸

The Global Alliance for Resilience (AGIR) Sahel and West Africa, is a framework that helps to foster improved synergy, coherence and effectiveness in support of resilience initiatives across the 17 Sahelian and West Africa countries. The Sierra Leone Government in collaboration with partners is committed to addressing food and nutrition crisis prevention and management through a number of policy directions that are contributing to resilience building for the most vulnerable population. The National Resilience Priorities Report recognizes Agricultural season, Cultivation of Staple Food below subsistence level, Shocks (sickness, food price increase, lack of production inputs, etc.), Gender lens to issues of food insecurity (with few women having limited access to land, tools and equipment which impact negatively on their capability to produce, process and market food) and the Ebola Viral Disease (EVD) as the main driving force behind cyclical food insecurity in Sierra Leone. The national resilience priorities rest on four pillars including: improve social protection for the most vulnerable communities and households in order to secure their livelihoods; strengthen the nutrition of vulnerable households; sustainably improve agricultural and food productivity, the incomes of vulnerable household and their access to food; and strengthening governance in food and nutrition security.

3.3 IFAD Guidelines

3.3.1 IFAD Safeguard Policies

The IFAD'S ten Environmental and Social Values and Principles are relevant to the AVDP project¹⁰⁹. These social values and principles are:

- Address the vulnerability and adaptation needs for the rural poor
- Promote the sustainable use of natural resources and protection of key ecosystems.
- Focus on partnership-oriented initiatives for improved social and environmental quality
- Address environmental and social impact assessments of agricultural and non-agricultural activities in an integrated manner.
- Incorporate externalities and minimize social costs.
- Implement participatory approaches, with special emphasis on the role of women.
- Promote the development of Indigenous Peoples and other marginalized groups (pastoralists, hunters and gatherers).
- Promote environmentally sound agricultural and manufacturing processes.
- Ensure systematic environmental and social monitoring.
- Undertake Strategic Environmental Assessments

¹⁰⁸ Global Alliance for Resilience National Resilience Priorities Report 2017.

¹⁰⁹ <https://www.ifad.org/documents/10180/a5e3ffcc-0ed7-4bc6-b523-39c25dc1edd8>

3.3.2 IFAD SECAP Procedure¹¹⁰

The objectives of the Environment and Social Impact Assessment Study in the IFAD's SECAP procedure are to:

- identify key linkages between rural poverty and environmental management and assess the potential environmental and social impacts of the proposed project on the natural resource base and livelihoods of communities in the target areas;
- explore and identify key options for advancing environmental and social sustainability; and
- Recommend key opportunities to influence IFAD support towards environmental sustainability and climate smart development.

This ESMF is intended to provide options that would inform and thus improve decision making of the AVDP design. The key environmental, climate change and social issues to be addressed include: (i) challenges faced to meet its rural development and food security goals; (ii) the major environmental, climate change and social issues that have a bearing on IFAD operations in the country; (iii) the direct impact and multiplier effect the mentioned issues have on the resilience of ecosystems and productivity of land and crops, natural resource management and rural livelihoods; (iv) the scale of volatility and risks resulting from climate variability and change; and (v) regulatory frameworks which are related to rural development and environmental issues.

The results of the ESMF and subprojects ESIA are: (i) an assessment of the environmental (and social/economic/institutional) issues particularly in the agricultural and rural development sector; (ii) the identification of links with relevant ongoing initiatives; (iii) the provision of specific measures, recommendations including opportunities to optimize adaptation, environmental management and resource use; in the project area. These results will shed light on the important opportunities available to build resilience and adaptive capacity in the program/project under development.

The Key Principles to guide the ESMF and the subproject ESIA are to:

- Look beyond the traditional 'do no harm' safeguards approach to mitigating environmental, climate change and social risks towards 'doing good' through greater focus on sustainability and management of environmental (rehabilitating degraded lands, seizing adaptation/mitigation opportunities and transforming the underlying inequalities that undermine inclusive development, etc.) and social impacts and risks;
- Begin the ESIA with a scoping exercise with the objectives of identifying as much as possible the relevant social, environmental, and climate change issues, so that baseline data collection and impact assessment can focus on them.
- Place strong emphasis on identifying opportunities and develop an appropriate management plan to enhance results and impact;
- Identify and compare alternative scenarios to recommend realistic proposals for design mission consideration;
- Identify capacity needs required to effectively implement the environmental and social management plan;
- Produce a realistic monitoring plan, including appropriate change management processes.
- Engage affected communities and other interested stakeholders throughout the ESIA process, from scoping to review and comment on the final draft report prior to decision-making.

3.3.3 The IFAD Climate Change Strategy (2010)¹¹¹

The IFAD's climate change strategy calls for the IFAD to more systematically respond to increasing demands from clients for technical support and innovation to better respond to climate change. This means analysing and addressing climate change challenges during the early stages of program and project design to build resilience and adaptive capacity. The

¹¹⁰ <https://www.ifad.org/documents/10180/a36f992c-5e31-4fac-8771-404bea02796b>

¹¹¹ https://www.ifad.org/topic/tags/climate_change/2154532

strategy goal and purpose are to:

1. To support innovative approaches to helping smallholder farmers build their resilience to climate change
2. To help smallholder farmers take advantage of available mitigation incentives and funding
3. To inform a more coherent dialogue on climate change, rural development agriculture and food security

The main strategy output is a more 'climate-smart' IFAD, where climate change – alongside other risks, opportunities and themes – is systematically integrated into core programmes, policies and activities:

- On operations, climate change can be – and in many cases already is – factored into IFAD's operating model. This means incorporating it into our toolkit for the early stages of country programme and project design and for implementation.
- On knowledge, innovation and advocacy- IFAD will explore new arrangements for sourcing climate-related expertise, share ground-level experiences to ensure their application throughout IFAD-supported programmes, and continue our work to shape the global dialogue on climate change for smallholders.
- On resource mobilization, the focus is to make IFAD's expanding overall portfolio climate-smart. Increased supplementary climate funds will continue to be sought to deepen the integration of climate change into IFAD's core programmes and to cover the increased cost this implies.
- On internal organization, IFAD will make greater use of existing in-house skills and people, and will
- Implement a new organizational structure that brings together and increases its staff capacity on climate and the environment. It will also continue to demonstrate the values of environmental awareness internally.

3.3.4 The IFAD Environment and Natural Resource Management (ENRM, 2011) Policy¹¹²

Sustainable environment and natural resource management (ENRM) lies at the heart of delivering poverty reduction for rural people. Poor rural people face a series of interconnected natural resource management challenges. They are in the front line of climate change impacts; the ecosystems and biodiversity on which they rely are increasingly degraded; their access to suitable agricultural land is declining in both quantity and quality; their forest resources are increasingly restricted and degraded; they produce on typically marginal rain fed land, with increased water scarcity; energy and agricultural input prices are on a rising long-term trend; and declining fish and marine resources threaten essential sources of income and nutrition.

Environmentally damaging agricultural practices are a major driver of these challenges. There is growing concern over inappropriate approaches that drive excessive use of fertilizers and pesticides, pollution of waterways and aquifers, build-up of salt in the soil, water scarcity in major river basins, declining levels of groundwater and loss of crop biodiversity. Large parts of Africa rely on rainfed agriculture with little or non-existent use of organic or inorganic fertilizers, soil erosion and poor access to seed varieties. Weak governance, damaging policies and changing consumption patterns lie at the heart of this environmental degradation: poor rural people, including smallholders, are often disempowered and thus unable to sustainably manage natural resources; a lack of clear land access and tenure rights removes incentives to maintain natural assets; distorting trade policies and fossil-fuel and other subsidies are key drivers. The response requires an 'evergreen revolution', powered by sustainable agriculture that balances crop/livestock, fisheries and agroforestry systems, so that surplus inputs are avoided and soil fertility and ecosystem services are not compromised, while production and income are increased. Building on a growing body of evidence of the success of sustainable agriculture investments, there is a huge opportunity to further scale up multiple-benefit.

IFAD's ENRM stresses that project designs present new opportunities to improve systematic

¹¹² https://www.ifad.org/topic/resource/tags/climate_change/2096936

integration and scaling up of ENRM of the portfolio. Such integration can help IFAD to engage in new and strengthened partnerships with specialized entities for enhanced and effective responses to issues associated with natural resources and, climate variability and change. ENRM is at the core of delivering IFAD's poverty reduction and sustainable agriculture mandate because its target groups rely directly on the environment and natural resources for their livelihoods, and client demand for support for ENRM is increasing.

3.3.5 Country strategic opportunities programme for Sierra Leone 2010-2015¹¹³

The IFAD targeting strategy in the Country Strategic Opportunities Programme (COSOP) 2010-2015 for Sierra Leone target group consists of smallholder farmers and landless rural households ready to abandon subsistence agriculture with the support provided by the programme. Special attention will be paid to ensure that the needs and priorities of more vulnerable groups such as woman-headed households and landless young people are taken into account. The key cross-cutting issues noted in the COSOP to be addressed across the strategic objectives include environmental soundness and natural resource management; gender mainstreaming, the pursuit of innovation; and knowledge management.

¹¹³ <https://webapps.ifad.org/members/eb/99/docs/EB-2010-99-R-12.pdf?attach=1>

4. DESCRIPTION OF THE ENVIRONMENTAL, CLIMATE AND SOCIAL CONTEXT

4.1 Environmental Context

Sierra Leone is a relatively small country. It has a land mass of about 72,368 km² and is located within the Upper Guinean Rainforest eco-region. The climate of Sierra Leone is described as wet tropical, marked by distinct wet and dry seasons. Sierra Leone has nine major river systems from north to south including the Great Scarcies, Little Scarcies, Rokel, Jong, Sewa, Moa and Mano Rivers. The country is divided into four main relief regions: coastline, interior lowland plains, interior plateau and mountains, each of which can be subdivided into a number of ecosystems. The coastline or coastal plains is relatively gentle and comprises estuarine swamps, terraces, alluvial plains and beach ridges. The interior lowland plains extend from the coastal terraces in the west to the east of Sierra Leone, occupying approximately 43% of the land area. At the edge of the lowland plains are the interior plateaus, made up of granite that runs from the northeast of the country to the southeast. The integrity of all these natural ecosystems and also the various agro-ecosystems are vital to ensure the ecosystem services upon which the population of Sierra Leone depend¹¹⁴.

Biodiversity loss is one of the major problems undermining sustainable development in Sierra Leone. Total forest cover in Sierra Leone amounts to 38% of total land area although only 5% is original forest cover. Annual deforestation between 1990 and 2010 has been at a rate of 20,000ha per year¹¹⁵. Agriculture comprises 48% of GDP and sustainable management of biodiversity has important implications for food security and poverty reduction. The main direct causes of land degradation in Sierra Leone are logging, firewood collection, mining, charcoal production, tree crop plantation, settlement expansion and the slash and burn practice used in shifting cultivation. The primary indirect causes are extreme poverty, corruption, low public awareness and weak institutions.

Forestry protection in Sierra Leone is very weak and facing constant threats posed by corruption, weak governance structures both at the legislative level as well as on the ground monitoring and sanctioning of illegal logging and general lack of awareness among farmers. MAFFS reported during the design mission, that protected areas and the 1km buffers are under constant threat from slash and burn practices and plantations. Slash and burn is a standard practice carried out by extremely poor farmers to clear land typically around 2ha for the cultivation of rice, vegetables, firewood and charcoal production.

4.2 Climate Change Context

Sierra Leone is characterised predominantly by a hot and humid climate with distinct wet and dry seasons. The wet season from May to October sees an average of 3000mm of precipitation with coastal areas receiving as much as 5000mm. The dry season is characterised by dusty, hot harmattan winds and drought conditions, with temperatures ranging between 25-27° and 22-25° during the wet season¹¹⁶. Seasonal rainfall in West Africa varies considerably on inter-annual and inter-decadal timescales, due in part to variations in the movements and intensity of the Inter Tropical Convergence Zone (ITCZ). Current mean annual rainfall however has decreased to its lowest levels since the 1960s.¹¹⁷

Sierra Leone is the third country worldwide least able to adapt to the adverse effects of climate change¹¹⁸ after Bangladesh and Guinea-Bissau. Influencing factors include their high dependence on rain-fed agriculture and natural resource-based livelihoods. Farmers, while

¹¹⁴ EU (2006) Sierra Leone - Country Environment Profile

¹¹⁵ FAO (2010). Global Forest Resource Assessment. Country Report Sierra Leone. FRA 2010/189.

¹¹⁶ Republic of Sierra Leone (2012). Second National Communication on Climate change.

<http://unfccc.int/resource/docs/natc/slenc2.pdf>

¹¹⁷ UNDP Climate change Country Profiles (undated) http://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Sierra_Leone/Sierra_Leone.hires.report.pdf

¹¹⁸ http://reliefweb.int/sites/reliefweb.int/files/resources/Climate_Change_Vulnerability_Index_%202014_Map.pdf

unaware of the meaning of climate change, have been found to already consciously adapt their farming practices. They have reportedly experiencing changes in rainfall patterns with rain in the dry season and dry periods in the rainy season. Climatic changes have manifested in more intense rainfall patterns with more frequent severe floods and seasonal droughts, late onset of rains, rising temperatures, particularly in the dry season, stronger winds including reports of local tornadoes, more intense thunderstorms and more frequent landslides.

Climate predictions estimate that maximum temperatures in Sierra Leone will increase inland by up to 2.6°C by 2060.¹¹⁹ The country is predicted to see a reduction in climate suitability for cocoa production by up to 20% in the more suitable southern districts and up to 40% in the drier north-eastern upland districts by 2050.¹²⁰ High yield cocoa production is a temperature sensitive commodity and IFAD investments will face productivity challenges should the project support rehabilitating old or extending new plantations in areas that are on the fringes of suitable growing climate.

Projected climatic changes suggest that Sierra Leone will suffer increasingly reduced climatic suitability for cocoa crops over the next 30 years. Maximum temperatures will increase, while overall precipitation is not projected to change significantly, the annual rainfall pattern and intensity will. This could result in increased risk of droughts during the wet season and rain during the dry season. Increased intensity when coupled with land clearing means a greater risk of surface runoff and topsoil erosion, increased risk of river damage to road infrastructure and increased risks of landslides.

4.3 Social-economic and cultural context

Poverty remains widespread in Sierra Leone where the impacts of the decade long civil war are still felt 15 years on in the form of devastated social and physical infrastructure. In 2016 the country ranked 179 out 188 (0.420) in UNDP's Human Development Index (HDI). Poverty is widespread with 81.4% of the working population living on less than US\$ 3.10 per day and 65% of people aged 15+ are employed. Sierra Leone also has a 48% literacy rate for people aged 15 and older. Overall the country has one of the highest inequality levels globally, gender inequality is also rated as one of the world's worst.¹²¹

Sierra Leone's land sector is described as chaotic and increasingly unsustainable, with the main problems including inequitable access to and a shortage of, accessible land. The absence of a registration system, cadastral mapping and information, overlapping jurisdictions for statutory and customary law undermine rights and access to land. Customary practices for land ownership and inheritance discriminate against women and the lack of defined women's rights to land under communal ownership mean that women are not consulted in management, purchase or selling of land. Women are also not sufficiently represented in institutions that deal with land and the international conventions dealing with women's rights have not been translated into law or national policies. Violent conflict relating to land is not uncommon, but conflicts and competition over land also extend to between line ministries, local authorities and chiefdom institutions.¹²²

¹¹⁹

http://sdwebx.worldbank.org/climateportalb/home.cfm?page=country_profile&CCCode=SLE&ThisTab=RiskOverview

¹²⁰ Götz Schroth et.al. (2016). Vulnerability to climate change of cocoa in West Africa: Patterns, opportunities and limits to adaptation. *Science of the Total Environment* 556. 231–241.

¹²¹ <http://hdr.undp.org/en/countries/profiles/SLE>

¹²² Republic of Sierra Leone (2015) National Land Policy.

5. REVIEW OF ENVIRONMENTAL, CLIMATE AND SOCIAL IMPACTS

5.1 Potential Environmental Benefits

The promotion of agri-businesses in tree and canopy crops, including oil palm and cocoa in already degraded lands and rehabilitation of abandoned plantations is expected to significantly improve the canopy agro-ecosystems with positive climate and environmental benefits. More climate and environmental provisioning services (including food and freshwater), regulating services (including carbon sequestration, flood and erosion prevention, land degradation prevention and restoration, water purification, soil remediation, and pollination), supporting services (including soil formation and nutrient cycling), and cultural services (including recreation and aesthetics), if done well, can bring environmental benefits. Such services will also enrich the biodiversity by creating new habitats and corridors for bird and animal populations. The mitigation monitoring strategy will ensure the preservation of virgin forests and wetlands. Adopting agroforestry (retaining trees in farmlands) and mixed cropping (with cover crops and anchor crops) will increase soil fertility, prevent erosion and reduce the usage of pesticides and agrochemicals, resulting in an overall cleaner and safer environment.

5.2 Potential negative environmental impacts

5.2.1 Deforestation and land degradation issues

Expanding tree crop plantations as a result of project activities could result in direct deforestation through tree crop farms expanding into forest land, or indirect deforestation where new tree crops displace other vegetable crops in the same farm, which in turn cause deforestation. In partnership with the Adaptation Fund and FAO, the project will build in safeguards through carrying out regular mapping of plot sites and monitoring of land use and forest cover by third party service providers. The maps generated will be compared with FAO's new database on protected forests to ensure that IFAD activities will not cause direct or indirect deforestation of designated protected forests.

5.2.2 Road construction and rehabilitation impacts:

The rehabilitation of feeder roads are essential to sustain the market linkages of the core commodity value chains supported by the AVDP, but also to community and local economies at large. Lessons have been learned from the Rehabilitation and Community-based Poverty Reduction Project (RCPRP) project that greater attention needs to be paid to the environmental impact of such infrastructure projects to avoid obstructing IVS drainage areas which cause water logging of otherwise arable land. The AF will support the carrying out of Environmental Assessments that will be conducted in accordance with EPA procedures to ensure planned activities such as culverts are included in the design and implementation of the feeder roads. The EPA will also be invited and supported to conduct minor infrastructure construction to ensure compliance with the ESMF mitigation plans.

5.2.3 Pollution from Agrochemical use

One of the potential environmental impacts is that of incorrect agrochemical use. Fertiliser use is limited in Sierra Leone but for rice farmers it is made available by MAFFS through a one bag for two bushels of rice basis. Farmers receive FFS training in agrochemical use although interviews with District Agricultural Officers (DAOs) revealed that farmers are still over-applying fertilisers and applying them at the wrong time, for example on already green rice instead of growing shoots in the mistaken belief that this will further improve rice productivity, instead of damaging it. Based on the experience with the Tree Crops Extension Project (TCEP) in Liberia and with the support of the AF, the AVDP will partner with MAFFS through a MoU to train a lead farmer per community to educate and monitor his or her community members on the correct application of fertilisers to reduce crop damage and fertiliser waste, reduce indirect GHG emissions and improve productivity. Youth will also be encourage to create gainful employment and business value chain in fertilizer and agrochemicals application.

5.2.4 Dam construction

In order to reduce farmer vulnerability to rain-fed agriculture and hereby climate change, the AF will support the upscaling of GEF supported earth dam pilots under the RCPRP. This will aim to provide a perennial source of water hereby typically supporting 120 farmers per dam to double or triple crop rice in 10ha each of land in the more arid upland regions. The construction of the new earthen dams will be based on the lessons learned from the pilot, which included structural problems of overflow due to a miscalculation of water quantities and causing flood damage. Other problems have included dams running dry during the dry season or dams being located too far from the IVS. These are all problems that have been identified and could have been avoided. The lessons learned will be incorporated into the new AVDP design through the usage of improved materials and improved site selection and design, previously constructed dams will also be repaired.

5.2.5 Climate change issues

Projected climatic changes suggest that Sierra Leone will suffer increasingly reduced climatic suitability for cocoa crops over the next 30 years. Maximum temperatures will increase and while overall precipitation is not projected to change significantly, the annual rainfall pattern and intensity will. This could result in increased risk of droughts during the wet season and rain during the dry season. Increased intensity when coupled with land clearing means a greater risk of surface runoff and topsoil erosion, increased risk of river damage to road infrastructure and increased risks of landslides

5.3 Potential social benefits

AVDP will target about 33,000 direct beneficiaries drawn from smallholder farmers, FBOs including cooperatives, partnering financial institutions, small scale rural entrepreneurs, women and rural youth (18 – 35 years). It is expected to reduce unemployment especially among the youth, reduce poverty and create wealth and income, improve the food security situation, improve access to social (health and education) and financial services and reduce travel time especially among the teeming rural population. Rehabilitation of rural feeder roads and farm tracks will improve the life and livelihoods of more indirect beneficiaries of the project through savings in transport cost, post-harvest losses and access to the market. Hundreds more will directly benefit through short term labour, as contractors, and as construction supervisors.

5.4 Potential negative social impacts

5.4.1 Land Access issues

Security of tenure remains by women and youth remains a challenge in Sierra Leone. Without secure ownership or at least guaranteed access to land for women and youth, the development of sustainable agri-enterprises will be extremely difficult, if not impossible and this could negatively affect the AVDP. The risk of being pushed out of the land leading to loss of investments after improvements have been made or even cash crops planted is high if the land is not appropriately secured or authorized by the relevant community and government institution.

5.4.2 Social Exclusion and Gender inequality

Sierra Leone has been described as one of the places with the highest gender inequalities¹²³. ~~Decisions in Sierra Leone~~ especially in the Districts are made at community-level by leaders/traditional rulers or Paramount Chiefs who are men in consultation with a council of elders who are also mostly men. Women and youth are often not sufficiently represented even in making decision that affect them. Thus women and youth not only risk being marginalized in land access, but also when opportunities or slots are allocated for economic activities in the community.

¹²³ M.T Pratt: The Economic Sense of Gender Equality. SiERRAEYE, Vol34, November-December 2017

5.4.3 Unsafe and Non-Healthy Working Conditions

Working conditions across sectors are generally poor in the rural areas of the Districts in Sierra Leone because of general poverty, poor production methods, and limited awareness of and non-compliance with health & safety standards. In the agricultural sector, most farmers do back-breaking work and are regularly exposed to agro-chemical toxins from the overuse of fertilizer and pesticides. In addition, due to the high level of poverty, children often help in the production and/or processing of agricultural commodities. Cases of water-borne diseases among rice farmers in the IVS has been reported due to non-usage of protective/safety shoes.

5.4.4 Managing expectations and Conflicts resurgence

Generally since the end of the civil war, Sierra Leone has been very peaceful. However, poverty and deprivation among youth, if not properly addressed, has the risk of fuelling conflicts.

5.4.5 Elite Capture

Weak and non-transparent governance structures as well as exclusionary and divisive politics poses the risk of the AVDP being hijacked or captured by the political and administrative elite to benefit only their cronies with significant impacts on the target beneficiaries.

6. ENVIRONMENTAL, CLIMATE AND SOCIAL MANAGEMENT PLAN FOR AVDP

6.1 Introduction

The environmental, climate and social management plans (ESMPs) presented below are relevant to the entire AVDP project, including the agri-enterprise and related infrastructure sub-projects whose locations are not yet known. However, for these subprojects, a separate screening as outlined in chapter 8 is still required. The outcome of this screening and subsequent review may lead to the development of more detailed, location- and project-specific ESMPs.

6.2 Responsibilities

MAFFs Steering Committee, will steer the programme planning and implementation including the implementation of the ESMF. Most of the AVDP activities are going to be carried out in the Districts. The existing IFAD NPCU, will implement the programme in partnership with District Government/District MAFFs, partner private sector entities and FBOs/Cooperatives. In the designation of responsibility both the NPCU and the MAFFS District Officers, other local district officers, service providers, EPA officers, farmers' organization and individual farmers are involved in the implementation of the ESMF.

6.3 Outline of the Management Plans

Tables 6.1 and 6.2 present the environmental and climate and social management plans. For each of the potential overall impacts described in chapter 5, the plans indicate a significance rating and (geographical) extent/prevalence of each impact, recommend mitigation measures, identify who is responsible for implementation of the mitigation measures, how implementation can be verified, and how frequently. The plans have been developed with input from a broad range of government ministries, department and agencies and other stakeholders consulted during the ESMF field mission in Freetown in June 2018. The recommended mitigation measures mostly apply to all the districts. It is important to re-emphasize that these management plans are relevant to the entire AVDP project, including the agri-enterprise and related (market) infrastructure sub-projects whose locations are not yet known. For these subprojects, a separate screening as outlined in chapter 8 is still required.

A copy of the environmental and management plans should be made available to all program staff, participating institutions and other key stakeholder representatives as well as used in community sensitization (i.e. awareness- raising and training) activities.

Table 6.1: Environmental (incl. Climate Change) Management Plan

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
ENVIRONMENTAL MITIGATION PLAN						
Deforestation (from tree crops especially oil palm plantation expansion into natural forest area) and upland crop production	High	All districts	<ul style="list-style-type: none"> ▪ Strongly discourage new oil palm and cocoa plantation in and around virgin forest and forest regrowth areas ▪ Strong emphasis to be placed on rehabilitation of existing and abandoned oil palm and cocoa plantations ▪ Limit approval for new oil palm and cocoa plantations to already degraded land/degraded secondary bush areas or deforested areas ▪ Strengthen participation in the processing and marketing value chains to create more jobs especially for women ▪ Strengthen partnership with the forestry department to train farmers in sustainable agroforestry 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Percent decline in forest cover ▪ Number of people engaged in the processing and marketing value chains ▪ MOU with the forestry department ▪ Number of Training conducted with farmers on agroforestry techniques 	Reference/baseline, Mid-term, End-Term Mid-Term, End-Term Mid-Term, End-Term Annual
Biodiversity loss (in IVS), Bush Fires/slash and burn agriculture	Medium	Kambia, Port Loko, Bonthe, Moyamba, Pujehun	<ul style="list-style-type: none"> ▪ Limit cultivation of rice in the mangrove ecosystem to reduce mangrove forest loss ▪ Discourage slash and burn and train farmers on sustainable land preparation and development options ▪ Avoidance of areas that infringe on known migration patterns of protected, endangered or rare species and maintain known wildlife migration corridor 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Percent decline in mangrove forest ▪ Number of farmers that received training on sustainable land preparation and management ▪ Biodiversity surveys 	Mid-Term, End-Term Quarterly Annual
Land and soil degradation	Medium	All districts	<ul style="list-style-type: none"> ▪ Production of project-specific ESIA by contractors should be required for all feeder roads construction ▪ Train farmers and service providers on sustainable land development and preparation methods including zero or 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Production of project-specific ESIA for feeder road construction ▪ Number of farmers that received training on sustainable land preparation 	Annual Quarterly

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<ul style="list-style-type: none"> minimum tillage. ▪ Encourage crop intensification and discourage opening of virgin forest for cropping. ▪ As much as practicable, encourage mixed cropping of target crops with cover crops and anchor crops (especially for oil palm at early stage) ▪ Involve partners from the Ministry and research institutes in training farmers on soil conservation techniques 		<ul style="list-style-type: none"> and management ▪ Consummated MOUs with Research Institutes and agencies dealing with soil conservation techniques 	Mid-Term, End-Term
Water pollution	Medium	All districts	<ul style="list-style-type: none"> ▪ Minimize use of inorganic fertilizers and encourage use of biodegradable organic manures (especially in rice, maize and vegetable fields) and agrochemicals in cocoa plantations ▪ Consider training youth in sustainable agrochemical application as an enterprise to promote environmental-smart agricultural value chain 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Number of farmers that use organic manure instead of inorganic fertilizer ▪ Number of youth engaged in integrated agrochemicals and pesticides application enterprise 	Annual Annual
Wetland (especially mangrove) degradation and removal	Medium	All districts	<ul style="list-style-type: none"> ▪ Discourage removal and draining of mangroves for rice paddies and vegetable farming 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Percent decline in wetland 	Reference/baseline, Mid-term, End-Term Mid-term, End-Term
Erosion and landslide/mudslide	Medium	All districts	<ul style="list-style-type: none"> ▪ Encourage agronomic practices such as contour ploughing, terraces and bunds in erosion and landslide/mudslide prone hill-slope areas ▪ Encourage the planting of cover crops and anchor crops with the main crop ▪ Encourage buffers along river bank to prevent erosion ▪ Design and construction of roads, bridges and culverts to be properly monitored to prevent inappropriate termination that can lead to erosion 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ No of farmers in erosion/landslide/mudslide prone areas adopting sound and sustainable agronomic practices 	Mid-term, End-Term
Flooding (from rivers and possible over flow/collapse of the earthen dam), Water logging, soil			<ul style="list-style-type: none"> ▪ Improve on the design of earthen dams in IVS using hydrological long-term(50-100 years) flood return periods to improve dam resilience ▪ Sustaining and improving on the partnership 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Number of rainy season with no dam overflow ▪ Improved capacity of the Me Office to generate forecast on extreme events 	Annual Quarterly

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
salinization and alkalization			<ul style="list-style-type: none"> with the Meteorological Agency to improve their capacity to generate forecast of extreme rainfall events and disseminate climate information ▪ Consider introducing no regret option including crop insurance as part of the farmers and Agri-entrepreneurs' package ▪ Production of project-specific ESIA by contractors should be required for all feeder roads construction to prevent obstructing IVS drainage areas and causing waterlogging of rice fields ▪ Analyze soils and monitor changes that potential problems can be managed. Allow for access to channels from maintenance in design ▪ Provide water for leaching as a specific operation 		<ul style="list-style-type: none"> ▪ Number of agro-entrepreneurs receiving climate information ▪ Number of farmers that signed off unto agric insurance ▪ Result from soil analysis 	<p>Quarterly</p> <p>Annually</p> <p>Biennial</p>
Agrochemical Waste proliferation	Low	All districts	<ul style="list-style-type: none"> ▪ Consider creating a value chain/service provider in soil testing for fertilizer applications to improve place and context-based fertilizer and agrochemical application ▪ Encourage development and use of improved and resilient local crop varieties to reduce pest resistance and use of agro-chemical ▪ Training youth in sustainable application of agrochemicals enterprise as part of the value chain ▪ Encourage use of organic manures ▪ Service providers and agro-chemical input suppliers to follow high standard of security and safety precautions in storage and transport of agrochemicals 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Number of soil testing service providers ▪ Number of farmers using improved and resilient local crop varieties ▪ Number of youth trained and engaged in integrated pesticide and agrochemicals management as part of value chain ▪ Number of trained and certified agrochemical suppliers 	<p>Annual</p> <p>Annual</p> <p>Annual</p>
Dry spell and Increase storm and wind activity	Moderate	All districts	<ul style="list-style-type: none"> ▪ Sustaining and improve on partnership with the Meteorological Agency to improve their capacity to generate and disseminate agriculture-specific forecasts to farmers in good time through additional weather stations 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Number of additional weather station supported/established by the AVDP ▪ Central data processing 	<p>Annual</p> <p>Once</p>

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<p>(to the 4 acquired through the GAFSP) and other appropriate weather data collection tools especially in the rural interiors</p> <ul style="list-style-type: none"> ▪ Improve the capacity of the Meteorological Agency to collate and process climate data through appropriate Hardware, Software and mobility support ▪ In addition to agric extension officers, engage other means including farmers organization forum, community radios, text messages, transmitter broadcast (in remote areas) to disseminate weather and climate information to farmers (possibly in local languages) ▪ Integrate use of traditional forecasting knowledge through regular feedback from farmers ▪ Consider introducing no regret option including crop insurance as part of the farmers and Agri-entrepreneurs' package ▪ deliver training and agricultural inputs in good time to assist farmers to adjust and adapt their planting and harvesting methods and timing 		<p>server and mobility support for the Met Office</p> <ul style="list-style-type: none"> ▪ Regular issuance of agro-climatic forecasts issued by the Meteorological Agency ▪ Number of farmers receiving and using climate information ▪ Number of entrepreneurs that signed on to agricultural insurance ▪ Number of feedbacks from farmers/farmers organization on climate information 	<p>Quarterly</p> <p>Quarterly</p> <p>Annual</p> <p>Quarterly</p>
GHG emissions from rice paddies	Moderate	All districts	<ul style="list-style-type: none"> • Discourage opening of new virgin forests and coastal mangrove wetlands • Train farmers on how to drain rice paddies in mid-season to reduce CH4 emission and improvement in nutrient management including the retention of rice residues • Encourage use of clean energy in processing activities 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> ▪ Percent decline in forest and wetland areas ▪ Number of farmers trained in sustainable rice paddies management ▪ Number of processing units using sustainable energy 	<p>Reference/baseline, Mid-term, End-Term Annual</p> <p>Reference/baseline, Mid-term, End-Term</p>

Table 6.2: Social Management Plan

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
SOCIAL MITIGATION PLAN						
Land tenure issues – role of paramount chiefs	High	All districts	<ul style="list-style-type: none"> ▪ Advocate for the implementation of the new land policy to guarantee land tenure security for beneficiary farmers ▪ Massive sensitization across the districts and chiefdoms on land tenure and access to land for AVDP intended beneficiaries ▪ Engage with Paramount Chiefs to secure land for intending beneficiaries with no access to land ▪ Make access to land by women and youth one of the preconditions for a community to participate in the AVDP ▪ The project (through the NPCU and District MAFFS) to sign land guarantee and documented lease agreements with land owners for 10-25 years for intending beneficiaries without access to land 	NPCU and District MAFFS, Service Providers	<p>Number of women and youth participating in AVDP (from the project register)</p> <p>Number of people without access to land participating in AVDP</p> <p>Secure land access and number of land lease agreement signed with land owners</p> <p>Attendance register of sensitization meetings with Paramount chiefs and other stakeholders</p>	<p>Quarterly</p> <p>Quarterly</p> <p>Every six months</p> <p>At every project activity</p>
Gender inequality and targeting	High	All districts	<ul style="list-style-type: none"> ▪ Spend enough time (at least 2-3 months) for mobilization on targeting to reach everybody at community meetings (Do not leave selection of beneficiaries to the paramount Chiefs). Use the local media as well as local trusted NGOs ▪ Encourage active participation of women in the AVDP up to 40% as indicated in the PDR ▪ Engage women organizations and advocacy and right groups to mobilize women to participate ▪ Give some concessions/incentives to women farmers to enable them participate ▪ Encourage men through advocacy to support women participation through guarantee of land and other resources required 	NPCU and District MAFFS, Service Providers	<p>Minutes and Attendance register at community meetings</p> <p>Number of women and youth participating in AVDP (from the project register)</p> <p>Number of women advocacy groups working with AVDP</p>	<p>At targeting mobilization meetings</p> <p>Quarterly</p> <p>Annually</p>

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
Social exclusion of women and youth due to limited access to land	High	All districts	<ul style="list-style-type: none"> ▪ Actively involve women and youth in all components and levels of decision-making within the project; ▪ Strive to maintain Project beneficiaries ratio of 40% women and 20% youth (men and women under 35 years old) ▪ Encourage the submission of business proposals from women-only groups (incl. cooperatives); ▪ Ensure women hold at least 30-40% of leadership posts in the farmer apex organizations and project management team; ▪ When organizing meetings or events, ensure they are appropriate to women's time and venue constraints; ▪ Access to land for women and youth should be a precondition for community selection/participation ▪ To avoid obstructionism ('blocking behaviour'), ensure men are included ('carried along') in sensitization activities. Work with locally-trusted CSOs in community sensitization (working towards 'attitudinal change') ▪ Make road and dam construction contractors to hire labour from the local communities to increase sense of belonging and participation ▪ Consider using local labour for farm tracks construction and rehabilitation instead of machines to increase number of indirect project beneficiaries 	NPCU and District MAFFS, Service Providers	Attendance lists Lists of approved projects and their beneficiaries Membership and staff lists Attendance lists at sensitization workshops and beneficiary / community feedback during site visits Community agreement on land access for women and youth Number of community youth engaged as labour in road and dam construction and farm tracks rehabilitation	At every project activity At business plan approval and every six months thereafter Every six months At every project activity Annual
Managing expectations	High	All districts	<ul style="list-style-type: none"> ▪ The AVDP project targeting and up scaling mechanism should be explicitly and transparently explained in the project implement manual (PIM) ▪ Selection criteria, what the project offers and expectations from intended beneficiaries should be explicit and unambiguous (and translated into the local languages so that everybody will be carried along) 	NPCU and District MAFFS, Service Providers	Project implementation manual Project selection criteria in local languages Knowledge management and communication material	Before project commencement 6months into project Quarterly

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<ul style="list-style-type: none"> Carry the community and agro-entrepreneurs representatives along in the project implementation (and possibly the Paramount Chiefs or their representatives) in every stage of project implementation Maintain robust knowledge management and information dissemination to keep everybody abreast of happenings 			
Unsafe and non-healthy working conditions	Medium	All districts	<ul style="list-style-type: none"> Incorporate environmental and social guidelines in contracts with service providers and ensure compliance; Sensitize project beneficiaries and their wider communities on health & safety standards, incl. safe use of production, processing and transport machinery, agro-chemicals (pesticides and fertilizer), electrical installations and wiring (in particular in wet areas / during rains); Sensitization of selected communities on child rights and ensure that there is no child labour on selected agri-enterprise projects. 	NPCU and District MAFFS, Service Providers	<p>Contractor Guidelines</p> <p>Health & Safety flyer or poster</p> <p>Community meeting</p> <p>Community meeting</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Within 6 months of project start and half-yearly review thereafter <input type="checkbox"/> Within 6 months of project start, half- yearly thereafter <input type="checkbox"/> Within 6 months of project start and half-yearly review thereafter <input type="checkbox"/> Within 6 months of project start, half- yearly thereafter
Elite capture	Medium	All districts	<ul style="list-style-type: none"> Detailed screening of business plan proposals on commercial viability, conflicts of interest and corruption. Exclude (use of) service providers owned by/tied to politicians or political parties; Ensure compliance with pre-approved, objective selection criteria and transparent information- sharing and decision-making Sensitize communities on project objectives, target groups, beneficiary selection criteria, and risk of elite capture ('hijack'); Agreement with traditional rulers and 	NPCU and District MAFFS, Service Providers	<p>Completed proposal screening forms</p> <p>Review missions</p> <p>Item on steering committee agenda</p> <p>Community meeting</p> <p>Agreement document</p>	<ul style="list-style-type: none"> During half-yearly review missions During half yearly committee meetings Monthly during first months, quarterly thereafter Within 6 months of start of project

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			council of elders on community and beneficiary selection, and adherence to representative and transparent decision-making related to the project (via letter of understanding, MoU or another appropriate format). Involve locally-trusted CSOs.			
Loss and Disturbance of Cultural Resources such as sacred forest and archeological site	Low	All district	<ul style="list-style-type: none"> Do not approve projects to located in or around sacred forests and community groves and archaeological sites 	NPCU and District MAFFS, Service Providers	Inventory of cultural resources	<ul style="list-style-type: none"> Annual
Conflict resurgence	Medium	All districts	<ul style="list-style-type: none"> Maintain robust knowledge management, information dissemination and community engagements to keep everybody informed Develop a clear complaints, grievances redress and dispute resolution framework and make this known to all stakeholders Develop a clear and simple stakeholder engagement plan (SEP) (incl. communication/outreach strategy), particularly on project objectives and staffing (incl. who's responsible for what), criteria for community and beneficiary selection, community – project communication structure / methods, and grievance/conflict management; Keep relevant stakeholders informed about project progress on a regular basis; Involve youth and women leaders as well as respected elders in key project decisions and sensitization activities; Publicly disclose relevant information on contracts and payments; Encourage contractors / service providers to give employment preference to local community members 	NPCU and District MAFFS, Service Providers	<ul style="list-style-type: none"> Stakeholder engagement plan (SEP) Stakeholder meeting reports, project flyers Complaints register Meeting records, observation Service provision contract and employment lists Code of conduct Community meeting Knowledge management materials Number of local CSOs in partner with AVDP 	<ul style="list-style-type: none"> Within 2 months of start of project Quarterly Quarterly At every project activity Upon award of contracts and after payments Within 6 months of project start At every project activity during first 6 months, quarterly thereafter Quarterly Annually

Impact	Significance Rating (likelihood x consequence)	Extent / Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<ul style="list-style-type: none"> ▪ Develop a code of conduct for all stakeholders ▪ Sensitize women and particularly youth on what it's like to be an agri-entrepreneur (give a realistic picture of economic, social and environmental benefits but also challenges and responsibilities). ▪ Involve locally-trusted CSOs in community sensitization ▪ 			
Health						
Water borne diseases	Medium	All districts, especially in the Inland Valley Swamp	<ul style="list-style-type: none"> ▪ Efforts to focus on inland valley swamp to protect farmers from schistosomiasis, a water-borne disease in flooded rice fields, with rice boots and medication 	NPCU and District MAFFS, Service Providers	Sensitization materials Number of farmers using rice boots	<ul style="list-style-type: none"> ▪ Annual
High cholesterol from palm oil	Medium	All district	<ul style="list-style-type: none"> ▪ Encourage farmers group in the oil palm processing value chain to invest in 'modern' mechanical methods of extraction and processing which enhances processing, reduces drudgery and reduces cholesterol levels of palm oil for local consumption 	NPCU and District MAFFS, Service Providers	Number of oil palm processing group that are using modern methods	Quarterly
Dust from road construction	Medium	All districts	<ul style="list-style-type: none"> ▪ Road contactors to present an Environments and Social Impact Assessment with Management Plan for managing externalities as part of the bidding processing ▪ Consider using the Autoseal technology (a polymer based technology which hardens and can last for 5yeras or more) to help tackle the dust inhalation problem 	NPCU and District MAFFS, Rural Infrastructure Engineer, contractors / Service Providers	Number of ESIA for road rural feeder road projects	Quarterly

6.4 Stakeholder Engagement, Community Sensitization and Expectation Management

Experience with previous IFAD and other economic and social investment projects indicate that stakeholder engagement and sensitization are of critical importance to project success. In the absence of clear communication with relevant stakeholders and appropriate sensitization of local communities, rumors, misinformation and speculation thrive, and accusations and tensions easily boil over into (violent) conflict within and between communities. Therefore, for many of the potential environmental and social impacts, the management plans recommend the development of a stakeholder engagement plan with a clear communication strategy and the organization of community sensitization activities on a regular basis.

A stakeholder engagement plan (SEP) should include at least the following components¹²⁴:

- a) Principles, objectives and scope of engagement
- b) Regulations and (institutional) requirements
- c) Summary of previous stakeholder engagement activities
- d) Stakeholder mapping and analysis
- e) Strategies of engagement
- f) Key messages and communication channels
- g) Grievance mechanism (see also section 9.6 below)
- h) Resources and responsibilities
- i) Monitoring and evaluation

Community sensitization (i.e. awareness-raising and training) activities need to be clear, timely and culturally appropriate; this means that key messages need to be communicated in a format and language that is easy to understand, preferably by someone who speaks the local language and is familiar with local customs and sensitivities, and during a time that is convenient and sufficient for all key community groups, particularly women and youth. To ensure appropriate community entry and reach target groups most effectively and efficiently, it is advisable to also involve those civil society organizations that are already active in and trusted by the selected communities.

6.5 Grievance Management

Whenever a project causes negative environmental or social impacts there will be grievances (complaints) from people who are affected. "Having a good overall community engagement process in place and providing access to information on a regular basis can substantially help to prevent grievances from arising in the first place, or from escalating to a level that can potentially undermine project performance"¹²⁵

In order to reduce conflicts, a robust grievance / complaints mechanism that meets at least the following 'effectiveness' criteria should be instituted¹²⁶:

- a. *Legitimate*: enabling trust from the stakeholder groups for whose use they are intended, and being accountable for the fair conduct of grievance processes;
- b. *Accessible*: being known to all stakeholder groups for whose use they are intended, and providing adequate assistance for those who may face particular barriers to access;
- c. *Predictable*: providing a clear and known procedure with an indicative time frame for each stage, and clarity on the types of process and outcome available and means of monitoring implementation;
- d. *Equitable*: seeking to ensure that aggrieved parties have reasonable access to sources of information, advice and expertise necessary to engage in a grievance process on fair, informed and respectful terms;

¹²⁴ Adapted from IFC (2007) *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets* (IFC: Washington, D.C.), pp.164-168

¹²⁵ IFC (2007) *Stakeholder Engagement*, p.69 and p.72

¹²⁶ Office of the High Commissioner on Human Rights (OHCHR) (2011), *UN Guiding Principles on Business and Human Rights*(OHCHR: Geneva), pp.33-34

- e. *Transparent*: keeping parties to a grievance informed about its progress, and providing sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake;
- f. *Rights-compatible*: ensuring that outcomes and remedies accord with internationally recognized human rights;
- g. A source of *continuous learning*: drawing on relevant measures to identify lessons for improving the mechanism and preventing future grievances and harms;
- h. Based on *engagement and dialogue*: consulting the stakeholder groups for whose use they are intended on their design and performance, and focusing on dialogue as the means to address and resolve grievances.

IFAD has established a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of its environmental and social policies and the mandatory aspects of its Social, Environmental and Climate Assessment Procedures in the context of IFAD-supported projects. The procedure allows affected complainants to have their concerns resolved in a fair and timely manner through an independent process. Although IFAD normally addresses potential risks primarily through its enhanced QE/QA process and by means of project implementation support, it remains committed to: (i) working proactively with the affected parties to resolve complaints; (ii) ensuring that the complaints procedure is responsive and operates effectively; and (iii) maintaining records of all complaints and their resolutions¹²⁷.

The AVDP Project will as much as possible utilize every available grievances redress mechanisms including: associations (including farmers' associations/organizations) traditional council (Paramount Chiefs and elders), village square engagement (consisting of representatives of men, women and social groups), village general assembly, the project NCPU, etc.

¹²⁷ IFAD (2016) *Managing Risks to Create Opportunities. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP)* (IFAD: Rome), p.12

7. Review of Environmental, Climate, Social Impacts of AVDP Sub-Projects

7.1 Potential Impacts and Recommended Mitigation for Agri-Enterprise Projects

7.1.1 Oil Palm Plantation Farming

Oil palm is naturally suited to all districts of Sierra Leone. Despite its long gestation period, oil palm in the long run can have a number of environmental benefits. Oil palm plantations significantly contribute to carbon removal from the atmosphere when fully grown (though has low carbon sequestration capacity when compared to natural forest). At maturity, the product from oil palm produces zero waste. Nevertheless, although oil palm cultivation is possible with zero tillage and requires less soil additives, it does require some forest clearing and removal of existing canopies to enable the young palms to gain access to sunlight. Oil palm production is highly vulnerable to bush fires especially at infancy and maturing stages.

Some of the recommended mitigation measures for oil palm farming include:

- As much as possible, discourage opening of virgin forest and forest regrowth for oil palm plantation, strongly emphasising the rehabilitation of existing and abandoned lands, degraded or deforested areas for oil palm plantations;
- Strengthen partnership with the forestry department to train farmers in sustainable agroforestry related to oil palm plantation
- Encourage the use of renewable and low-carbon energy sources during processing operations;
- Encourage more people (especially women) at the processing value chain
- Encourage farmers to sign on to agricultural insurance in case of fire
- For the private sector: introduce and promote Standard Operating Procedures integrating guidance for improving productivity with measures aimed at minimizing negative environmental impact and greenhouse gas emissions;
- Promote RSPO system through the simplification of the certification approach and proactive engagements, use of environmentally-friendly oil palm management practices;
- Promote buffer zone management; safe storage, handling and application of agrochemicals and use of Personal Protective Equipment; and the non-use of child labour,
- Adopt Environment, Health and Safety (EHS) safeguards

7.1.2 Cocoa Farming

Cocoa farming is ecologically suited to forest zones, especially in the Eastern and Northern provinces. It is very important priority crop in Kailahun, Kenema, and Kono in the Eastern Province, and Koinadugu and Tonkolili in the Eastern province.¹²⁸ Cocoa production without application of fertilizers requires clearing of virgin forest. Therefore, cocoa production enterprise can have a negative impact on forests. Cocoa requires some shade at the early stages of growth, thus it naturally adapts as an agroforestry farming method, whereby a reasonable proportion of the canopy is retained. This helps to substantially retain the ecosystem services. Cocoa production is highly vulnerable to forest fires especially in dry season. The climatology of cocoa is very complex; it requires heavy rainfall at infancy and growing stages, but less rainfall at the seed production stage. It thus has the risk of being affected by changes in rainfall and temperature.

Some of the recommended mitigation measures for cocoa farming include:

- Encourage the use of existing farms or fallow lands or abandoned plantations, as well as the adoption of early maturing varieties with organic manure to discourage the opening of virgin forests;
- As much as possible, create a fire buffer zone around the cocoa plantation;
- Encourage more entrepreneurs along the cocoa value chain including processing,

¹²⁸ National Sustainable Agriculture Development Plan 2010-2030: Sierra Leone's Comprehensive African Agriculture Development Programme. Version Adapted by CAADP Compact 18th September 2009, Freetown

- transportation and marketing
- Encourage farmers to sign on to agricultural insurance.

7.1.3 Rice/Legume Farming

Rice is Sierra Leone's most important staple food. It is grown across all the 16 districts of Sierra Leone.

- Upland and Inland Valley Swamp (IVS) Rice: is grown across the provinces.
- Boliland (grassland with wetlands) Rice: thrives in Bombali, Kambia and Port Loko in Northern Province, as well as throughout all the districts in the Southern province and Western Area.
- Mangrove Rice: is grown in mangrove wetland in Kambia and Port Loko districts in Northern Province and Bonthe, Moyamba and Pujehun districts in the Southern province.
- Riverine Rice: is grown in Bonthe and Pujehun in the Southern district.

Rice cultivation requires clearing of land and removal of virtually all the trees and plants to provide enough sunshine for the rice paddy. In addition to mangrove and wetland destruction, one important negative impact of rice cultivation is the emission of greenhouse gases (especially methane) from rice paddies. Although these can be reduced by periodically draining the rice paddies, farmers need to be trained on how best to do this. Higher temperatures can make rice sterile with low productivity, while rice production may impact on biodiversity, especially birds and rodents' population that feed on rice grain. Rice waste, which can constitute a nuisance to the environment, has the potential of being converted into animal feed. Rice cultivation requires agrochemicals and pesticide that can easily pollute water bodies.

Some of the recommended mitigation measures for rice farming include:

- Strongly discourage rice cultivation in the coastal mangrove swamps to forestall storm surges and disastrous flooding from the ocean.
- Train farmers on draining methods of rice paddies in mid-season to reduce GHG emission;
- Train farmers on improved nutrient management, including the retention of rice residues;
- Discourage excessive opening of virgin forests and wetlands for rice cultivation;
- Minimize the use of pesticides and agrochemicals and encourage the use of organic manure to reduce impact on waterbodies;
- Encourage the use of scare-crows and other innovative methods to dissuade birds, instead of bird traps and other methods that can negatively impact bird population;
- Encourage farmers to sign on to agricultural insurance.

7.1.4 Cassava, Sweet Potato and Ground Nuts

These crops are ecologically suitable throughout all districts of Sierra Leone and very popular among women farmers. Cassava in particular has the advantage of being adapted to different kinds of soil and ecological conditions and also drought tolerant and pest resistant. In low-lying areas cassava cultivation is highly susceptible to flooding, which destroys both the crop and cultivars. Nevertheless, cassava is vulnerable everywhere to bush fires. Cassava processing generates minimum waste, which can be converted into livestock feed.

Some of the recommended mitigation measures for cassava farming include:

- Avoid cassava farming in low-lying areas especially around river valleys to avoid flooding;
- Use early maturing cultivars;
- Create a fire buffer zone (a cleared perimeter) around farmland;
- Deliver training and agricultural inputs to farmers on-time to enable them to adjust and adapt their planting and harvesting methods and timing;
- Encourage farmers to sign on to agricultural insurance

7.2 Potential Impacts and Recommended Mitigation for (Market) Infrastructure Projects

The following are some of the (market) infrastructure projects likely to be embarked upon by AVDP Project

1. Construction and rehabilitation of feeder roads and farm tracks
2. Construction and rehabilitation, including culverts and bridges
3. Rehabilitation of Agro Business Centres (ABC)
4. Land development activities
5. Small scale (earthen) dams and irrigation schemes in the IVS

Some of the potential impacts of market infrastructure development include:

7.2.1 Land Access

Market infrastructure will require the availability of land resource for their provision. The arrangement made for land will go a long way in determining sustainability of market infrastructure. About 24,000 ha (12000 rehabilitated and 12000 new) of land is expected to be brought under cultivation and 600km of feeder roads to be constructed and 1800km of farm tracks. 20 earthen dams are expected to be constructed especially in the IVS. Land development, irrigation activities and road construction all require large expanse of land. Some preconditions for market infrastructure include assurance that government or the community has guaranteed the lease of land to the beneficiaries during the program life, and the development of strategies for the maintenance and sustainability of the infrastructure by the concerned parties.

7.2.2 Dust, Vibration, Mudslide and Noise

The degree to which individuals perceive dust to be a nuisance depends on the frequency, intensity and duration of a dust-generating event. Farmers usually engage in a variety of activities that uses equipment or practices that create dust. Most land clearing equipment generates some dust. Dust may also be generated as fugitive dust when fine particulates are lifted from fields, roads, buildings and yards via air turbulence. The main mitigation measures recommended for mitigating dust including dust protection masks for machine operators and the spraying of water to reduce the level of dust during construction and/or transport activities.

Heavy equipment used for road construction create ground movement such that cracks can occur in adjacent buildings. These can also create some form of discomfort to inhabitants of the surroundings. An assessment of surrounding buildings would be carried out to ascertain the level of susceptibility to cracks because of ground movement. The buildings are to be strengthened and compensation paid for damages where it is unavoidable. Noise from the use of equipment is also a major concern. Operators should only use construction equipment that produces a moderate decibel level and consider the times when people will experience less discomfort (i.e. day-time only). Because of the nature of the terrain in Sierra Leone, roads construction through hills and valleys are of environmental concerns to prevent landslide. Road construction contractors will be expected to produce Environmental Management Plans for road construction and conduct environmental screening for the construction of farm tracks.

7.2.3 Deforestation

The removal of vegetation cover and trees during construction can lead to deforestation, and should therefore be avoided as much as possible. Where tree removal is unavoidable, this should be compensated by tree and vegetation replanting along the constructed roads.

7.2.4 Ground Water Contamination

Unchecked and unmonitored underground exploration, for example during dams' construction, can lead to ground water contamination. Appropriate impact studies should be conducted prior to the construction of dams.

7.2.5 Flooding/ Erosion

Flooding and erosion can occur because of poor judgement and poor design and construction practices. Adequate drainage should be provided for surface water run-off. Vegetation cover should be provided for slopes. Unnecessary dug-outs and/or excavation of soil from its natural terrain should be avoided. Replacement of dug out soils should be carried out when necessary.

7.3 Environmental and Socio-Economic Management Framework (ESMF)

Table 7.1 provides a framework for managing the likely impacts of the various activities expected to be implemented during the key parts in the agricultural value chain, i.e. production, processing, marketing, transport (and supply). It is important to re-emphasize that these management plans are relevant to the entire AVDP project, including the agri-enterprise and related infrastructure sub-projects whose locations are not yet known.

Table 7.1 Environmental and Social Management Framework (ESMF) for Agricultural Value Chain Stages

Part in value chain	Key issue affecting the Environment	Potential impact (negative and				Standard Mitigation Measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic			
<i>Production</i>	<ul style="list-style-type: none"> <input type="checkbox"/> Land preparation – land clearing, cultivation and other issues <input type="checkbox"/> Use of earth-moving machines, e.g. tractors for clearing <input type="checkbox"/> Use of agro-chemicals <input type="checkbox"/> Use of pesticides 	<ul style="list-style-type: none"> <input type="checkbox"/> Forest and wetland removal <input type="checkbox"/> Land & soil degradation <input type="checkbox"/> Water and soil pollution <input type="checkbox"/> Flooding <input type="checkbox"/> Erosion and mudslide <input type="checkbox"/> Slash and burn / Bush fire <input type="checkbox"/> Biodiversity loss <input type="checkbox"/> Waste management <input type="checkbox"/> GHG emission <p>Buffer Zone management</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Increased youth, women and men employment directly and indirectly <ul style="list-style-type: none"> ▪ Increased youth, women and men interaction and cooperation ▪ Increased sense of pride and responsibility by participating youth and women <ul style="list-style-type: none"> ▪ Inter- and intra-community conflict on land ownership <ul style="list-style-type: none"> ▪ Possible agitation from youth not presently included in the programme and whose expectations are not properly managed ▪ Social exclusion especially lack of access to land by women and youth ▪ Possible loss of cultural assets 	<ul style="list-style-type: none"> <input type="checkbox"/> Increased sales and household income <input type="checkbox"/> Increased youth employment and social well-being <input type="checkbox"/> Improved nutrition and food security <input type="checkbox"/> Increased ability of women and youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development <input type="checkbox"/> Increased import substitution especially of rice <input type="checkbox"/> But increasing associated environmental and social costs 	<ul style="list-style-type: none"> <input type="checkbox"/> As much as possible, discourage the opening of virgin forest and wetlands <input type="checkbox"/> Train farmers in sustainable land management practices to reduce environmental impacts <input type="checkbox"/> Deliver training and agricultural inputs to farmers on-time to enable them to adjust and adapt their planting and harvesting methods and timing <input type="checkbox"/> Adopt and enforce health, safety and environment rules at production sites to ensure clean, sustainable and environmentally friendly as well as climate-smart production processes <input type="checkbox"/> Encourage full exploration of the value chain including creating service providers in soil testing and agrochemical services <input type="checkbox"/> Develop a clear and simple Stakeholder Engagement Plan (SEP), incl. grievance mechanism, to manage expectations <input type="checkbox"/> Actively involve women and youth in all components and levels of decision-making within the project 	<ul style="list-style-type: none"> <input type="checkbox"/> Number of farmers that received training on sustainable land preparation <input type="checkbox"/> Changes in forest and wetland <input type="checkbox"/> Results from periodic soil and water analysis <input type="checkbox"/> Health, safety and environment manual <input type="checkbox"/> Number of value chain enterprises around soil testing and agrochemicals management <input type="checkbox"/> Stakeholder Engagement Plan <input type="checkbox"/> Conflict resolution committee meetings <input type="checkbox"/> Lists of approved projects and their beneficiaries <input type="checkbox"/> A greement on land access for women and youth and land lease documents 	

<p><i>Processing</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Use of processing machines 	<ul style="list-style-type: none"> <input type="checkbox"/> Waste generation <input type="checkbox"/> Air, water and land pollution <input type="checkbox"/> GHG emission from machines <p>Certification / RSPO</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Unsafe and non-healthy working conditions <p>Possible use of child labourers</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Increased sales and household income <input type="checkbox"/> Increased youth employment and social well-being <input type="checkbox"/> Improved processing capacity, value additions and value chain development <input type="checkbox"/> Improved nutrition and food security <input type="checkbox"/> Increased ability of youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development <input type="checkbox"/> Increased import substitution of Rice <ul style="list-style-type: none"> <input type="checkbox"/> But increasing associated environmental and social costs 	<ul style="list-style-type: none"> <input type="checkbox"/> Encourage the use of renewable and low-carbon energy sources during processing operations <input type="checkbox"/> Adopt health, safety and environment rules at processing sites <input type="checkbox"/> Train farmers in sustainable agro-processing practices to reduce environmental impacts <input type="checkbox"/> Step up knowledge management and information dissemination to showcase the achievement of the project 	<ul style="list-style-type: none"> <input type="checkbox"/> Number of operators adopting renewable low carbon technologies <input type="checkbox"/> Number of enterprises established focusing on processing <input type="checkbox"/> Number of entrepreneurs adopting sustainable processing operations <input type="checkbox"/> Knowledge management /communication plans, stakeholder meeting reports, communication project flyers/leaflets
<p><i>Marketing</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Construction of market infrastructure 	<ul style="list-style-type: none"> <input type="checkbox"/> Dust, smoke, noise, ground movement / vibration <input type="checkbox"/> Deforestation <input type="checkbox"/> Water pollution <input type="checkbox"/> Flooding and erosion and mudslide from poorly constructed culverts, roads, etc. 	<ul style="list-style-type: none"> <input type="checkbox"/> Better access to market <input type="checkbox"/> Better access to production and processing sites by supervisory agencies <input type="checkbox"/> Improved access to rural communities <input type="checkbox"/> Conflict over land and demand for compensation where infrastructure is to be constructed 	<ul style="list-style-type: none"> <input type="checkbox"/> Improved market penetration <input type="checkbox"/> Access to market information and market linkage and support services <input type="checkbox"/> Strengthened market value chain, with more profitable enterprises <input type="checkbox"/> Improved storage and reduced waste and postharvest losses 	<ul style="list-style-type: none"> <input type="checkbox"/> Use construction equipment with moderate decibel during construction <input type="checkbox"/> Develop/adopt and enforce health, safety and environment rules at construction sites <input type="checkbox"/> Lawful and willing consent of community/or individuals on land site for market infrastructure 	<ul style="list-style-type: none"> <input type="checkbox"/> Observation of construction equipment for dust, noise, smoke, vibration, etc. <input type="checkbox"/> Work inspection report on the environmental quality of market infrastructure <input type="checkbox"/> Health, safety and environment plans <input type="checkbox"/> Copy of consent of community /individuals on market infrastructure land site

<i>Transportation</i>	<ul style="list-style-type: none"> • Use of motorized and heavy transportation machines 	<ul style="list-style-type: none"> ☐ GHG emission from transportation 	<ul style="list-style-type: none"> ☐ Influx of rural migrants to agri-enterprise sites and processing areas ☐ Increased number of service providers, which boost the economy 	<ul style="list-style-type: none"> ☐ Increased ownership of motorized and other transport system ☐ Increased number of service providers ☐ Increased GDP ☐ But increasing associated environmental and social costs 	<ul style="list-style-type: none"> ☐ Organize transport entrepreneurs into an association for easy management ☐ Develop a code of conduct, and health, safety and environment regulation for transport operators 	<ul style="list-style-type: none"> ☐ Code of conduct for transport operators ☐ Minutes of meetings of transport operators' association

7.4 Analysis of Alternatives

The traditional approach to cocoa tree crop farming in Sierra Leone has been by default organic farming, this has been primarily due to a lack of agrochemical availability. Based on the analysis of the approach thus far, the outcome has been to focus on high-yielding cocoa varieties. This has environmental implications of increased agrochemical use, the exhaustion of already poor soils and the excessive de-shading of natural forest trees. On the basis of this analysis the project decided to use climate resilient planting materials and intercropping instead of pursuing maximum yields.

Under the RCPRP project, farmers were encouraged to abandon the destructive shifting agriculture practice typically employed in the uplands. The abandonment of slash and burn was encouraged through the promotion of climate resilient rice growing in the IVSs. Slash and burn is practiced by the extremely poor farmers and involves blanket burning to clear forestland to grow rice, vegetables, produce firewood and charcoal. The AVDP design mission has discovered however that farmers working the IVS will still continue their upland agricultural activities for typically 40% of the time during the dry season. To discourage this, the project will introduce vegetable growing for the tail end of the growing season to discourage the continued environmentally destructive practices. Cultivation of Rice in the mangrove area is becoming popular because of the inherent fertility of the mangrove swamp. This has severe consequences with loss of mangrove which can lead to flooding and storm surges. AVDP will discourage the cultivation of land in the mangrove dominate wetland areas.

Oil palm is grown throughout all the districts of Sierra Leone. The traditional practice is to open up the virgin forest, cut the trees down and destroy them with fire or turn them to charcoal (another popular common ecosystem destruction livelihood activity). This is because oil palm requires a lot of sunshine to grow. The AVDP will only support the rehabilitation of abandoned oil palm plantation. It will only support new plantations if they are to be sited in already degraded areas or degraded secondary bush areas. No new plantation in virgin forest will be supported.

8. ENVIRONMENTAL AND SOCIAL SCREENING OF SUB-PROJECTS

8.1 Introduction: Screening and Review

The Environment and Social Risk Category of the AVDP is 'B' which means 'some adverse impacts can be readily remedied by appropriate preventive actions and/or mitigation'¹²⁹. However to remain a 'B' Category Project serious attention has to be paid to Oil Palm cultivation (because of its huge potential to cause deforestation) and the construction of feeder roads considering the terrain in most districts of Sierra Leone .

During the implementation of AVDP, all sub-project proposals will be screened, first on eligibility on the basis of the 'letter of interest' / application form (see Annex 1), and secondly on the basis of environmental, climate and social impacts using the more detailed screening forms (see Annex 2). Project Screening for Environmental Impacts will ensure that sub-projects with high and irreversible impacts on the environment or people that cannot be readily mitigated are not eligible for support by AVDP.

Sub-project proposals with medium (manageable) environmental and social impacts should include the following basic elements in the application and contain in the project-specific ESMP:

- A summary and description of the possible adverse effects that specific sub-project activities may occur;
- A description of any planned measures to avoid or mitigate adverse impacts, and how and when they will be implemented;
- A system for monitoring the environmental and social effects of the project;
- A description of who will be responsible for implementing and monitoring the mitigation measures; and
- A cost estimate of the mitigation measures, which should be included in the sub-project proposal.

The scope of any environmental and/or social review and related mitigation measures will be determined by the relevant (environmental/climate change) NCPU staff in consultation with technical experts where needed, via the sub-project screening and approval process. Sub-project proposals with only minor or no adverse impacts do not need a separate review (or ESMP).

8.2 Screening for Eligibility

The AVDP PDR provides a detailed description of the targeting and selection process for beneficiaries. Annex 1 provides the proposed format for the letter of interest / application form, which should be completed by each intended beneficiary and will be used as the primary tool for screening for eligibility.

8.3 Screening for Environmental and Social Impacts and Climate Impacts

Based on relevant SECAP guidelines, two separate environmental and social screening forms have been developed: for agri-enterprise (Annex 2) and related (market) infrastructure subprojects (Annex 3), and climate screening form for sub-projects (Annex 4). The intended beneficiaries are only required to complete the intention/application form in Annex 1 while the screening is done using the form in Annex 2, 3 and 4 by the NCPU Environmental/Climate Change Officer (assisted by any Service Provider for that purpose).

Annex 5 provides an environmental and social guidelines for contractors especially those handling the construction of market infrastructure such as the construction /rehabilitation of market-connected rural feeder roads. Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As

¹²⁹ Source: IFAD (2016) Managing Risks to Create Opportunities. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) (IFAD: Rome), p.18

such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design. The guidelines include the site selection, prohibitions, construction management measures, safety during construction, community relations, chance finds procedures and environmental supervision during construction.

8.4 Impact Significance Rating

In order to determine the significance of impacts, the likelihood of an impact occurring is considered against the consequence or magnitude of the impact if it was to occur. Likelihood is defined as the frequency of an impact occurring.

Table 8.1 Definitions of Consequence

Consequence	Definition
No Impact / No change	<ul style="list-style-type: none"> • No impacts on biophysical and social environments / livelihood / health / gender • No public concerns • No legal issues
Negligible	<ul style="list-style-type: none"> • Low/minor impact on environment / livelihood / health / gender • Minor social impacts • No legal issues
Intermediate	<ul style="list-style-type: none"> • Some level of impact on environment / livelihood / health / gender • Social issues apparent • May have legal implications
Severe	<ul style="list-style-type: none"> • High level impacts on environment / livelihood / health / gender • High public concerns or perceptions • Legal non- compliance
Unknown	<ul style="list-style-type: none"> • Extent of the impact cannot be determined at this point • Apply precautionary principle

Projects that have low significance impacts may not require a new ESMP; in that case the standard ESMP and ESMF in this report will suffice. In the case of project with medium significance, the development of appropriate plans, in addition to the standard ESMP and ESMF may suffice to manage the severity of the impacts. In the case of projects with impacts of high significance, a separate ESIA is almost always required.

9. MONITORING OF ENVIRONMENTAL, CLIMATE AND SOCIAL IMPACTS

9.1 Introduction

The overall objective of environmental and social monitoring is to ensure that recommended mitigation measures are incorporated, and that activities carried out during sensitization (i.e. training and awareness-raising) and infrastructure construction/maintenance are environmentally and socially acceptable, and therefore sustainable.

9.2 Key Performance Indicators

The project targets are established in the logical framework. When the activities and indicators are established, baseline data needs to be collected to serve as a benchmark and against which changes in the identified indicators can be measured. The types of parameters that can be monitored may include mitigation measures or design features, or actual impacts. In some cases, such as drainage structures and soil conservation interventions, monitoring is fairly straightforward and can be done as part of routine or periodic maintenance. However, other parameters, particularly those related to social, ecological and climate change issues can only be effectively assessed over a period of 2 to 5 years.

The monitoring plan in Table 9.1 lists the parameters to be monitored, activity that will generate the parameters, monitoring indicator, and responsibility, monitoring means, frequency and the estimated cost.

Table 9.1: Environmental and Social Monitoring Plan

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD) ¹³⁰
ENVIRONMENTAL MONITORING						
Site specific ESIA's for road construction	Environmental Screening and impact assessment	Baseline on status of the environmental conditions	NCPU- Environmental Officer, Market Infrastructure Engineer	ESIA reports Adherence to laid legal and policy requirements	Once (project specific)	49,180
Site specific ESIA's for Earthen dam construction	Environmental Screening and impact assessment	Baseline on status of the environmental conditions	NCPU- Environmental Officer, Market Infrastructure Engineer	ESIA reports Adherence to laid legal and policy requirements	Once (project specific)	32,787
Site specific environmental screening (ES) for farm tracks	Environmental screening for farm tracks	Baseline status of environmental conditions	NCPU- Environmental Officer, Market Infrastructure Engineer	Environment Assessment report	Once (project specific)	29,508
Environmental baseline study	Environmental and social baseline for the project	General conditions of the entire study area	NCPU- Environmental Officer	Remote sensing and field assessment	Baseline	26,230
Land, soil and water degradation assessment (including waste and agrochemicals in land, soil and	Assessment of soil, water, land and vegetation	Status of land, soil, water and vegetation characteristics including soil microorganism count and water quality	NCPU- Environmental Officer	Field investigations and Laboratory Analysis	Biennial	78,689

¹³⁰ The estimated costs presented cover the monitoring expenses for all the 16 districts

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water) - two yearly						
Forest and (mangrove) wetland deforestation assessment -two yearly	Assessment of forest and mangrove wetlands	Status of forests and mangrove wetlands	NCPU- Environmental Officer	Remote Sensing and Field survey	Biennial	78,689
Erosion/mudslide and flooding - two yearly	Assessment of soil erosion and flooding	Changes in soil/land resulting from soil erosion/mudslide and inundation	NCPU- Environmental Officer	Field measurement and laboratory test	Biennial	78,689
Biodiversity and Cultural Resources surveys - annually	Biodiversity survey	Changes in abundance of plant and animal biodiversity	NCPU- Environmental Officer	Field biophysical survey	Annual	157,377
Access to climate information and agro-decision makings and GHG emissions	GHG measurement and Survey of access to climate information and agro-decision makings	Level of access to climate information by rural small holders farmers Extent of GHG emission from rice paddies	NCPU- Environmental Officer	Social survey and field investigation	Biennial	47,213
SOCIAL MONITORING						
Social / livelihood (SLA) baseline	Rapid appraisal of livelihoods of rural small holders farmer	Status of rural small holder farmers livelihoods	NCPU- Environmental Officer and Gender Officer	Social Surveys/Rapid rural appraisal	Once	52,459
Livelihood monitoring	Appraisal of rural livelihood improvements through AVDP	Status of rural small holder farmers livelihoods	NCPU- Environmental Officer and Gender Officer	Social Surveys	Annual	78,689
Other social monitoring	Engagement on land tenure and land access, gender, social exclusion, elite capture, monitoring conflict, managing expectations and health & safety issues.	Extent of project compliance with social safeguards	NCPU- Environmental Officer and Gender Officer	Social Surveys meetings, trainings	Annual	65,574

9.3 Summary of Environmental and Social Monitoring Costs

Table 9.2 shows the summary of the monitoring costs among the monitoring activities shown on Table 9.1 for year 1 and the years 2-6 of the AVDP project life cycle.

Table 9.2: Summary of Environmental Monitoring costs

Monitoring Parameter	Unit cost (in USD)	Total for 16 districts	Year 1/2	Year 2 - 6
Site specific ESIA's for roads per district*	4,918	78,689	39,344	39,344
Site specific ESIA's for earthen dams per district	2,049	32,787	16,393	16,393
Environmental baseline study	1,639	26,230	26,230	
Environmental monitoring **	24,590	393,443	65,574	327,869
Survey climate information access and GHG emissions study -	2,951	47,213	23,607	23,607

Social / livelihoods baseline study	3,279	52,459	52,459	0
Livelihoods monitoring	4,918	78,689	13,115	65,574
Other social monitoring ***	4,098	65,574	10,929	54,645
Total monitoring costs	48,443	775,082	247,650	527,432

*include ESIA for 600km road and environmental screening 1800km farm tracks

** include monitoring of land and soil degradation (including soil, water, land and agrochemicals), forest and wetland, flooding, erosion and mudslide, and biodiversity survey

*** includes monitoring of conflict, land access, social exclusion, gender, elite capture, and health & safety issues

As shown on Table 9.2 a total of **USD 775,082.00** has been estimate for the environmental and social monitoring for the AVPD. This represents about **1.2%** of the total estimate project cost. The detailed overview of the monitoring costs is shown on Annex 6. A total of **USD247, 650** is expected to be expended at the base year while the rest is spread across the 2nd to the 6th year (end of the project life cycle). The financing of the monitoring costs is expected to be supported by the Adaptation Fund, and relate especially to: Climate Resilient and Smart Agricultural Production (Component 1) and Climate Resilient Rural Infrastructure (which is under component 2) of the AVDP PDR

10. CAPACITY BUILDING AND TRAINING FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLANS

10.1 Strengthening Capacity and Improving Resilience

A successful mainstreaming of climate change and the ESMF into implementation of the AVDP project requires the strengthening of institutional capacities, in particular those of the Meteorological Agencies, EPA, Farmers Organization, Agricultural Development Program (ADP), and Women Organizations. Moreover, there is a strong need for context-specific, in-situ training sessions for farmers, and others in the value chain, for example on climate-smart agriculture and climate change adaptation, to improve their resilience to deal more effectively with climate-related weather events.

10.2 Training Topics

Proposed training topics include, at the very least:

- Community sensitization;
- Requirements of IFAD's SECAP and ERNM, Gender, as well as Climate, Land and Disclosure policies;
- ESMF processes, procedures and institutional arrangements to develop and implement required management plans;
- Data gathering and use of tools for data analysis;
- Screening and rating as prescribed in the ESMF;
- Environmental, social and climate impact assessment, and requirements;
- Preparation, implementation and monitoring of ESMPs and ESIA's;
- Reporting and monitoring implementation of ESMPs;
- Farmers Field School training on climate smart agriculture, environmental and social best practices, including: Sustainable land preparations, agrochemical application and pest and disease management, sustainable agronomic practices, soil fertility management, low-impact farming methods,
- Conflict resolution and grievance management mechanisms;
- Environmental (EMS 14001) and social audit, and report writing

10.3 Target Audience and Approach

The target groups for training should include, at least:

- Project Steering and Technical Committees; NPCU
- District MAFFS/Project Staff
- Meteorological Agency and ADP staff
- Service providers
- Beneficiaries (i.e. incubators and apprentices)
- Farmers Organizations

The training topics will be delivered based on the needs of each training target group. As much as possible, Training the Trainers (TOT) will be encouraged, where applicable, to manage resources and effectively reach the target audiences.

Table 10.1: Training Activity and Estimated Cost

SN	Activity	Year						Budget (USD)	Remarks
		1	2	3	4	5	6		
1	General Stakeholders and community sensitization using the media and workshop	X						78,689	Local media+1 day workshop in each of the 16 districts
2	Community sensitization in the districts		X	X				52,459	2day workshop
3	ToT training for regional and state environment /climate specialists, ADP staff and other relevant stakeholders on: (a) Requirements of IFAD's SECAP and ERNM, Climate, Land and Disclosure Policies (b) ESMF processes, procedures and institutional arrangements to develop and implement required management plans; (c) Subproject Screening (d) Environmental, social and climate impact assessment and mitigation; (e) Preparation, implementation, monitoring and reporting of ESMPs and ESIA's	X		X				24,590	5day workshop
4	Soil testing and analysis for production	X	X	X	X	X	X	110,164	
5	Data gathering and analysis for Environmental and Climate M & E	X						7,377	3day workshop
6	Farmers Field School training on climate smart agriculture, environmental and social best practices, including: Sustainable land preparations, agrochemical application and pest and disease management, sustainable agronomic practices, soil fertility management, low-impact farming methods	X	X	X	X	X	X	110,164	
7	Conflict resolution and grievance management	X						5,246	
8	Environmental (EMS 14001) and social audit and report writing	X						10,000	5day workshop
								398,689	

The total training cost is estimated at **USD 398,689** which represents about 0.62% of the project cost. In total, both the Environmental and Social Monitoring costs and Training cost accounts for **1.82%** of the estimated project cost.

Annex 1: Screening for eligibility

AGRICULTURE VALUE CHAIN DEVELOPMENT PROJECT

Letter of Interest (Eligibility Screening Form) Please complete all the required spaces in this form

1. Name: Surname -----Other Names:-----

Maiden name (for married women):-----
-

2. Sex: (a) Male { } (b) Female {
}

3. Date of birth: -----
--

4. Highest Education Level: (a) No formal education { } (b) Primary School { } (c)
Secondary
School { } (d) Vocational school (e) Tertiary Education {
}

5. Which community do you belong to: -----

6. How long have you lived in this community: -----

7. How do you belong to this community: (a) by birth { } (b) by marriage { } (c) other
(specify):--

8. Chiefdom ----- District -----

9. What enterprise are you interested in -----

10. Do you have any experience in this enterprise: (a) Yes { } (b) No { }. If yes, how
many years:

11. Do you belong to any youth or women organization: (a) Yes { } (b) No { }. If yes, what
is the name: -----

12. Do you belong to any cooperative society: (a) Yes { } (b) No { }. If yes, what is the
name: -----

13. Do you have access to any land for the enterprise: (a) Yes { } (b)
No { }

14. If yes to question 13, where is the land located-----
; and what is the area size of the land? -----

15. What kind of title do you have to the land: (a) Government paper { } (b) Inheritance from
parent { } (c) husband or wife's consent { } (d) family allocation { } (e) community's
allocation { } (f)

Others (specify):-----
--

Endorsement

S:

Applicant: I certify that the information provided here is correct

Name: -----

Signature: -----

-

Date: -----

Community/traditional leader:

Name: -----
Sign: -----
Date: -----

Verifications:

Comments by the Local Government Liaison Office:-----

Name of Officer: ----- Designation: -----

--

Sign and date: -----

Comments by the District Project Coordination Office:-----

Name of Officer: -----

Designation: -----

Sign and date: -----

Annex 2: Screening for Agric Enterprises

A: Screening Form for Agri-Enterprise Projects

General Information

Project Name:	
Name of applicant:	
Name of Cooperative: Contact person's details:	
Name of Group: Contact person's details:	
Project Location:	
Project sector (e.g. rice farming, Oil Palm processing, etc.)	
Estimated Cost:	
Proposed Date of Commencement:	
Expected Project duration:	
Site (estimated area in ha):	
Any equity/contribution brought into the project:	
Any plan for new construction:	

B: Screening for Environmental and Social Issues for Sub-projects

Question	Yes	No	Additional explanation of
1. Will the sub-project develop any wetlands?			
2. Would the sub-project result in economic displacement ¹³¹ (loss of			
3. Would the sub-project result in conversion and/or loss of Physical Cultural Resources?			
4. Will the sub-project have significant social adverse impacts (affecting access to and/use rights to land, access to potable water and water for other uses) on local communities or other project-affected parties?			
5. Will the project trigger unsustainable natural resource management practices (fisheries, forestry, livestock, and significant increase in use of agrochemicals) that exceed the			
6. Does the sub-project include conversion of significant areas (above 50 ha) of natural forests/other wild lands?			
7. Would the project potentially cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. habitat loss, erosion/ other form of land degradation, fragmentation, hydrological changes)?			
8. Does the proposed project target area include ecologically sensitive areas ¹³² of global significance for biodiversity conservation and/or biodiversity-rich area; habitats depended on by endangered species?			
9. Does the project involve fisheries development in situations where little information exists on sustainable yield?			
10. Could the project pose a risk of introducing invasive alien species?			
11. Does the project involve the transfer, handling or use of genetically modified organisms/living modified organisms that may have an adverse effect on threatened biodiversity?			
12. Does the project involve land use changes (agricultural intensification and/or expansion of the cropping area) and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?			
13. Will the project result in increased use of agrochemicals which may affect the natural environment/human health?			
14. Does the project include small-scale irrigation and drainage projects, and water impoundment including small dams (except in wetlands)?			
15. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas?			
16. Do the project activities include rangeland and livestock development?			

¹³¹ Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (see SECAP Procedure Guidance Statement 13)

¹³² Sensitive areas' include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race

17. Does the project involve artisanal fisheries where there is information on sustainable yield?			
18. Do the project activities include aquaculture and/or			
19. Do the project activities include watershed management or rehabilitation?			
20. Does the project include large-scale soil and water conservation measures?			
21. Does the project include small and micro enterprise development sub-projects?			
22. Does the project involve credit operations through financial service providers, including credit for pesticide/other agrochemicals, livestock purchasing,			
23. Do the project activities include natural resources-based value chain development?			
24. Would any of the project activities have minor adverse impacts on physical cultural resources?			
25. Would the project have low probability to have physical resettlement or economic displacement?			
26. Does the project include development of agro-processing facilities?			
27. Will the project require a migrant workforce during construction?			
28. Will the project require seasonal workers to plant and/or harvest produce			
29. Will the construction or operation of the project cause an increase in traffic on rural roads?			

Guidance for sub-project categorization:

"Yes" response to any of questions 1-11	Sub-project Environmental and social	ESIA is required for subproject
"Yes" response to questions 12-29	Sub-project Environmental and social	Sub-project to adopt the ESMP in the general ESMF
"No" response to almost all questions	Subproject Environmental and social	No further analysis is required

Annex 3: Screening for Market Infrastructure

A: General Information for (Market) Infrastructure Sub-Projects

Name of market infrastructure:	
Infrastructure type:	
Location:	
Proposed Date of Commencement:	
Expected Project duration:	
Estimated cost:	
Estimate number of communities to be served:	
Estimated number of entrepreneur to be served:	

B: Screening for (Market) Infrastructure Sub-projects

Question	Yes	No
1. Will the project activities include construction/rehabilitation of rural roads or other rural infrastructure in protected/sensitive areas? ¹³³		
2. Does the project include construction of roads or other infrastructure that entail the total area being cleared of 50 ha or above?		
3. Does the project include construction of dam (s)/reservoir (between 5-15 m high with a reservoir exceeding 2 million m ³)?		
4. Does the project involve large-scale irrigation schemes rehabilitation/development (above 100 ha)?		
5. Does the project involve significant extraction of ground water (significantly above recharge capacity)?		
6. Does the project include water-based (ground or surface) development where it is believed that significant depletion due to climate change or overutilization has occurred?		
7. Does the project involve significant extraction, diversion or containment of surface water?		
8. Does the project include drainage or correction of natural water bodies (e.g. river draining)?		
9. Will the project include construction/rehabilitation of rural roads that pass through wetlands?		
10. Would any of the project activities have minor adverse impacts on physical cultural resources?		
11. Does the project include development of agro-processing facilities?		
12. Will the project require a migrant workforce during construction?		
13. Will the construction or operation of the project cause an increase in traffic on rural roads?		

¹³³ Sensitive areas' include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

14. Has the government or community guaranteed the lease of the land for the (market) infrastructure?		
15. Is there any plan in place for sustainability of the infrastructure during the project life time?		
16. Does the project include specific measures to protect against dust (such as dust masks and water spraying)?		
17. Has arrangement been made to pay adequate compensation for private property that may be affected by the construction of the project?		

18. Will construction equipment with moderate decibels be used and the timing of use be so that people will experience less discomfort?		
19. Will tree and vegetation replanting be carried out to stabilize slopes and re-green road sides?		

Guidance for categorization:

"Yes" response to any of	Environmental and social category is A	ESIA is required
"Yes" response to questions 10-13	Environmental and social category is B	Sub-project to adopt the general ESMP in the ESMF
"No" response to almost all questions 1-13 and	Environmental and social category is C	No further analysis is required

Annex 4: Climate Screening Form

Climate Screening Form for Sub-Projects

To be used with the environmental and social screening forms.

Screening for Climate Issues

Question	Yes	No	Additional Explanation of 'Yes' response*
1. Is the project area subject to extreme climatic events such as flooding, drought, tropical storms, or			
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?			
3. Will the project make investments in low-lying coastal areas/ zones exposed to river flooding and coastal storm surge?			
4. Will the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?			
5. Is the project located in areas where rural development projects have experienced significant weather-related losses and damages in the past?			
6. Will the project develop/ install infrastructure in areas with a track record of extreme weather events?			
7. Is the project target group entirely dependent on natural resources (such as seasonal crops, rain-fed agricultural plots, migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?			
8. Will climate variability likely affect agricultural productivity (crops/ livestock/fisheries) or the associated incidence of pests and diseases for the project target groups?			
9. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production			
10. Is the project investing in climate-sensitive livelihoods that are diversified?			
11. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?			
12. Is the project investing in institutional development and capacity building for rural institutions (such as farmer groups, cooperatives) in			

13. Does the project have the potential to become more resilient through the adoption of green technologies at a reasonable cost?			
14. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?			
15. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector resilience/policies?			
16. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved crop variety, capacity building; or including climate risk issues in ...)			
17. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify additional complementary investment actions to manage climate risks?			

Guidance for categorization:

"Yes" response to any of	Sub-project Climate risk is High	Climate risk Analysis is required for sub-project
"No" response to almost	Sub-project climate risk is moderate	Sub-project to adopt the ESMP in the general ESMF

Annex 5 - Environmental and Social Guidelines for contractors¹³⁴

(for reference in contractor agreements/contracts)

Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design including the following:

Site Selection

Sites should be chosen based on community needs for additional projects, with specific lots chosen based on geographic and topographic characteristics. The site selection process involves site visits and studies to analyse: (i) the site's, sub-urban, or rural characteristics; (ii) national, regional, or municipal regulations affecting the proposed sites; (iii) accessibility and distance from inhabited areas; (iv) land ownership, including verification of absence of squatters and/or other potential legal problems with land acquisition; (v) determination of site vulnerability to natural hazards, (i.e. intensity and frequency of floods, landslides, etc.); (vi) suitability of soils and sub-soils for construction; (vii) site contamination; (viii) flora and fauna characteristics; (ix) presence or absence of natural habitats and/or ecologically important habitats on site or in vicinity (e.g. forests, wetlands, rare or endangered species); and (ix) historic and community characteristics.

The rules (including specific prohibitions and construction management measures) should be incorporated into all relevant bidding documents, contracts, and work orders.

Prohibitions

The following activities are prohibited on or near the project site:

- Cutting of trees for any reason outside the approved construction area;
- Hunting, fishing, wildlife capture, or plant collection;
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.
- Disturbance to anything with architectural or historical value;
- Building of fires;
- Use of firearms (except by authorized security guards);
- Use of alcohol by workers.

Construction Management Measures

Solid, sanitation, and hazardous wastes must be properly controlled, through the implementation of the following measures:

Waste Management:

- Minimize the production of waste that must be treated or eliminated;
- Identify and classify the type of waste generated. If hazardous wastes (including health care wastes) are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal;
- Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each;
- Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands). All garbage, metals, used oils, and excess material generated during construction should only be disposed in authorized areas, incorporating recycling systems and the separation of materials.

Maintenance:

- Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands);

¹³⁴ Adapted from Ministry of Agriculture, Irrigation and Water Development, Republic of Malawi (2015) *Environmental and Social Management Framework for Programme for Rural Irrigation Development in Malawi*, pp.76-80.

- Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems;

Identify, demarcate and enforce the use of within-site access routes to limit impact on site vegetation;

- Install and maintain an adequate drainage system to prevent erosion on the site during and after construction.

Erosion Control

- Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways;
- Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind-induced erosion, as needed;
- Maintain vehicle speeds at or below 10mph within the work area, 15mph or below within 200m of the site, and abide by the relevant speed limits at all times to / from the work area.

Stockpiles and Borrow Pits

- Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion-prone soils, and areas that drain directly into sensitive water bodies;
- Limit extraction of material to approved and demarcated borrow pits.

Site Clean-up

- Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris.

Safety during Construction

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- Carefully and clearly mark pedestrian-safe access routes;
- If school children are in the vicinity, include traffic safety personnel to direct traffic;
- Maintain supply of supplies for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction;
- Conduct safety training for construction workers prior to beginning work;
- Provide personal protective equipment (PPE) and clothing (such as goggles, gloves, respirators, dust masks, hard hats, steel-toed and –shanked boots, etc.) for construction workers and enforce their use;
- Post Material Safety Data Sheets for each chemical present on the worksite;
- Require that all workers read, or have read, all Material Safety Data Sheets. Clearly explain the risks to them and their partners, especially when pregnant or planning to start a family. Encourage workers to share the information with their physicians, when relevant;
- Ensure that the removal of asbestos-containing materials or other toxic substances be performed and disposed of by specially trained workers;
- During heavy rains or emergencies of any kind, apply construction safeguards guidelines;
- Brace electrical and mechanical equipment to withstand unexpected events during construction.

Nuisance and Dust Control

To control nuisance and dust the Contractor should:

- Maintain all construction-related traffic at or below 15 mph on streets within 200 m of the site;
- Maintain all on-site vehicle speeds at or below 10 mph;
- To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90db;
- In sensitive areas (including residential neighbourhoods, health centres, schools, etc.) more strict measures may need to be implemented to prevent undesirable noise levels;
- Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people (children, elderly);
- Phase removal of vegetation to prevent large areas from becoming exposed to wind;

- Place dust screens around construction areas, paying particular attention to areas close to housing, commercial areas, and recreational areas;
- Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material;
- Apply proper measures to minimize disruptions from vibration or noise coming from construction activities. **Community Relations**

To maintain cordial community relations the Contractor should:

- Following the country and ESMP requirements, inform the population about construction and work schedules, interruption of services, traffic detour routes, as appropriate;
- Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures;
- At least five days in advance of any service interruption (including water, electricity) the community must be advised through clearly visible posters at the project site and at central community locations;
- Where possible, particularly for tasks that can also be performed through low-skilled manual labour (such as digging of shallow trenches, etc.), make use of labour from the local community.

Chance Find Procedures for Culturally Significant Artefacts

In case culturally valuable materials (incl. shrines, graves, etc.) are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archaeological, historical, paleontological, or other cultural value, announce findings to project manager and notify relevant authorities;
- Protect artefacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artefacts;
- Prevent and penalize any unauthorized access to the artefacts;
- Restart construction works only upon the authorization of the relevant authorities.

Environmental Supervision during Construction

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for non-compliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental supervisor. Contractors are also required to comply with national and state regulations governing the environment, public health and safety.

Annex 6: Detailed Costing of Environmental and Social Monitoring costs

Sn	Monitoring activities	Qty /frequency	costing index	No of districts	Cost (unit) in USD	Total for 16 districts (USD)	Year 1	Year 2 - 7
1	Site specific ESIA's for road construction	600km roads	600		49,180	49,180	24,590	24,590
2	Site specific ESIA's for earthen dam	40 earthen dams	40		32,787	32,787	16,393	16,393
3	Site specific Environmental Screening for farm track construction/improvement	1800 farm tracks	1800		29,508	29,508	14,754	14,754
4	Environmental baseline study	1 time	1	16	1,639	26,230	26,230	0
5	Land, soil and water degradation assessment (including waste and agrochemicals in land, soil and water) - two yearly	3times	3	16	4,918	78,689	11,241	67,447
6	Forest and (mangrove) wetland deforestation assessment -two yearly	3 times	3	16	4,918	78,689	26,230	52,459
7	Erosion/mudslide and flooding - two yearly	3 times	3	16	4,918	78,689	26,230	52,459
8	Biodiversity survey - annually	6 times	6	16	9,836	157,377	22,482	134,895
9	Survey of access to climate information and agro-decision makings and GHG emissions study -	3times	3	16	2,951	47,213	6,745	40,468
10	Social / livelihood (SLA) baseline study	1 time	1	16	3,279	52,459	52,459	0
11	Livelihood monitoring (annual)	6 times	6	16	4,918	78,689	0	78,689
12	Other social monitoring**	6times	5	16	4,098	65,574	9,368	56,206
	TOTAL				152,951	775,082	236,721	538,361

Annex 7: List of Stakeholders Consulted

Meetings: 19/6/2018

Ministry of Lands, Country Planning and the Environment

- Mr Israel Jigbo – Permanent Secretary
- Mr Keita

Sierra Leone Environmental Protection Agency (EPA)

- Mr Bah – Director EPA

Forestry Department

- Mr Sahr J Kellie – Deputy Director, Forestry

Ministry of Works

- Mr Joseph Tikanu – Permanent Secretary

Sierra Leone Meteorological Agency

- Mr Ibrahim S Kamara – Director
- Mr Gabriel Kpaka – Deputy Director
- Mr Patrick Miesa – Head of Climatology
- Mr Saiku Yayah Bah - Accountant