

Republic of Indonesia

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

Final programme design report

Main report and appendices

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Programme Management Department

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Currency equivalents

10,000 Indonesian Rupiah (IDR) = USD0.77 USD1.0 = IDR13,000

Weights and measures

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

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

Abbreviations and acronyms

AAEHRD Agency for Agricultural Extension and Human Resource Development

AHPT Animal Health and Production Technician.

APBD Anggaran Pendapatandan Belanja Daerah (Regional Government Annual

Budget)

APBN Anggaran Pendapatandan Belanja Negara (State Annual Budget)

APBNP Anggaran Pendapatandan Belanja Negara Perubahan (Revised State Annual

Budget)

APFS Audited Project Financial Statements

ASBANDA Asosiasi Bank Daerah, Association of BPDs

AWPB Annual Work Plan and Budget

Bakorluh Badan Koordinasi Penyuluhan/ Agency for Extension Coordination (Province)
Bapeluh Badan Pelaksana Penyuluhan/Agency for Extension Coordination (District)
Bappeda Badan Perencanaan Pembangunan Daera/ Regional Development Planning

Agency

BAPPENAS Badan Perencanaan Pembangunan Nasional (National Development Planning

Agency)

BI Bank Indonesia, monetary authority

BMT Baitul Maal wa Tamwil, sharia-based SCC

BNI Bank Negara Indonesia - a commercial bank (state-owned)

BP3K sub-district extension units

BPD Bank Pembangunan Daerah - Regional banks (owned by provincial and district

governments)

BPK Badan Pemeriksa Keuangan (Indonesian Supreme Audit Agency)
BPKP Badan Pengawasan Keuangandan Pembangunan (State Finance and

Development Audit Agency)

BPR Bank Perkreditan Rakyat, Rural Bank

BPTP Assessment Institute for Agricultural Technology for Indonesia
BRI Bank Rakyat Indonesia - a commercial bank (state-owned)

Bupati District Mayor
Camat Sub-district Mayor

CBFO Community-Based Financial Organization
CCDP Coastal Community Development Project
CIAT International Centre for Tropical Agriculture

DAF Department of Agricultural Finance (DG PSP under MoA)

DAFEP Decentralized Agriculture and Forestry Project
DEKON/TP De-concentration/Co-Administration funds

DFA District Financial Advisor
DFS Digital Financial Services
DG Directorate General

DG BANGDA Directorate General of Reginal Development, MoHA

DGAIF Directorate General of Agricultural Infrastructures and Financing, MoA.

DGB Directorate General of Budget, MoF

DGFB Directorate General of Fiscal Balance, MoF

DGRD Directorate General of Regional Development, MoHA

DGT Directorate General of Treasury, MoF

DGWR Directorate General of Water Resources, MPW

Dinas Technical line department of the Province/District Administration

DIPA DaftarIsianPelaksanaanAnggaran (Annual Budget Implementation Form)

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DIPA-HPD DaftarlsianPelaksanaanAnggaran – HibahPada Daerah (DIPA for Grant to

Regional Government)

DIPA-TP DIPA Tugas Pembantuan (Annual Budget for Co-Administration Fund)
DPA-SKPD Daftar Pelaksanaan Anggaran – Satuan Kerja Pemerintah Daerah (Annual

Budget at Regional Government Work Unit)

DPMO District Programme Management Office

DRFC District Rural Finance Coordinator

EA Executing Agency

FEATI Farmer Empowerment through Agricultural Technology and Information

FEW/PPL Field Extension Worker/Penyuluh Pertanian Lapangan

FLF Financial Literacy Facilitator FM Financial Management

FMA Financial Management Assessment

FSP Financial Service Provider

Gapoktan Gabungan Kelompok Tani, Farmer Group Associations

GDI Gender Development Index

GICS Government Internal Control System

GII Gender Inequality Index
Gol Government of Indonesia
HDI Human Development Index
IA Implementing Agency
IDR Indonesian Rupiah

IFAD International Fund for Agricultural Development

IP Indigenous People

IPDMIP Integrated Participatory Development and Management of Irrigation Sector

Project

KPA KuasaPenggunaAnggaran (Authorized Budget Holder)

KPA-HPD KuasaPenggunaAnggaran – HibahPada Daerah (On-granting Budget

Authorized User)

KPKD Kantor PerbendaharrandanKas Daerah (Regional Government Treasury

Office)

KPPN Kantor PelayananPerbendaharaan Negara (State Treasury Office)

KUR Kredit Usaha Rakyat, People's Business Loan

LDH Loan Disbursement Handbook

Lembaga Keuangan Mikro Agribisnis, micro finance institution established before Law

LKM-A 1/2013 on MFIs

MAK Mata AnggaranPengeluaran (Budget Expenditure Codes)

MFI Microfinance Institution (according to Law 1/2013)

MoA Ministry of Agriculture

MoCSME Ministry of Cooperatives and Small Medium Enterprises

MoF Ministry of Finance
MoHA Ministry of Home Affairs
MPW Ministry of Public Works

MTEF Medium-Term Expenditure Framework

MTR Mid-term review

NAEP National Agricultural Extension Project

NGO Non-Government Organisation

NPL Non-performing Loan

NPMO National Programme Management Office

NPMU National Project Management Unit (in WISMP II)

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NFA National Finance Advisor

NTT Nusa Tenggara Timur (East Nusa Tenggara)

OGA On-Granting Agreement

OJK Otoritas Jasa Keuangan (Financial Services Authority)

P4K ProyekPeningkatanPendapatanPetani Kecil (Small Farmers' Income

Generating Project)

PBB Performance Based Budgeting

PEFA Public Expenditure Financial Accountability

PERMENKEU PeraturanMenteriKeuangan (Minister of Finance's Regulation)

PFA Provincial financial advisors
PFM Public Financial Management
PIM Project Implementation Manual

PIU Programme/Project Implementation Unit
PKK Pemberdayaan dan Kesejahteraan Keluarga

PMU National Support Unit

PPK PejabatPembuatKomitmen (Commitment Maker Officer)
PPL Penyuluh Pertanian Lapangan (Extension worker)

PRA Participatory Rural Appraisal

PSP Prasarana dan Saran Produksi, (Agriculture) Infrastructure and Means

PT Perseroan Terbatas, limited liability company

READ Rural Empowerment and Agricultural Development Project

READ SI Rural Empowerment and Agricultural Development Programme Scaling-up

Initiative

RF Revolving Fund

RKA RencanaKerjadanAnggaran (Work Plan and Budget)

RKA-HPD RencanaKerjadanAnggaran -Hibahpada Daerah (Work Plan and Budget –

Grant to Regional Government)

SA Special Account

SAI SistemAkuntansiInstansi (Agency Accounting System)

SAIBA SistemAkuntansiInstansiBerbasisAkrual (Accrual Based Accounting System)
SAKPA SistemAkuntansiKuasaPenggunaAnggaran (Accounting System for Authorized

Budget Holder)

SBFIC Savings Bank Foundation for International Cooperation

SC Steering Committee

SCC Savings and Credit Coperatives (single purpose)

SCG Savings and Credit Groups

SHG Self-Help Groups, often with savings and credit activities among group members

SIMAK BMN SistemInformasiManajemendanAkuntansiKeuanganBarangMilik Negara

(Financial Management Information System – State Owned Assets)

SM Social Mobilizer

SOE Statement of Expenditures

SP2D Surat PerintahPencairan Dana (Instruction Letter to Disburse Budget)
SPAN SistemPerbendaharaandanAnggaran Negara (State Treasury and Budget

System)

SPM Surat PerintahMembayar (Instruction Letter to Pay – from Treasurer to KPPN)

SPP Surat PerintahPembayaran (Instruction Letter to Pay)

TI Transparency International

TOR Terms of Reference

ULP Unit LayananPengadaan (Procurement Service Unit)

UPDD Village Fund Management Unit

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VF Village Facilitator
WA Withdrawal Application
WFP World Food Programme

WISMP II Second Water Resources and Irrigation Sector Management Project

Map of the programme area

Indonesia

Rural Empowerment and Agricultural Development Scaling-up Initiative (READSI)



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 | 14-09-2016

Executive Summary¹

- 1. Context and ownership. READ SI (Rural Empowerment and Agricultural Development Scaling-up Initiative) is the first stage in the scaling-up of the successful Rural Empowerment and Agricultural Development (READ) project. IFAD supported READ from 2008 to 2014, which, following a re-design at mid-term, has achieved significant results in terms of empowering smallholder farmers, increasing income and production and strengthening villagelevel institutions by integrating community-driven development and agricultural productivity activities into one complete package of support. READ further piloted a number of innovations, including (i) a focus on public-private partnership for instance with MARS for technical services in cocoa development; (ii) the out-sourcing of key services, such as village facilitation and input supply (such as improved seeds) to external partners, such as NGOs; (iii) a clear focus on selected key food and income crops that were supported with a comprehensive, well-resourced input package; (iv) and working capital finance being provided as group based and owned, noncollateral finance. Given this successful pilot, the Government of Indonesia (GoI) has identified READ as a model that can support achieving national development goals and has requested IFAD financing and technical support in the scaling-up of the READ approach.
- 2. Building on the lessons learned from READ and other IFAD-supported interventions in the country and region, READ SI will upgrade the original READ approach and move from a project to a programmatic platform with the intention to influence future public and private investment. It is expected that the READ SI approach will be further scaled up with national public financing. The scaling up strategy of READ SI combines testing and refining the READ approach in different settings, the first stage of geographical replication within Sulawesi, West Kalimantan and East Nusa Tenggara (NTT) with a strong knowledge management and evidence-based policy dialogue framework and institutional capacity building.
- 3. The high degree of ownership for this initiative, within the GoI in general and in the Ministry of Agriculture (MoA) in particular, is evident by the fact that MoA has already commenced scaling up elements of READ in two new provinces in 2015, in West Kalimantan and NTT, with a total budget of approximately IDR 20 billion per year (USD 1.45 million), though in these very different agricultural and socio-economic settings the initial implementation has progressed slower than expected, highlighting the need for continued IFAD technical support to the broader scaling up. These locations will now be integrated into READ SI.
 - Furthermore, given the recent large increase in public investment in the agriculture sector (national budget allocation for MoA increased by 50% from 2015 to 2016, mainly for infrastructure investments), this scaling up initiative provides a strategic opportunity to link to large scale investment programmes such as the very large Government-funded UPSUS and the forthcoming Gol/ADB/IFAD-supported Integrated and Participatory Development and Management of Irrigation Project (IPDMIP) as well as smaller and more localized initiatives.
- 4. **Development Objective** of READ SI is that "Rural households in Sulawesi, West Kalimantan and NTT are empowered individually and collectively with the skills, confidence and resources to sustainably improve their farm and non-farm incomes and livelihoods". The key performance targets are:
 - (a) >76,500 smallholder households directly benefiting of increased household assets by 25% more than comparable non-participating smallholder households;

¹Mission composition: The mission team was composed of Ron Hartman, IFAD Country Director; Nigel Smith, Team Leader; Tony Ryan, Agriculture Specialist/READ MTR & Implementation Support Team Leader; Pari Bauman, Gender and Empowerment Specialist; Sarah Hessel, IFAD Programme Officer; Wolfram Hiemann, Rural Finance Specialist; Shankar Kutty, IFAD Procurement Specialist; Norman Messer, IFAD Rural Institutions Specialist; Anissa Pratiwi, IFAD Country Programme Officer; Lucia Gaitin Sanchez, Environment and Cocoa Climate Sustainability Specialist; Sumaryo Soemardjo, Financial Management Specialist; and Agnese Tonnina, Economist.

- (b) Chronic malnutrition reduced by 10% in children under 5yrs of age;
- (c) >80% of participating poor and near poor households increase real net farming or non-farm income by >30% more than comparable non-participating households;
- (d) Commodity and livelihood groups are active and functioning effectively in 90% programme villages; and
- (e) Return on investment (ROI) exceeds 20%.
- 5. **READ SI duration** will be 60 months, with programme effectiveness expected no later than January 2018, but earlier if possible by agreement between GoI and IFAD.
- 6. **Target groups** will include:
 - (a) the poor and near poor who have the potential to generate economic returns from agriculture with programme support; and
 - (b) landless and land-poor, including women-headed households, who will be included in activities directed at homestead gardening, improved nutrition and financial literacy.
- 7. The programme areas are home to a large number of diverse indigenous people and ethnic groups, particularly the *komunitasadatterpencil* (KAT, term used by the Ministry of Social Affairs for a group of people bound by geographical unity and shared economic and/or socio-cultural systems). The targeting strategy will ensure the inclusion of ethnic groups and indigenous people who meet the programme selection criteria, as well as the adaptation of activities to social and culturally influenced particulars of indigenous people.
- 8. **READ SI implementation areas** will include a total of 24 districts, with 20 districts within the six provinces of Sulawesi Island (Sulawesi Utara, Gorontalo, Sulawesi Tengah, Sulawesi Tenggara, Sulawesi Selatan and Sulawesi Barat) and two districts in each of West Kalimantan and NTT. It is expected that READ SI will continue in the five original READ districts in Sulawesi Tengah and the two districts in each of NTT and West Kalimantan. Thus there will be a total of 15 new and 9 old districts in READ SI. District selection will be finalized by MoA by January 2017.
- 9. READ SI will be implemented in a total of around 450 villages 360 new villages and 90 old villages. In each of the nine "old" districts, READ SI will continue working in 10 "old" READ villages and extend activities to 10 additional "new" villages. For new districts, 18 new villages will be supported in each. "New" villages (in both old and new districts) will receive the "foundation stage" core READ support, including substantial farmer training and small infrastructure support. Old villages in old READ districts will have a more advanced set of interventions.

Programme Components

- 10. Component 1: Village agriculture and livelihoods development is the core of the programme, both conceptually and in terms of direct impacts and accounts for around 56% of programme investments. The component focuses on the proven READ approach of community mobilization closely integrated with agriculture and livelihood development within programme villages with Village Facilitators and technical extension staff working side by side in each village. It includes all activities within the villages and implementation will be led by district governments in line with Indonesia's decentralization framework.
- 11. The elements of the integrated village process include four complementary dimensions which will run in parallel with the programme supported households and common interest groups:
 - (i) Community mobilization;
 - (ii) Agriculture and livelihoods;
 - (iii) Savings, loans and financial literacy; and
 - (iv) Nutrition, including early childhood nutrition (i.e. "the first 1000 days"/1000 Hari Pertama Kehidupan)

- 12. The four dimensions above will remain relevant to all READ SI villages, however the original READ villages will be at a more advanced stage of development in terms of the thematic focus areas and therefore will be supported with a selected set of more advanced interventions. This will enable these advanced interventions to be tested and refined in a limited number of villages before being rolled-out later to new villages, enabling READ SI to continue to innovate around emerging critical issues while delivering strong impacts with increasing efficiency in new villages.
- 13. Component 2: Services, inputs and market linkages deals with the key support services and markets, especially at the district level and the associated systems at higher levels, and covers five key services each addressed under a sub-component. This is an area of greater focus for READ SI and is intended to improve the performance and service delivery of these key services in a more sustainable way. It is a compliment to the farmer-centred activities in component 1 and not a driver. It represents around 19% of total programme budget, with the large majority of this (around three-quarters) targeted towards upgrading the public extension services both in terms skills and some infrastructure directly supporting Component 1 activities. The activities under each sub-component will be primarily managed and coordinated by the relevant technical staff in the National Programme Management Unit.
- 14. The sub-components each correspond to a key service or support market and are:
 - 2.1 Agricultural extension service (all districts)
 - 2.2 Financial services (all districts)
 - 2.3 Seed supply markets and system (all districts)
 - 2.4 Cocoa farmer support services and markets (Sulawesi only)
 - 2.5 Livestock production and health services and markets (before MTR only in NTT, possible scale up post-MTR)
- 15. Private-public partnerships will be an important part of the approach to more sustainable improvement of these service markets and systems, especially for: financial services through locally focussed partnerships with banks; expanding on the successful partnership with MARS Cocoa from READ to further strengthen cacao support markets and establishing new partnership with other lead cocoa firms, such as Mondelez, and; market-oriented collaborations between rice seed multiplier farmers and the supporting technical seed producer agencies of MoA.
- 16. Component 3: Policy and strategy development support has the objective to strengthen policy and institutional framework for smallholder agriculture. This will include informing national policies and programmes, documenting and scaling up best practices and building public capacity to effectively deliver services in support of inclusive rural growth. This component will be primarily funded through an IFAD grant, but managed as an integrated part of READ SI. The activities will be linked to complementary investments, such as the IFAD-supported policy platform on irrigated agriculture in BAPPENAS.
- 17. **Implementation** of READ SI will follow the overall implementation arrangements of READ and will inherit the strong management foundations that have underpinned READ's success. At the same time it will also need to adapt some implementation principles reflecting the evolution into a programme management framework (from a standalone project). Key principles on which READ SI implementation arrangements will operate are:
 - (i) Designed to operate within mainstream government systems and processes;
 - (ii) Expanding strong core management team, including bringing in best managers from READ districts to more core roles in new READ SI programme:
 - (iii) Building strong systems and processes to maximize management efficiency (especially given high workload of the executing agency with two major investments, IPDMIP and READ SI);
 - (iv) Build responsibility and accountability at all levels in the programme;

- (v) Benchmarking between districts and within districts and staff, enabled by independent monitoring and evaluation; and
- (vi) Incentives for strong performance, to foster self-motivation, but with mechanisms to address under-performance.
- 18. MOA will be the Executing Agency with the Agency for Agricultural Extension and Human Resource Development (AAEHRD) being assigned to host the READ SI National Programme Management Office (NPMO), continuing from READ. The NPMO will contract additional technical specialists to work as an integrated part of READ SI delivery in the areas of social mobilization and rural finance. This implementation model was recognized to have been a major factor in READ's post-MTR success.
- 19. While the NPMO has overall responsibility for programme delivery, each of the Components has specific implementation arrangements:
 - (a) Component 1: District BAPPEDA and their relevant technical agencies (e.g. BAPELLUH and DINAS Pertanian) will have prime responsibility for programme delivery within their districts. Staff from the specialist implementing partners on social mobilization and rural finance assigned to each district will work as an integrated part of the district implementation teams and be based in the relevant agency teams (similarly at sub-district level). The district teams will be provided with technical backstopping and monitoring by NPMO team as well as the corresponding provincial agencies, especially BAPPEDA and BAKORLUH who will host the READ SI Provincial Programme Support Unit (PPSU). There will be a more systematic process for engagement of Sub-district (Camat) and village heads (Kepala Desa).
 - (b) Component 2: The NPMO will have primary responsibility for delivery of activities under the four sub-components. In the case of cocoa and rural finance, public-private-partnerships (PPPs) will be a central mechanism.
 - (c) Component 3: The grant will be administered by the NPMO as a fully integrated part of the READ SI programme and be used to support activities implemented by key partner agencies of MoA, especially at management level (Secretary General), and district level as well as in other relevant government agencies (including Bappenas) as applicable.
- 20. **Total costs** are estimated at USD 87.28 million over a five-year implementation period, including physical and price contingencies, duties and taxes. Programme investments are organized into three major components: (i) village agriculture and livelihoods development (55.8% of the costs); (ii) services inputs and market linkages (18.8% of the costs); and (iii) policy (1.3% of the costs). NPMO and provincial offices programme management costs represent 6.6% of the total programme cost while district offices costs² are 11.8% of the total cost. An unallocated amount of USD 5 million, or 5.7% of the total programme cost, is also included in the budget in order to grant financial flexibility to the programme.
- 21. **Financing** will be from an IFAD loan of USD 58.88 million, or 67.5% of the total programme cost and an IFAD grant of USD 1 million. The Government of Indonesia will contribute USD 15.07 million (17.3%) by financing salaries of all NPMO, provinces, districts and sub-districts staff and by waiving taxes and duties. The programme beneficiaries are expected to contribute USD 5.84 million (6.7% of the programme cost) mostly to co-finance the purchase of basic and advanced agriculture mechanization under sub-component 1.2 and "private sector partners" which are companies investing on cocoa-related activities will finance USD 6.49 million, or 7.4%, of the total programme cost.
- 22. **Key risks** to the programme have been identified and specific mitigation measures designed in order to address them, with the main risks being:
 - (a) selection of priority crops that benefit small farmers;

² Costs that are strictly related to the direct implementation of programme activities.

- (b) private public partnerships' effectiveness in serving small farmers;
- (c) elite capture;
- (d) programme management capacity and capacity support needs of new districts; and
- (e) ensuring continuity between READ and READ SI, especially in relation to the core teams of the NPMO and specialist implementing partners for social mobilization.
- 23. Sustainability of the economic benefits to READ households were already considered to be high under READ, as these were primarily achieved through adoption of improved production practices based on knowledge and skills gained from the project and knowledge once learned is not easily forgotten. READ SI aims to go even further in terms of sustainability of impacts. The design maintains the core READ approach and has additional elements intended to raise sustainability even further:
 - (i) Component 1 includes additional features such as: focus on financial literacy and savings to increase households' capacity to recover from shocks; linking savings and loan groups to banks, so they are more valued by their members and subject to greater management discipline and transparency; providing support for machinery investment via micro-service enterprises of farmers rather than giving machinery for free.
 - (ii) Component 2 is almost entirely geared towards building more sustainable support services and markets for critical services and inputs to serve farmers' demands. These include: more sustainable, market-based local supply of quality rice seed; stronger links between farmers and established mainstream banks as well as better supervision of local MFIs, and; improved cacao support services based on private provision of advice and inputs. The expected collaboration with the Department of Agricultural Finance of MOA to extend the range and coverage of agricultural insurance for smallholders also has potential to significantly increase resilience and small farmers' ability to recover from shocks.
 - (iii) From an environmental perspective, READ and READ SI both have the opportunity to improve the profitability of cacao to a level where it is an attractive choice for more farmers and so current upland land used for maize and other secondary crops is likely to be diverted to cacao (and existing cacao plantings sustained) which is less vulnerable to unpredictable rain-fall and also helps preserve soil fertility and reduce erosion, especially on sloping land. Promotion of integrated homestead gardening, with small fish ponds, will also contribute to some increased resilience to climate shocks.
 - (iv) From an institutional perspective, READ SI is the first stage of the scaling-up and mainstreaming of the READ approach into GoI investment. If successful, there is a high likelihood of the READ approach being well sustained in the relevant institutions at central level and also across a wider number of districts and provinces.

Logical Framework

Note: numerical targets related to number of farmers / households are provisional and will be validated during Design Finalization.

Results Hierarchy	Indica			Means of Verification			Assumptions		
	Name	Base- line	YR1	Mid- Term	End Target	Source	Frequency	Responsibility	
Goal: Growing prosperity of Indonesian smallholder farming families	>76,500 smallholders households directly benefiting increase household assets by 25% more than comparable non-participating smallholder households	0	-	-	76,500 HH by >25%	survey Mid, end political and eco		ey Mid, end	political and economic stability
	Chronic malnutrition reduced by 10% in children under 5yrs of age.	40%	-	-	30%				remote communities covered by READ SI where subsistence
	3. Percentage of households experiencing a hungry season is reduced by 50%	0			50%				agriculture still has a greater importance.
Development Objective: Rural households in Sulawesi, West Kalimantan and NTT are empowered	4. 80% of participating poor and near poor ⁴ households direct beneficiaries increase real net farming or non-farm income by >30% more than comparable non-participating households	0	0	20%	80%	RIMS+ survey Annual outcome survey	Base, Mid, end line Annual	NPMO	Local and international demand for key crops does not suffered prolonged collapse in prices or demand volumes. Farmers do not suffer from prolonged or repeated draughts or other adverse climate conditions or natural disasters.
individually and collectively with the skills, confidence and resources to sustainably improve	 Commodity and livelihood groups are active and functioning effectively in 90% programme villages; (Disaggregated by type of group, including women's groups] 	TBC	0	50%	90%	Programme progress reports	Annual	NPMO	
their farm and non-farm incomes and livelihoods through a scalable programmatic approach.	6. Return on investment (ROI) exceeds 20%	0	-	-	20%	Programme Compl. Report	End line	NPMO	

³ All indicators relating to households and individuals to have data disaggregated by gender, poverty status and ethnicity

⁴ "near poor" defined as living on <USD3.10 (2011 PPP) per capita per day [this poverty line to be rechecked]

Results Hierarchy	Indic		Means of Verification			Assumptions				
	Name	Base- line	YR1	Mid- Term	En Targ		Source	Frequency	Responsibility	
Outcome 1: Improved household incomes and livelihoods are enabled through improved productivity and profitability of farm	7. 50% real increase in labour productivity (as net farm income per day's labour) for >45,000 smallholders (60% of participating households)	0	0	20,000 HF by 25%	40,000 by 50%		Annual outcome survey Farm record books	Annual Seasonal	NPMO SM teams	Sufficient numbers of smallholder are interested in improving their production rather than leaving farming or switching to other production systems entirely.
and non-farm activities and better management of household finances and nutrition.	8. Average yield increase for flagship and other crops for households supported on the specific crop by: a. cocoa: >150% b. rice: >30% c. other crops: >30% for other crops/livestock selected by farmers for support	0	0	Cocoa = 50% Rice = 30% Other crops = 30%	150% = Rice 30% Other	=	Annual outcome survey Farm record books	Annual	NPMO SM teams	Good quality genetics and other critical are available in sufficient quantities to allow widespread adoption.
	9. 80% of participating households have affordable access to and use of sufficient seasonal & investment finance – whether from CBFOs, FSP ⁵ loans or own savings	TBC	-	40%	80%		RIMS+ survey Annual outcome survey	Base, Mid, end line Annual	NPMO	Presence and interest of major banks and other FSP in programme districts in expanding services to rural households
	10.50% women participating in the programme adopt improved mother and child nutrition behaviours, set-up integrated homestead and provide ongoing mutual support	0	5%	25%	50%		RIMS+ survey Annual outcome survey	Base, Mid, end line Annual	NPMO	Sufficient numbers of mothers and families are interested in improving the nutrition of their families. Any possible negative cultural beliefs related nutrition can be mitigated.
	11. 80% of all machinery and infrastructure supported have easy and equitable access for all intended beneficiaries and are well maintained at the end of the programme	0	80%	80%	80%		Program me progress reports	Annual	NPMO	Elite capture of investments is avoided.

⁵ CBFO - community based financial organization, FSP = financial service providers e.g. banks, MFIs

Results Hierarchy	Indi		Means of Verification						
	Name	Base- line	YR1	Mid- Term	End Target	Source	Frequency	Responsibility	Assumptions
Outcome 2: Critical services and input markets In programme districts are sustainably improved in terms of quality,	12.80% of households are satisfied with the: a) relevance, b) quality, and c) accessibility of agricultural extension and advisory services provided by the public and private sector (disaggregated by provider)	0	80%	80%	80%	Annual Client satisfaction and feedback surveys	Annual	NPMO	-
relevance, availability and accessibility to serve the needs to programme communities	13.Rice Seed – affordable, quality, certified "READ" seed (or equivalent) readily commercially available for all farmers as needed in the local market in 80% of rice producing programme villages	TBC	-	40%	80%	Seed supply survey Annual outcome survey	Annual	NPMO	Enabling seed policies and practices for rice and other crops are in place or are put in place.
	14.PPPs set-up and functioning well with at least 3 national scale partners to improve service delivery and input supply in cocoa or rice value chains in programme locations, including at least 2 with major cocoa businesses.	0	1	2	3	PPP reports PPP partner survey	Annual	NPMO	Continued interest from MARS and other major cocoa business to partner with government for sector development. Willingness of key parts of MoA to have genuine PPP with private firms.
	15.Good quality, active local private service providers offering services and being regularly used by programme supported farmers in 80% of programme village	TBC	-	40%	80%	Bi-annual service provider survey	Bi- annual	NPMO	Private entrepreneurs and businesses are interested to run service businesses in programme districts
Outcome 3: Supportive policy and institutional framework for smallholder agriculture	 16. At least 2 sector-wide policy works (analysis/review) undertaken and discussed at national (and district if applicable) level. 17. Roadmap agreed upon and resources committed for GOI to scale up READ SI approach to priority locations. 	-	-	-	Two targets met	Progress reports, documentatio n and M&E system itself	End line	NPMO	Continued Gol commitment to high levels of investment in agriculture and pressure for investment efficiencies

Results Hierarchy	Indicators						ification		
	Name	Base- line	YR1	Mid- Term	End Target	Source	Frequency	Responsibility	Assumptions
Outputs:	No. of farmers trained in improved production/post harvest technology	0	-	35,000	65,250	Programme progress reports	Annual	NPMO	175 HH per new village plus 25 HH per old village (homestead gardening only)
	No. of mechanisation service MSMEs operating	0	-	270	450				1 per village
	No. of women trained and receiving starter kits for integrated homestead gardening	0	-	6,000	11,250				25 per village
	No. of individuals complete financial literacy training	0	-	61,200	61,200				80% of total programme participants

I. Strategic context and rationale

A. Country and rural development context

- 1. A member of the G-20, Indonesia is a fast growing middle-income country (MIC) with the fourth largest population in the world. With a 3% annual urban growth, over 50% of Indonesians now live in urban centres, generating a soaring demand for consumption goods, including food products.
- 2. Steady economic growth has led to gradual poverty reduction. The economy grew at average 5.5% annually between 2002 and 2012, boosted by domestic consumption with around 25% of GDP produced by Jakarta. The number of people living below the national poverty line of IDR 312,000/month (USD 21.7) has dropped from 24% in 1999 to 11% in 2014 (27.7 million people). However, the pace of poverty reduction has been slowing over the last years and the 2010-2014 National Medium-Term Development Plan to reduce poverty to 8-10% could not be achieved. Besides, another 27% of the population (or 68 million people) are near poor and extremely vulnerable to shocks such as illness, extreme weather or price volatility. Consequently, it is estimated that about 25% of Indonesians have fallen under the poverty line at least once in a three year period.
- 3. While poverty has been falling, malnutrition remains stubbornly high. In fact, the prevalence of stunting (height for age) among children under five years of age has risen slightly from 36.8% in 2007 to 37.2% in 2013. There is therefore a pressing need for a renewed focus on child malnutrition integrated with economic development. More generally, Indonesia's Human Development Index of 0.684 remains below the average for the East Asia and Pacific Region. Rising inequalities, with an increase in the Gini Coefficient from 0.36 in 2005 to 0.41 in 2014, are threatening to roll back progress made in poverty reduction and further entrench poverty.
- 4. Rural poverty remains greater than urban poverty, in absolute and relative terms. While the GDP share of agriculture has come down to 12% (2014), it is still the main source of income for one third of the population and for 64% of the poor. This means that across the country, on average, farmer households are 3.5 times more likely to be poor than non-farming households (approximately 21% vs 6%, respectively). Declining land sizes, complex and insecure tenure arrangements together with a lack of appropriate technologies, infrastructure, rural finance and input and output markets results in sub-optimal use of the already small landholdings and low labour productivity. Vulnerability to climate change has reduced the options and increased the risk of agriculture and innovation, whilst in many communities some households depending on agriculture own little or no land and work as labourers or share croppers. Consolidating poverty reduction gains, reducing inequality and ensuring the rural poor are included in economic growth opportunities is a national priority.
- 5. The 2015-2019 National Medium Term Development Plan projects a reduction of the poverty rate from 11% to 7-8% and an annual economic growth rate of 8%. The agricultural, fisheries and forestry sector are expected to grow by 4.5% (0.6% over the 2014 growth rate) over the same period. The plan targets four priority areas: food sovereignty, energy sovereignty, marine and maritime development and industry and tourism development.
- 6. There has been some evidence-based consolidation on the key elements needed for a strategy for rural growth around agriculture. That smallholders require infrastructure, technology, access to input and output markets and rural finance, at a minimum, has been well established. They also require security of tenure and an enabling policy structure that provides a secure context for economic growth. The importance of differentiating the capacities and needs of the rural poor and developing approaches that respond to these needs is also well accepted. Amongst the rural poor there are smallholders with the resource base to generate economic returns,

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⁶ living on less than USD 2 a day

whilst for others agricultural income is a key but declining part of a broader livelihood strategy. National development planning is increasingly seeking approaches that can serve all rural poor and ensure that growth does not lead to entrenched poverty as Indonesia makes the transition to a modern middle income country.

- 7. While support for economic growth is pivotal, parallel investments in human capital are important. Human development progress in education (particularly female), technical capacity, health and access to knowledge, is both an outcome and a driver of economic growth. Indonesia continues to perform poorly on key nutrition indicators and evidence shows that education, particularly female literacy, is a main driver of progress. Women, whose equal rights are recognized in law and whose active participation in household livelihoods is evident, continue to lag behind men on key human development indicators. Projects that support the organizational capacity of women as economic actors in their own right, and facilitate their access to resources and knowledge, not only generate growth but also positive human capital dividends. Rural poverty reduction is best served by development approaches that identify opportunities for economic growth tailored to differentiated household needs and combine these with key human capital investments.
- 8. Since IFAD started working in Indonesia in 1980, 16 loan projects have been developed, totalling USD 1 627 million, of which USD 530 million were financed by IFAD. Under the 2016-2019 Country Strategic Opportunities Programme (COSOP), IFAD is aiming to support inclusive rural transformation to enable rural people to reduce poverty and achieve sustainable livelihoods. The country strategy is organized around three interconnected strategic objectives. The first objective is to facilitate the access of small-scale producers to remunerative agricultural markets, to enable them capture the benefits emerging from a growing and diversifying demand for food-based products, and earn higher income. The second strategic objective is to build the resilience of small-scale producers and their families and to optimise their risk mitigation strategies to reduce their vulnerability. The third objective is to strengthen rural institutions so that they can support inclusive rural transformation and deliver accountable services that meet the needs of small producers. Interventions under the 2016-2019 COSOP are to target (i) smallholder farmers, both men and women, interested in commercial agriculture (ii) smallholder producers in the fisheries sector (iii) women and women headed households (iv) marginal communities and ethnic minorities in the selected geographic areas.
- 9. The original Rural Empowerment and Agricultural Development Programme (READ) became effective on 19 Nov 2008, with its completion on 31 Dec 2014. The total approved programme cost was USD 28.3 million comprising an IFAD loan of approximately USD 21.08 million and IFAD grant of USD 500,000. The goal of READ was a sustainable improvement in the livelihoods of the rural poor in targeted villages of Sulawesi Tengah Province. The objective was a sustained growth of economic activities and improved natural resource management in the target villages. READ has been implemented in 5 districts of Sulawesi Tengah: Banggai, Buol, Parigi Moutong, Poso and Tolitoli.
- 10. It is important to differentiate between READ before and after Mid-term Review (October 2011). Prior to the MTR, READ was largely a village planning and infrastructure project with only 14% of the budget targeted to agriculture development. Post MTR, READ was significantly focussed towards agriculture (away from village infrastructure) in fact 47% of the post MTR READ budget (of \$11.4m) was applied to the Agriculture Component. Although post-MTR READ was implemented in only 3 years (2012-14), it achieved significant impact in terms of improved yield and profitability of key economic and livelihood crops and exceeded its beneficiary target by 100% (20,125 v 10,000). It should also be noted that the Agency for Agriculture Extension and Human Resource Development (AAEHRD) which implemented READ did so with almost no external consultant support the exception being the team of 150 village facilitators provided by an NGO. In summary READ achieved a great deal with limited budget in a relatively short time.

11. Three key strategies were employed in the agriculture component of post-MTR READ: (i) focusing on key food and economic crops in Sulawesi Tengah i.e. rice, maize, cacao, coconuts and vegetables; (ii) developing a coherent package of support which addressed the four major requirements for productivity enhancement i.e. access to improved genetics, affordable working capital, farm mechanization and adequate, good quality technical support; and (iii) introduction of partnerships with other agencies to ensure farming systems support was delivered with optimal efficiency.

B. Rationale

- 12. Importance and opportunities for agriculture-based growth in Sulawesi, West Kalimantan and NTT. Agriculture remains the main source of income for one third of the population and for 64% of the poor⁷. While well commercialized in some parts of the country (especially Java), smallholder agriculture is less developed in the remoter areas of Indonesia, such as Sulawesi and the border districts in West Kalimantan and NTT. In these areas, while there are some successful and well commercialized farmers, the majority of farmers combine subsistence agriculture with the sales of small surpluses to the market. Low availability of modern inputs, lack of appropriate technologies, low access to irrigation (less than 50% of the 7.2 million irrigated hectares are fit for use), high post-harvest losses and limited access to finance, extension and other support services contribute to low yields and low returns from farming.
- 13. Sulawesi is already a key production area for several commodity crops, including cocoa and coconut. Rice remains an important crop for many households, but Sulawesi is not yet a major rice surplus producer in Indonesia though there is considerable potential for Sulawesi to increase its rice production. This is important for Sulawesi's rice farmers but also for the food sovereignty of the country as a whole, as production on Java is approaching its limits and the gradual loss of agricultural land and labour on Java means that other areas of Indonesia need to increasingly produce a greater share of the country's food.
- 14. The border districts of NTT and W. Kalimantan are less developed in terms of market oriented agriculture even compared to many parts of Sulawesi, with subsistence oriented production still playing an important role. In NTT livestock are especially important in household livelihoods while cocoa is not widely grown. READ SI therefore needs to be able to support these different agricultural priorities in different agro-ecological zones, as it will also need to do if it is to be scaled-up even more widely in Indonesia.
- 15. Large parts of the READ SI programme areas have yet to be developed and the potential for sustainable intensification is significant. There are therefore substantial opportunities to increase productivity through combined environmentally sustainable packages of support to enable smallholders to earn higher incomes serving the growing demand for a wide range of products from the increasingly urbanized population and growing middle class.
- 16. **Innovation in rural empowerment and agricultural development**. READ was implemented in Central Sulawesi with the objective of delivering sustainable improvements in the livelihoods of the rural poor. The project had a slow start with poor initial performance. The project was redesigned during the mid-term review (MTR) with a number of innovative elements to respond to beneficiaries' needs:
 - (a) the integration of community empowerment and agricultural productivity activities into one complete package of support;
 - (b) a focus on public-private partnership for instance with MARS for technical services in cocoa development;

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⁷ Government of Indonesia, BPS

- (c) the out-sourcing of key services, such as village facilitation and input supply (such as improved seeds) to external partners, such as NGOs;
- (d) a clear focus on selected key food and income crops that were supported with a comprehensive, well-resourced input package; and
- (e) working capital finance being provided as group based finance.
- 17. **READ impacts**. After the MTR, project implementation quickly gained momentum and achieved strong results for rural women and men in Central Sulawesi⁸:
 - (a) <u>Food security</u>: 94% of READ households (HHs) reported a reduced food shortage period of less than 3 months (average duration: 1.9 months, maximum 4 month), while only 54% of non-READ HHs could report a food security shortage period below 3 months (average duration: 3.2, maximum 10 months).
 - (b) Increased income and asset ownership: READ HHs had higher income available than non-READ HHs and 40% of the average monthly READ HH income was above the local poverty line compared to 29% in non-READ HHs. 83% of beneficiaries further reported an increased income from agricultural production.
 - (c) Agricultural productivity: The service packages delivered to the smallholders resulted in strong yield increases: READ cocoa farmers achieved 193% higher yields than non-READ farmers. For coconut, the increment was as high as 500% (800kg with READ vs. 300kg without READ support).
 - (d) Empowerment: READ made a particular impact for women empowerment: As the Outcome Survey shows, women are now more involved in decision making processes, both at the household and village level, and have increased access to economic, agricultural and financial resources.
 - (e) Access to markets and services: 91% of READ HHs reported improved access to markets. vs. 50% of non-READ HHs. 95% of READ HHs reported improved access to credit and 81% had accessed a financial service over the last 12 month (vs. 33% of non-project HHs).
- 18. Within a fairly short timeframe, READ turned into a well-recognized and appreciated brand among smallholder farmers and national, provincial and local government authorities. Since the READ programme closed in June 2015, activities have continued in all five project districts funded by the respective local government authorities, the private sector partners, and importantly the beneficiaries themselves. It is especially notable that the local government in all five READ districts have taken on the SM team from READ in their own government operations.
- 19. **Scaling up and harmonization.** The GoI requested IFAD to support the scaling up of READ under READ SI as it is considered as a potential model for larger strategic investment to achieve priorities and goals laid out in the 2005-2025 National Long-Term Development Plan and the 2015-2019 Medium-Term National Development Plan. Particularly the Medium-Term National Development plan gives prominence to agricultural sector development and aims at ensuring security, self-sufficiency, and food sovereignty through increase of domestic production capacity. The programme is fully aligned with the 2016-2019 IFAD COSOP and is working towards all three strategic objectives.
- 20. Given the recent large increase in public investment in the agriculture sector (national budget allocation for MoA increased by 50% from 2015 to 2016, mainly for infrastructure investments), this scaling up initiative provides a strategic opportunity to link to large scale investment programmes such as the very large UPSUS and the forthcoming GoI/ADB/IFAD-supported Integrated and Participatory Development and Management of Irrigation Project (IPDMIP) as well as smaller and more localized initiatives.

⁸ Results taken out of the Impact and Outcome Surveys conducted at project completion, comparing READ participating households to non-READ households.

- 21. Building on the lessons learned from READ and other IFAD-supported interventions in the country and region, READ SI will upgrade the original READ approach and move from a project to a programmatic platform with an intention to influence future public and private investment.
- 22. It is expected that the READ SI approach will be further scaled up with national public financing. The scaling up strategy of READ SI combines testing and refining the READ approach in different settings with a strong knowledge management and evidence-based policy dialogue framework and institutional capacity building.
- 23. The high degree of ownership for scaling up this initiative, in the GoI in general and in the MoA in particular, is evident by the fact that MoA has already commenced scaling up the community-driven development element of READ in two other provinces in 2015, in West Kalimantan and NTT with a total budget of approximately IDR20 billion per year (USD1.45 million). Though, in these very different agricultural and socio-economic settings, the initial implementation has progressed slower than expected, highlighting the value-added of continued IFAD engagement in the scaling-up initiative. These districts will now be integrated into READ SI.

II. Programme description

C. Programme area and target group

- 24. The target groups will include:
 - (a) the poor and near poor who have the potential to generate economic returns from agriculture with programme support; and
 - (b) landless and land-poor, including women-headed households, who will be included in activities directed at homestead gardening, improved nutrition and financial literacy.
- 25. Target group (b) will be involved in 'livelihood' activities whilst the second group will be formed around the selected agricultural commodities. The objectives and monitoring indicators for the performance of the 'livelihood' and 'agriculture' interventions of the programme will differ. Women will constitute 50% of the overall target group. The targeting strategy will ensure the inclusion of ethnic groups and indigenous people who meet the programme selection criteria, as well as the adaptation of activities to social and culturally influenced particulars of indigenous people. A typology of target groups and the project responses is included in Appendix 2.
- 26. The development of differentiated "livelihood based" and "agricultural growth based" activities for these target groups will support the programmatic objectives of the government. By using the proven READ model to trial interventions and activities that address distinct challenges and develop replicable development responses READ SI will evolve the core READ approach so that it is even more widely applicable.
- 27. Drawing on lessons from READ on the experience of gender inclusion, the gender strategy for READ SI is based on three main principles to support the relevance and accessibility of project interventions to poor rural women: (i) the definition of clear targets with responsibilities assigned to pursue these; (ii) putting the resources directly in the hands of the beneficiaries rather than routing these through male elite dominated Village Fund Management Unit (UPDDs) as happened in READ and (iii) developing interventions geared to women's expressed interests, ie: homestead gardening and off-farm interventions. Drawing on these principles, the operational measures, detailed further in Appendix 4, include:
 - (a) Gender targets of 50% for programme participants and VFs (mission fieldwork suggests that this is a realistic target).
 - (b) Gender sensitive selection of interventions to maximise returns to women's labour and support their social and economic empowerment (the process is explained in depth in Annex 4).
 - (c) The mainstreaming of gender into the social mobilisation process, as outlined in Annex 4.

- (d) Direct targeting of homestead gardening interventions to women.
- (e) A secret vote on infrastructure choices to enable women to express preferences.
- (f) The inclusion and prioritisation of women as Financial Literacy Facilitators on financial literacy training.
- (g) A gender inclusive programme management and implementation team, including the appointment of private service providers with experience in gender and social inclusion.
- (h) Adherence to best practice in gender sensitive monitoring and evaluation of programme impact.
- 28. **Programme areas** will include a total of 24 district, with 20 districts within the six provinces of Sulawesi Island (Sulawesi Utara, Gorontalo, Sulawesi Tengah, Sulawesi Tenggara, Sulawesi Selatan and Sulawesi Barat) and two districts in each of West Kalimantan and NTT. It is expected that READ SI will continue in the five original READ districts in central Sulawesi and the two districts in each of NTT and W. Kalimantan. Thus there will be a total of 15 new and 9 old districts in READ SI.
- 29. READ SI will be implemented in a total of around 450 villages 360 new villages and 90 old villages. In each of the nine "old" districts, READ SI will continue working in 10 "old" READ villages and extend activities to 10 additional "new" villages. For new districts, 18 new villages will be supported in each. "New" villages (in both old and new districts) will receive the "foundation stage" core READ support, including substantial farmer training and small infrastructure support. Old villages in old READ districts will have a more advanced set of interventions.
- 30. District selection will be finalized by MoA by January 2017 in line with the agreed criteria below. For new READ SI districts, a short list of districts has been compiled (Appendix 2) from those that have both high poverty levels and agricultural potential. The final selection of districts will be completed according to the following criteria:
 - (a) high poverty levels;
 - (b) offer agricultural potential accessible to the target group;
 - (c) avail credible commitment from Governors and leadership of candidate provinces and districts both to delivery of the immediate development objectives but also in collaborating closely with the central level teams to develop and refine an effective programmatic platform for READ;
 - (d) enable the programme to address diverse and varied development challenges and that can test and further develop READ as a programmatic platform for rural development.
- 31. Given that READ SI is to work in diverse settings as part of the scaling-up strategy, the programme will work in all six Sulawesi provinces and in NTT and West Kalimantan. It is recognized that this choice of geographical spread may be more challenging to manage compared to a more concentrated geographical area which may otherwise be more efficient from a simple one-off project investment perspective. However, the desire to test the READ SI approach for further scaling-up justifies this additional management challenge.
- 32. READ SI will work primarily via the districts, so it is the poverty and agricultural potential at the district level that will guide district selection. This means that even within the provinces with poverty rates below the national average, READ SI will target the poorer districts. In NTT and West Kalimantan READ SI will only work in the existing READ districts so no new districts are to be selected in these two provinces. New districts will therefore only be in Sulawesi. At the provincial level in Sulawesi, three of the Provinces (Sulawesi Tenggara, Gorontalo and Sulawesi Tengah) have rural poverty rates above the national average, whilst the other three (Sulawesi Selatan, Sulawesi Utara and Sulawesi Barat) have rural poverty rates lower than the

national average. However, given the scale of provinces, there are significant variations in poverty rates between districts within the same province. For example, in the relatively wealthier Sulawesi Selatan (South Sulawesi) the district-level poverty rate range from 6.3% to 17.8% (see Annex 1 of Appendix 2 for detailed district level data). Furthermore, poverty mapping accounts for the population that is below the poverty line, but up to 40% of the population in Sulawesi is only just above the poverty line and lacks sufficient assets to cushion external shocks and to avoid falling back into poverty.

- 33. The HDI values (not adjusted for inequality) for the Sulawesi provinces are just below the national average of 0.684, with only Sulawesi Utara having a higher HDI at 0.696. Further, whilst not as poor as the Papua and Molucca regions, large absolute numbers of poor, growing inequality and land scarcity are a concern and closely aligned with reduced benefits from poverty reduction. Nutrition data on key indicators for 2014 also reveal a complex picture with some Provinces on Sulawesi Island scoring significantly lower than the national average.
- 34. In preparation for the selection of new READ SI districts in Sulawesi, a short-list of 35 districts with poverty rates higher than the national average, as well as low scores on food security, connectivity and human development has been compiled and is presented in Appendix 2.
- 35. In summary, the new and old districts in Sulawesi combined with the old READ districts in NTT and West Kalimantan present diverse development challenges that reflect those experienced across Indonesia and are therefore an ideal setting to test and refine a rural development approach for nationwide scaling up.

D. Development objective and impact indicators

36. The Programme Goal and Development Objectives are summarised below:

Goal: Growing prosperity of Indonesian smallholder farming families	 >76,500 smallholders households directly benefiting increase household assets by 25% more than comparable non-participating smallholder households 						
	2. Chronic malnutrition reduced by 10% in children under 5yrs of age.						
	3. Percentage of households experiencing a hungry season is reduced by 50%						
Development Objective: Rural households in Sulawesi, West Kalimantan and NTT are empowered individually and collectively with the skills, confidence and resources to sustainably improve their farm and non-farm incomes and livelihoods through a scalable programmatic approach.	4. 80% of participating poor and near poor ⁹ households direct beneficiaries increase real net farming or non-farm income by >30% more than comparable non-participating households						
	 Commodity and livelihood groups are active and functioning effectively in 90% programme villages; (Disaggregated by type of group, including women's groups] 						
	6. Return on investment (ROI) exceeds 20%						

E. Outcomes/Components

Outcomes

37. READ SI seeks to achieve three primary outcomes, summarized in the table below.

38. Outcomes 1 and 2 closely relate to the specific objectives of Components 1 and 2, respectively, and can be viewed as reflecting the immediate objectives of READ SI as a development investment "project" delivering results on the ground in its programme areas.

⁹ "near poor" defined as living on <USD3.10 (2011 PPP) per capita per day [this poverty line to be rechecked]

39. Outcome 3 concerns the wider aspirations to develop READ into a robust programme platform for far wider scaling-up across Indonesia. Consequently, Outcome 3 cannot meaningfully be achieved without success in both Outcomes 1 and 2 – as there is little merit in scaling-up a programme that has not been able to deliver tangible development results on the ground.

Outcome 1: Improved household incomes and livelihoods are enabled through improved productivity and profitability of farm and non-farm activities and better management of household finances and nutrition.	 50% real increase in labour productivity (as net farm income per day's labour) for >45,000 smallholders (60% of participating households) Average yield increase for flagship and other crops for households supported on the specific crop by: a. cocoa: >150% b. rice: >30% c. other crops: >30% for other crops/livestock selected by farmers for support 80% of participating households have affordable access to and use of sufficient seasonal & investment finance – whether from CBFOs, FSP¹⁰ loans or own savings 50% women participating in the programme adopt improved mother and child nutrition behaviours, set-up integrated homestead and provide ongoing mutual support 80% of all machinery and infrastructure supported have easy and
	equitable access for all intended beneficiaries and are well maintained at the end of the programme
Outcomes 2: Critical services and input markets In programme districts are sustainably improved in terms of	11. 80% of households are satisfied with the: a) relevance, b) quality, and c) accessibility of agricultural extension and advisory services provided by the public and private sector (disaggregated by provider)
sustainably improved in terms of quality, relevance, availability and accessibility to serve the needs to programme communities	 Rice Seed – affordable, quality, certified "READ" seed (or equivalent) readily commercially available for all farmers as needed in the local market in 80% of rice producing programme villages PPPs set-up and functioning well with at least 3 national scale partners to improve service delivery and input supply in cocoa or rice value chains in programme locations, including at least 2 with major cocoa businesses.
	 Good quality, active local private service providers offering services and being regularly used by programme supported farmers in 80% of programme village
	15. Good quality, active local private service providers offering services and being regularly used by programme supported farmers in 80% of programme village
Outcome 3: Supportive policy and institutional framework for smallholder agriculture	16. At least 2 sector-wide policy assessments undertaken and discussed at national (and district if applicable) level.
	 M&E and KM system established at MoA level that facilitates the identification and scaling up of successful innovations in smallholder agriculture.

Components

40. READ SI will maintain the core set of integrated activities in programme villages that are acknowledged as the foundations of the original READ success. Building on these, the component structure will be re-organized to better enable the advancement of complementary

¹⁰ CBFO - community based financial organization, FSP = financial service providers e.g. banks, MFIs

aspects of the READ model outside the villages as well as the move to a programmatic approach capable of being scaled-up in a wider range of local settings. The READ SI components are outlined below:

Component 1: Village agriculture and livelihoods development

- 41. Component 1 is the core of the programme, both conceptually and in terms of direct impacts and accounts for around 56% of programme investments. The Component focuses on the proven READ approach of community mobilization closely integrated with agriculture and livelihood development within programme villages with Village Facilitators and technical extension staff working hand in hand in each village. It includes all activities within the villages.
- 42. For presentational and budgeting purposes only, the elements of the integrated village process are summarized below around the four complementary dimensions which will run in parallel with the programme supported households and common interest groups :
 - (i) Community mobilization
 - (ii) Agriculture and livelihoods
 - (iii) Savings, loans and financial literacy
 - (iv) Nutrition, including early childhood nutrition (i.e. "the first 1000 days")
- 43. Around 80% of READ SI villages are expected to be "new" READ SI villages while around 20% will be "original" villages that were also part of READ. READ SI will adopt a differentiated intervention strategy between new and old villages.
- 44. The four dimensions above will remain relevant to all READ SI villages, however the original READ villages will be at a more advanced stage of development in terms of the thematic focus areas and so will be supported with a selected set of more advanced interventions, which are summarized at the end of this section. This will enable these advanced interventions to be tested and refined in a limited number of villages before being rolled-out later to new villages which will enable READ to continue to innovate around emerging critical issues while delivering strong impacts with increasing efficiency in new villages.

(i) Community mobilization

- 45. Community mobilization is the "glue" at the heart of the READ approach that enables programme supported households to take full advantage of the range of technical and other support provided. It ensures that programme households fully understand the opportunities presented by the programme as well as the obligations and responsibilities for those who chose to join the programme. It enables the scope of programme activities within each village to be adjusted and balanced to respond to the real agricultural and livelihood priorities of the households. It is central to the aspirations and activities on nutrition, where social norms and behavioural issues are central to improving nutrition. It creates additional social capital, via the agriculture and livelihood groups, to amplify poorer households' voices within the wider village development process. It also creates a safe space for poorer households to learn vital financial literacy skills, begin to practice good financial disciplines and gradually start using mainstream financial services.
- 46. Community mobilization will facilitate programme activities being delivered in ways which make them most accessible and valuable to the women and men participating rather than just to be most convenient for the programme teams delivering the services and activities. In short, it puts the farmers and households at the very heart of READ SI.
- 47. In putting small farmers at the heart of the programme, it also places responsibility on the farmers themselves to lead their own development marking an important break from many previous government interventions in the agriculture sector, which provide generous subsidies and handouts but ultimately create dependency and do not truly empower small farmers. An important objective of the community mobilization work in READ SI is to facilitate this transition from dependency and expectation to empowerment and ownership among small farmers.

- 48. The transition process to the empowered farming will include, amongst other provisions, small targeted input packages, effective technical assistance, support for savings and rewards for good performance. It aims to convince by demonstration that small farmers can be sustainably empowered and create a safe space for risk averse household to try new approaches for example on their farms or in terms of using financial services.
- 49. In new programme villages, activities will begin with an initial process of community mobilization to introduce the READ SI programme and then facilitate the voluntary selection of interested and eligible households into the programme. An extensive socialisation and Participatory Rural Appraisal (PRA) process, building on lessons from READ, will ensure that all poor households are given the opportunity to participate. The participatory identification of poor households will include the identification of production constraints particular to the poor in each village and therefore allow initial analysis of relevant agricultural and livelihoods interventions. In addition, social mobilisation by hamlet will ensure that all parts of the community, including hamlets that may be relatively remote and populated by minorities, migrants or indigenous peoples, are included.
- 50. Households and individuals choosing to join the programme will be facilitated into self-selected common interest groups organized around one of the thematic agriculture or livelihoods areas (see below). These common interest groups will receive a comprehensive package of training and support on their particular agricultural or livelihood focus (e.g. rice, cocoa, homestead gardening) as well as savings and credit activities, including financial and business literacy training. Nutrition activities, especially those on early childhood nutrition, will also be organized in part through these common interest groups.
- 51. Village facilitators will lead the community mobilization and will work closely with the extension officers (*PPLs*) with the support of the village head (Kepala Desa). Community mobilization with and around the groups will continue through the programme duration in the villages to ensure interventions remain relevant and accessible and that households and individuals continue to actively participate. Promoting the mobilisation and organisational capacity of groups representing the poorest members of the selected villages is important in the context of recent policies that place significant financial resources for development at the village level, including the new Village Law¹¹.
- 52. Collective empowerment of farmers will take place at three levels: musrenbang/participatory community planning of productive infrastructure, bulk purchases of inputs and services, and economies of scale for sale of fermented cocoa. Regarding Musrenbang 12/participatory community planning of productive infrastructure, READ's proven approach to social mobilization leads to increased levels of confidence and social cohesion of farmers who will be able to influence and present a business case for infrastructure funding as currently rolled out under the Village Law and other Gol programmes. Regarding bulk purchases of inputs and services, a pilot will be launched using some of the best cocoa commodity groups to complement the role of the Cocoa Doctors in this domain. Regarding economies of scale for sale of fermented cocoa, the fermentation process currently represents the most obvious opportunity to "shift value upstream" in the cocoa value chain and a pilot will be launched to federate cocoa groups for aggregating their fermented produce for sale at community level.

¹¹ The Village Law (no 6/2014) avails villages funds equal to 10 percent of the state budget earmarked for regional administration, transferred on a yearly basis, starting with 3 percent in the first year, and reaching 10 percent in 2017. For 2015 this means that each village will on average received Rp750 million (\$60,000), while in 2017 and 2019 the funds are estimated at IDR 1.4 billion (USD 136,000) and IDR 2.4 billion (USD190,000) respectively. The spending guidelines indicate that 70% of these funds should be utilized for infrastructure development, while the remaining 30% should be spent on economic activities. Funds are disbursed based on the submission of community development plans and managed by the Village Head.

¹²Musyawarah Rencana Pembangunan or Multi Stakeholder Consultation Forum for Development Planning was formalised through Law No. 25/2004 on National Development Planning at all levels of government over three time frames – long-term, medium-term and annual plans.

With respect to both activities, bulk sales of inputs and of fermented cocoa, READ SI will work through its community facilitators with PPLs to encourage cocoa commodity groups to join or set up village level federations (Asosiasi Petani Perkebunan) as well as larger federations of farmer organisations and/or cooperatives (KUD/Koperasi Perkebunan). These decisions cannot be pre-scheduled ahead of time as they need to be based on the maturing of a sound conviction on the part of farmers that there is an important business-related function for such higher level aggregation and such activities must be implemented at the pace of the farmers and not be rushed in order to meet predetermined M&E output targets.

(ii) Agriculture and livelihoods

- 53. Following the successful READ model, each of the thematic common interest groups will be provided with a comprehensive package of support in their chosen product or activities. The choice of product or activities of the common interest groups is expected to be driven by the farmers themselves and fall into one of the following categories:
 - (a) annual crops
 - (b) estate crops
 - (c) integrated homestead gardening
 - (d) livestock (before MTR only in NTT, possible scale up post-MTR))
 - (e) off-farm income activities
- 54. For agriculture, the support package will include:
 - (a) Technical training delivered through farmer fields schools (FFS) as well as technical aspects, such as concepts of "farming as a business" looking at the household economics of the different options as well as considerations of responding to market demands.
 - (b) Trial plots ("demplots") for farmers to see first-hand the difference between, for example, different combination of seeds, nutrition and management practices.
 - (c) Farmer field days, exchange visits and systematic follow-up by village facilitators and extension staff will also be used to reinforce learning and confidence of farmers in adopting improved production and post-harvest practices. An important dimension here will be to encourage self-learning and farmer to farmer knowledge sharing. This will in part be enabled by farmers being supported to keep farm record books so they can compare experience from year to year and with their friends and neighbours to learn for themselves what gives the best results.
 - (d) Small start-up packages of quality inputs (seeds, fertilizer, planting materials etc.) will be provided to farmers as grants as part of the initial FFS to facilitate immediate application of the promoted technologies to build confidence among farmers. The start-up grants will be provided on the condition that they are used to adopt the promoted techniques and packages on the households farm. Compliance will be ensured by the grants being provided using mutual guarantee mechanisms in small groups of 4-6 farmers from within the farmer field schools (FFS) to ensure adoption of trained techniques and practices as agreed. The maximum value of start-up grants will vary depending on the crop/livelihood but are expected to be in the range of USD250-350 per household and will comply with prevailing government regulations on grants. In exceptional cases some start-up packages will be provided in-kind, for example goats.
 - (e) Ongoing routine access to quality inputs and services for farmers will be facilitated through a combination of savings and credit development (to provide better access to the necessary finance) and upgrading of the local input and services markets especially for the flagship commodities of rice and cocoa (see below).
 - (f) Support to investments in machinery and small infrastructure linked to the selected crops (see below).

- 55. FFS will be organized into classes of not more than 25 farmers with priority for attendance given to group members. Farmers from programme households will be able to attend training under more than one FFS, subject to availability of space, but will only receive the start-up input package for one of the crops of their choosing. Where not all places on the FFS are taken up by READ SI households, non-programme households will be invited to join on a voluntary basis.
- 56. In order to balance the need for quality and consistency of FFSs while responding to the interests of different farmers in varying agro-ecological zones between different districts, READ SI will initially offer FFS in each district on up to 5 key crops plus integrated homestead gardening. The 5 FFS crops may be different between districts and will be selected in each district directly based on demand from the participating READ SI farmers. As flagship crops, rice and cocoa are expected to be demanded in all districts in Sulawesi with other crops expected to be in demand including maize, soy, cloves and copra. In the border districts of West Kalimantan and East Nusa Tenggara (NTT), crops will be adjusted to each location with a mix of subsistence and commercial crops. In NTT, the flagship crops/products will be rice and livestock. Where district teams demonstrate that they have delivered the initial FFS to a high standard, i.e. with high adoption rates of >75% of trained farmers, then they will be given greater freedom and resources to develop and offer additional FFS on a wider range of crops and livestock in response to farmer demand.
- 57. Integrated homestead gardening groups will be particularly focused towards women, with only women eligible to participate in the savings and credit activities embedded in these groups. There will also be a concentration of nutrition activities linked to these groups. Men interested to attend the FFS training on integrated homestead gardening will be welcomed to do so. Integrated homestead gardening is expected to include production of vegetables, small fish ponds and small livestock initially focused on home consumption but also recognizing that some farmers may increasingly sell surplus into the local market.
- 58. In addition to training and starter input packages, the programme will also provide support to investment in agricultural machinery and small infrastructure linked to production. Support to agricultural machinery is outlined under Component 1.3 (see para 63(c) below).
- 59. For small productive infrastructure, READ SI will support investment of approximately IDR100 million per village only in new villages. The infrastructure investments will be implemented in the second and third years of programme activity in the village and not before. The infrastructure investment will be implemented as two IDR50 million allocations and comply with Gol regulations on participatory infrastructure investment, with beneficiary contributions allowed in-kind. The process will involve participatory decision making in the selection and planning of the works, community planning for sustainable O&M arrangements, community supervision of construction and public community audit of works and expenditures after completion. VFs will be trained to facilitate all steps of this process. Disbursement of funds will be via the Village Account, under the supervision of the Village Head. It is hoped that the participatory planning and decision making process used for this will demonstrate to the Village Head and other village stakeholders an effective and efficient local participatory planning process that may be relevant to other similar plans, such as those for the Village Fund provided for under the Village Law. If there is interest from the Village Head and village community to build on this approach for wider use in the village, then the VF will be made available to the village to actively support this process under the guidance of the Village Head and with backstopping from the Social Mobilization (SM) supervisors in the sub-district.
- 60. Livestock will be a group based activity, mostly aimed at poor women, and initially only promoted in NTT. Half of the members will receive 1 year female animals and after 3 kidding cycles, will pass the original females onto the other members. To avoid conflict within the village, goat management will be on the basis of "cut and carry" feeding. All members will receive animal health, husbandry and nutrition training as well as a starter pack of fodder seed

and fertilizer. In addition, a team of animal health and production technicians will be trained and fielded on the basis of one technician per 3 villages. (see sub-component 2.5)

61. Non-farm livelihood activities will also be supported based on the experience from the original READ model to provide opportunities for households with minimal agricultural land. In an evolution of the READ approach in this area, non-farm livelihood opportunities will be addressed in a more selective way based on credible local market opportunities. As such, non-farm livelihood activities are not expected to be implemented in all villages, but only those with credible market opportunities for specific non-farm products or services.

(iii) Savings, loan and financial literacy

- 62. Affordable seasonal and investment finance, whether from Community-Based Financial Organizations (CBFOs) or other Financial Service Providers (FSP), as loans or from own savings, is vital if households are to be able to invest in improving their farming and household enterprises to raise incomes and take the opportunities presented by READ SI's technical support. Yet, at present, there are substantial gaps between farmers and FSPs, limiting the capacity of large numbers of households to invest to fulfil their potential. READ SI will work to bridge this gap using a three-pronged attack to strengthen demand, supply and intermediation (or direct channels) to link the two, through:
 - (a) strengthen household demand and confidence in using mainstream financial services, including savings, loans and other financial services, primarily through improvements in individual financial literacy and good household financial disciplines;
 - (b) strengthen local financial intermediation mechanisms, especially the capacity and inclusiveness of CBFOs and local micro finance institutions (MFIs) at group, village or sub-district level that can help aggregate demand and supply of financial services at the local level in some communities; and
 - (c) strengthen supply of financial services from banks and MFIs into READ SI villages, through partnerships (mostly at the local district or provincial level) to improve their outreach to READ SI groups and households and their confidence and willingness to serve them with their existing range of products and services (provided that their existing range of products and services match with READ SI's activities). (See Sub-component 2.2)
- 63. The programme will therefore implement activities in four main areas:
 - (a) <u>Financial literacy</u>: Financial literacy¹³ (FL) is the foundation of greater financial inclusion. FL training will be delivered to the groups mobilized as outlined in Sub-component 1.1 on Social Mobilization and will be conducted in all READ SI villages. The training will take a very practical approach and will be closely integrated with the agricultural and livelihoods technical training using the focus crops and activities of the groups as the basis for learning and practicing financial literacy skills. The FL training will be conducted on a voluntary basis in the initial twelve months of implementation in each village. It will be delivered via the Village Facilitator (VFs) and social mobilisation teams through a cascade approach in which the VFs help the READ SI mobilized groups to select one of their own members to act as Financial Literacy Facilitators (FLFs). These are typically local residents, often women, who have done well at school and live in the village on a long term basis. The scope of the financial literacy training will cover different modules to ensure the follow aspects are covered:

¹³ The term Financial Literacy can have different scope in different countries and contexts. For the purposes of the READ SI PDR, the term is used in its broad sense of numeracy, financial literacy, household economy and basic business literacy for household enterprise as well as financial negotiation. For the Indonesian reader, it is recognized that the common understanding regarding financial literacy (FL) and financial inclusion concerns the knowledge about financial institutions and their products and not household economy and also not business finance management. FL includes also consumer protection issues. See: OJK http://www.ojk.go.id/id/kanal/edukasi-dan-perlindungan-konsumen/Pages/Literasi-Keuangan.aspx

- (i) Household economy, a field in which NGOs are active;
- (ii) Financial institutions and their products, the typical FL training as promoted by Indonesia's Financial Services Authority OJK and implemented by banks;
- (iii) Identifying and assessing investment opportunities, which might be designed and introduced by the Provincial Finance Advisors (PFA) in cooperation with participating banks. In a similar context, the Konsultan Keuangan Mitra Bank (KKMB), one of Bank Indonesia (BI)'s efforts to promote bank loans to micro, small and medium-sized enterprises (MSMEs), assisted MSMEs in writing project proposals. KKMBs are business development service providers who link MSMEs with feasible investment opportunities with banks.
- (b) <u>Saving and loans</u>: In the few villages where there are existing, well managed CBFOs (e.g. LKM-A or other village-based/community-owned organizations including sharia compliant models), who serve some READ SI target households and are motivated to serve more, READ SI will facilitate programme households to join these CBFOs and/or begin using savings and loans. However, it is expected that in most READ SI villages active CBFOs capable and willing to serve READ SI households to be absent.

In the majority of villages, those without already suitable well-managed CBFOs, READ SI will promote small-scale savings and loans activities as a second focal activity within all the READ SI commodity and livelihood groups mobilized under Sub-Components 1.1 and 1.2. The purpose of the Savings and Credit Groups (SCGs) is to create a safe space in which members can practice and become more confident savers and borrowers and start to practice better financial behaviours and household financial disciplines, for example with regular savings, no matter how small the amount. Loans are primarily expected to be very small productive loans or for social or emergency purposes. It is not expected that these SCG activities, with funds generated by the members only, will be a primary source of loans for seasonal finance or investment in farm or non-farm activities.

The SCG activities will be based on self-help group principles and will follow the approach promoted in READ in terms of group management, meeting protocols, internal governance and record keeping. Members of SCGs or mature groups that develop to become formal cooperatives may also be linked to mainstream banks once their groups are mature (see Subcomponent 2.2) as was the intention at the end of READ. The SCGs will be savings-led in an effort to raise sustainability and READ SI will not provide lending capital either in cash or kind (in contrast to the approach adopted in READ).

(c) <u>Machinery investment:</u> In addition to technical and business planning advice, READ SI will promote the use of small equipment and machinery that will improve the welfare of the group members. The programme will make best use of limited resources and increase sustainability by not handing over the equipment free of charge.

For **basic equipment**, such as tractors, threshers and village/mobile mills, READ SI will offer small equipment and machinery grants to its groups that have demonstrated good performance over the first two years of activities, e.g. in SCG activity or adoption of demonstrated production technologies. The grant will be for approximately one third of the cost of the proposed equipment and machinery. There will be a cap on the total grant provided per group (approx. USD 1500 per group). Based on business plans, grant funds may be provided to the groups as a whole or to sub-sets of members that are prepared to invest in setting up these machinery service enterprises. The effect of introducing equipment can be tripled if the groups or individuals contribute with two thirds to the investment costs, thus allowing up to 75% [or even 100%] bank financing based on a collateral value assumed to be 50% [66%]).

For advanced equipment, such as harvesters, transplanters and driers, it is recognized that banks and MFIs are unlikely to extend finance at present. As such READ SI will implement a scheme in which the programme offers these equipments for time-limited test trials (e.g. one year) or based on rent/leasing contracts to its groups that have demonstrated good performance over the first two years of activities, e.g. in SCG activity or adoption of demonstrated production technologies. After the test-trials, the equipment will be offered to the groups using it for purchase at preferential conditions. In the event they choose not to purchase it, it will be passed on to another group for a new time-limited trial on the same basis until it is bought by one of the groups. Details on type and number of equipment as well as detailed procedures will be developed as part of the detailed PIM preparation and ensure compliance with Indonesian budget regulations¹⁴. This approach to advanced machinery investment promotion will first be piloted in old READ SI villages in Yr 1 and 2 before being rolled-out to the rest of the programme if successful (subject to budget availability).

(d) <u>Strengthening of existing CBFOs and LKM-A.</u> Where they exist, the most compelling option for improving access to financial service is to strengthen existing LKM-A and other village-based/community/member-owned organizations (including Sharia compliant models such as Baitul Maal wat Tamwil, BMT). Such strengthening would include, for example, support to become a MFI according to Law 1/2013 on MFIs or a cooperative as well as establishing bank linkages for a range of financial services and refinancing CBFO funds and including mobile/digital financial services.

For each identified CBFOs with credible potential to increase provision of inclusive financial services in its community, the District Finance Advisors (DFA) will conduct a capacity assessment and jointly develop and support the implementation of a capacity building plan. In doing so, the DFA will work closely with the district agencies responsible for micro-finance supervisions as well as the READ SI social mobilisation team.

There will be a particular focus on supporting the concerned CBFOs to qualify and apply for registration as MFIs under OJK or under the MoCSME to set up a linkage with a bank or specialist financing institution for refinancing, including associated capacity building in order to increase linkage potential for the CBFOs. Support from READ SI may also include assistance in completing formal registration with OJK, if appropriate, and the provision of some limited quantities of equipment necessary for improved management practices (e.g. laptops, printers and other relevant equipment).

(iv) Nutrition

64. Nutrition will receive a more explicit focus under READ SI in recognition of the high levels of child malnutrition despite rising incomes and improving aggregate food availability. While READ SI will place a greater emphasis on nutrition, it is recognized that there is no single solution to tackle these problems. Yet the fact that malnutrition rates remain unchanged despite rising incomes and food availability give some clues that some of the remaining constraints to better nutrition are driven by social norms and behaviours.

65. READ SI will therefore adopt a multi-pronged approach to improving nutrition. It will also encourage local innovation combined with evidence-based assessment to identify and scale-up promising innovations in the approaches to improving nutrition. Nutrition activities will be conducted in all READ SI villages coordinated by the Village Facilitators, including for example:

(a) technical awareness raising and training on relevant knowledge concerning good nutrition practices, food stuffs etc., tailored to the local social-agricultural context given the food stuff available in different seasons that can form a part of balanced and healthy diet for different members of the family - from the very young to the very old;

¹⁴ At the time of writing, current regulations mean that GoI may hand over equipment free of charge (donation) to farmers groups but not lease it for a test period and sell it without following established procedures (public auctioning).

- (b) integrated homestead gardening promotion, extension and starter input packages (see Sub-Component 1.2) to increase the convenience and year round availability of supplementary vegetables and other foods (e.g. fish, eggs) to improve the quality of the dietary mix. The IFAD How To Do Note15 is a useful reference for these activities. (FFS to be led by PPLs)
- (c) women's group mobilization to strengthen social capital, around SCG, integrated gardening and nutrition. Within these groups, the programme will foster mother to mother mutual support which is expected to lead to ongoing mother and child groups (with rolling membership over time) for more intensive mutual support and from the programme and other health providers. This will be harmonized with other ongoing government maternal and child health initiatives in the villages; and
- (d) social marketing approaches to change the aspirational and social status of good childhood nutrition to motivate behavioural changes e.g. cooking competition, prizes, village level awards for whole village performance, awards from Bupati (district mayor) at big events etc.
- 66. READ SI is expected to place a particular focus on the most critical period of early childhood and ante-natal nutrition from conception to 24 months, the so called "first 1000 days". With this focus the district teams, and social mobilisation and VF teams in particular, will develop, test and evaluate innovative social marketing and other approaches to improving early childhood and ante-natal nutrition. These activities will focus on households with young children and recently married couples in the whole village (and not general activities with READ SI households without young children). The intent is that the village level systems which are developed should be self-sustaining without significant on-going programme support once established. Consequently all activities should be designed to be minimal (though not necessarily zero) cost activities that can largely be continued by the community themselves to increase longer term sustainability.
- 67. Given the complexity of the nutrition challenge, READ SI will actively encourage and reward local innovation by teams in districts to work out what combination of factors works best. These teams will be given freedom to develop and test different combinations of nutrition interventions combined with very close monitoring of results using three additional indicators tracked at least once per quarter to get rapid learning and feedback both for the programme and also for the mothers involved on what is working and the progress they are making:
 - (a) stunting level of children (height for age)
 - (b) incidence of diarrhoea in children
 - (c) dietary diversity (measured by using a simple tool to categorize food stuffs eaten in the previous 24 hours)

Component 2: Services, inputs and market linkages

- 68. This Component deals with the key service delivery systems, especially at the district level and the associated systems at higher levels, and covers four key services, each addressed under a sub-component. This is an area of greater focus for READ SI and is intended to improve the performance and service delivery of these key services in a more sustainable way. It is a compliment to the farmer-centred activities in Component 1 and not a driver. It represents around 19% of total programme budget, with a majority of this targeted towards upgrading the public extension services both in terms skills and some infrastructure directly supporting READ SI activities in Component 1. The activities under each sub-component will be primarily managed and coordinated by the relevant technical staff in the NPMO.
- 69. The five sub-components each correspond to a key service or support market and are:
 - 2.1 Agricultural extension service (all districts)
 - 2.2 Financial services (all districts)

¹⁵ https://www.ifad.org/documents/10180/b53c82b2-471f-41d2-8d99-c39ca4d4e5b3

- 2.3 Seed supply markets and system (all districts)
- 2.4 Cocoa farmer support services and markets (Sulawesi only)
- 2.5 Livestock production and health services and markets (NTT only before MTR)
- 70. For West Kalimantan, once the second flagship commodity has been chosen to complement rice, additional activities to support the associate service and input market development will be programmed through the AWPB process and implemented in West Kalimantan districts.
- 71. <u>2.1 Agricultural extension services</u>: To support the extension activities under Component 1 and also to improve the overall agricultural extension and HR development capacity in MoA, READ SI will implement an upgrading programme for extension services in programme districts, upgrading skills and also extension facilities. There will also be investment in the overall extension and HR development system coordinated by AAEHRD under its mandate within MoA, including the Agricultural Training Centres (ATC) at Kupang and Makassar. Major activities will include:
 - (a) HR skills, knowledge and training
 - (i) Extension officer (PPL) skills refresher training
 - (ii) Review and revision of ATC extension training to be more relevant to farmer needs
 - (iii) Farmer extension materials review, improvement and production all crops. (ATC)
 - (b) Facilities upgrading
 - (i) Sub-district extension offices upgrade
 - (ii) ATC facilities upgrade subject to agreement to be more demand responsive.
- 72. <u>2.2 Financial services</u>: To compliment activities focused on the demand for mainstream financial services under Component 1, this sub-component will work with banks and MFIs to improve the supply and accessibility of financial services in READ SI villages and districts. This will include four main areas of activity:
 - (a) **Financial service baseline survey** in each district, to identify current FSPs, products, coverage etc.
 - (b) Financial Service Provider Partnerships with those FSPs that have the most dominant presence in rural areas, namely BRI, BPDs and in some selected areas with BPRs that have established a dense network of outlets. In each location, READ SI will collaborate with the partner FSPs to extend their existing schemes and services to the programme's target farmers. These will be mostly locally-driven partnerships, with READ SI working with local branch and regional manager to identify and remove barriers that are holding back increased lending and service by the partner bank into programme villages and households. While operationally driven at the local level, these will be within an overall framework coordinated with senior managers of the banks at provincial or national level, as appropriate.
 - (c) Collaboration with OJK focusing on two areas:
 - i) LKM-A Registration and Strengthening: READ SI will support the joint programme of OJK and Ministry of Agriculture (under the Directorate of Agricultural Finance (DAF) under DG PSP) to support the application, registration and strengthening of the savings and credit units (LKM-A) of qualifying farmers groups and farmer group associations (Gapoktan). READ SI's teams will collaborate with the teams from OJK and DAF in programme districts to identify active CBFOs and support them in their choice to register as cooperative MFI or PT MFI and qualify for government support.
 - (ii) Strengthening district level microfinance supervisory agencies by OJK: These activities will be coordinated with similar activities under IPDMIP with OJK, with READ SI taking primary responsibility (including funding) for the collaboration with OJK in its programme districts.
 - (d) **Agricultural Insurance Promotion** in partnership with MoA's DAF in order to extend the coverage and use of farm insurance products by smallholders. DAF launched new farm

insurance products for rice and livestock in October 2015. They hope to extend farm insurance to cover additional crops and livestock. READ SI will collaborate and support DAF to develop, market test and promote suitable insurance products. Consideration will also be given to the feasibility of farm insurance products for cocoa orchard replanting and rehabilitation.

- 73. 2.3 Seed supply markets and system: Reliable supply of affordable quality genetics is essential for farmers to be able to sustain good yields over the long term. Component 1 will provide some initial quality seed to farmers in the FFS on rice and other main annual crops (e.g. soy, maize) so they can immediately put their new knowledge into practice. This sub-component will complement that initial starter-input package by working with progressive seed-multiplication farmers groups and key agencies to strengthen the system of local seed multiplication and sale to farmers in their area.
- 74. The READ SI design sees this system as a 4 step process: (i) breeding; (ii) multiplying; (iii) distributing high quality seed; and (iv) providing credible assurance to farmers that the seed they are using is of a consistently high standard. All parts of this system need to work well if the whole system is to serve farmers' needs. Elite and multiplier farmers will be the primary actors in the two-step multiplying stages of this process. Breeders seed will be sourced from the Indonesian Rice Research Institute and distributed to provincial BPTPs (Assessment Institute for Agricultural Technology for Indonesia) who will oversee the multiplication process. BPTPs will be supported by BP3K (sub-district extension units) extension staff while distribution arrangements will be managed by BBI. Technical support will be provided to the multiplier farmers in each district, for a period of at least three full production cycles to ensure quality production systems are well established.
- 75. After the initial injection of quality seed at the programmes expense, rice farmers will be expected to purchase F-4 extension ("blue") grade seed from the multiplier farmers who will in turn purchase F-3 grade ("purple") seed from elite multiplier farmers thus ensuring sufficient and reliable supply as well as financial sustainability.
- 76. Seed will be available to farmers as labelled, certified seed backed by an enhanced seed certification system strengthened by the programme. All seed produced by multiplier farmers will be subject to GoI seed certification according to MoA regulations (including MoA Regulation No.56/2015) including field inspections and germination testing. To build a high degree of confidence among farmer and programme managers, random samples of seed will be independently verified by grade and certified to minimum standards of 90% purity and 90% germination and compared to BPSP/MoA test results. Only once seed has been tested and verified can the relevant label be applied. This service will operate as a fee based service, paid for by the grower of the sample being tested.
- 77. READ SI will also have activities to improve the availability of hermetic storage drums by working with local input and equipment suppliers to increase availability while at the same time promoting demand through initial demonstrations and some samples provided to farmers to test for themselves.

2.4 Cocoa farmer support services and markets

- 78. The ultimate objective is to substantially raise cocoa farm incomes for very large numbers of cocoa farmers, especially in Sulawesi, making cocoa farming an attractive profession once again for small farmers and thereby moving the cocoa sector to a more competitive and sustainable footing.
- 79. In line with this, the overall objective of the sub-component is to substantially improve the cocoa support service markets in programme district so that cocoa farmers can readily access affordable good quality advice and inputs to upgrade their cocoa production without relying on

government handouts. This should be achieved through four specific complementary objectives:

- (a) strengthening and expanding the coverage of embedded service delivered within the supply chains:
- (b) developing high quality, affordable private service providers, including private nurseries;
- (c) significantly expanding the cadre of private and public extension professionals who have advanced cocoa production and farm business knowledge and expertise so that this is far more widely available within cocoa communities;
- (d) strengthening the role and capacity of District Estate Crops Dinas to backstop, mentor and nurture these private providers while not undermining them with free giveaways of inputs or advice which are unsustainable.

Public services and support to cocoa farmers

- 80. An important context to the service and input market for cocoa is the long running Cocoa National Movement Program (Gernas) of the Estate Crops Director General of MoA. With an annual budget of Rp1 trillion (USD76.9 million), GERNAS has distributed fertilizer and seedlings to a high percentage of cocoa farmers in Indonesia aimed at boosting productivity. Yet despite this, total cocoa production has continued to fall dramatically, having almost halved in the last 7 years according to industry estimates. The side effect of GERNAS' generous handouts has been to hold back the development of more sustainable service and input markets for cocoa. There have also been widely acknowledged technical issues with some aspects of Gernas, especially relating to the fertilizer and the survival rate/quality of the seedlings.
- 81. More recently, in 2016, the budget for GERNAS was dramatically cut by >75% to only Rp235 billion (USD18 million) at a time when overall MoA budgets are increasing. This potentially implies a very different role and strategy emerging for MOA support to the cocoa sector. READ SI will therefore be open to collaborating with DG Estate Crops in MoA and the Estate Crop Dinas in the programme districts in support of this shift in direction, especially where it concerns development of more sustainable services and input markets for cocoa farmers.

Public private partnerships (PPP) in support of cocoa farmers

- 82. In support of the sub-component objectives, READ SI will expand on the PPP initiated under READ. Two PPPs for READ SI are currently being negotiated with two of the three leading chocolate makers, MARS Cocoa and Mondelez, who are at the top of the value chain in Indonesia. READ SI will be open to exploring a third PPP with the other leading chocolate maker, Nestle, if there is interest from both sides and a suitable partnership can be designed that is consistent with a shared set of common objectives.
- 83. Each of the PPPs will be individually designed, negotiated and managed and is expected to primarily focus in the Districts relevant to the partner firms supply chains. As such the activities and approach to cocoa service market development may be different from District to District.
- 84. The expected scope and status of the proposed PPPs with each of MARS cocoa and Mondelez are summarized in Appendix 4. Ongoing discussions and negotiations are happening on both PPPs and it is hoped that these will be concluded prior to negotiation of the financing agreement between GoI and IFAD so that the details of the PPP can be included in the READ SI programme documentation.
 - 2.5 Livestock production and health services and markets:
- 85. Livestock will be a flagship product in NTT given its importance to farmers there. A vibrant livestock sub-sector in NTT demands, among other things, an effective and efficient system of

animal production and health services. Over the medium term, as the local livestock sector becomes increasingly market-oriented with more intensive smallholder livestock production, animal production and health services will need to be delivered primarily by private providers operating in the villages in order to meet the demand for services from an expanding subsector.

- 86. Initially, in NTT only, READ SI will fund the training and establishment costs of 6 animal health and production technicians (AHPTs) covering 3 districts each. AHPTs will be private sector, part-time farmers. Training will be: (i) delivered at the Kupang Agriculture Training Centre; (ii) curriculum will be a tailor-made module approved/designed by READ; (iii) course duration will be 2 modules of 3 weeks each (i.e. basic plus refresher). This technical training at the ATC will be accompanied by a structured programme of on-the-job professional coaching and follow-up by professional livestock staff of the district DINAS which is conducted in the technicians own place of work. Such follow up should be a minimum of one visit per month for an 18 month period to ensure the technician develop the deep confidence and skills needed to be a trusted service provider in their community. Technician will be provided with a starter package of equipment and medicine and vaccines once they have completed their ATC training. In addition, READ SI will fund an information, marketing and awareness campaign estimated with each. It is assumed that the AHPT clinic/office refurbishment will be funded by each AHPT.
- 87. Subject to satisfactory progress being made by the group of private livestock technicians, READ SI will then review experience from elsewhere in Indonesia and Asia on the development of networks and associations for the technicians to provide mutual professional support and backstopping and raise the sustainability of these services over the longer term. For example, in some other ASEAN countries district-level associations of private livestock technicians have been operating successfully in some areas for more than 20 years with minimal external support.
- 88. At mid-term, READ SI will review the experience and lessons from the livestock production and service market development in NTT and assess potential and appropriateness for this to be scaled-up into other READ SI districts outside of NTT.

Component 3: Policy and strategy development support (IFAD grant)

- 89. It is widely recognised that the agricultural sector policy environment in Indonesia has not kept pace with the changing requirements of the sector, and that the substantial policy analysis conducted in the country much of it outside Government has to date had limited influence on national policy. Today, the sector faces major challenges in its modernization, and to make use of the opportunities and meet the demand for both national food security and export, there is an urgent need to develop a policy and institutional framework that catalyses increased investments from the private sector, including small farmers themselves, and more effective use of public resources. Policies and institutions to facilitate the scaling up of READ represent an important dimension of this.
- 90. In the context of READ IFAD provided limited support to enable the Ministry to conduct some basic policy analysis itself: this it did, and it strongly benefitted the scaling up process. Now, the Government of Indonesia has requested IFAD to continue this policy support and expand it, to possibly also inform the preparation of the 2020-2025 National Medium-Term Development Grant. Towards this end, IFAD has allocated a USD1 million grant to support policy and knowledge management activities, and the associated capacity building work on which they depend.
- 91. In line with READ SI's programmatic approach, the objective of the component is to strengthen policy and institutional framework for smallholder agriculture. This will include informing national policies and programmes, documenting and scaling up best practices and building public capacity to effectively deliver services in support of inclusive rural growth.

- 92. The grant will be housed within the MoA, in order to ensure a direct link between policy analysis, recommendations and operations, and to build the in-house capacity (and demand) for analytical work. The funds will be administered, and the activities led, by the NPMO, where the Knowledge Management Officer will have specific responsibility for facilitating, and supporting, the implementation of the activities. This will not only ensure accountability, but it will also assist the process of ensuring that successful piloted innovations inform new programmes and policies and further READ SI's scaling up agenda.
- 93. The activities will be guided by and implemented in close coordination with the MoA's Secretary General's (Set-Gen) office, so as to ensure the policy-level buy-in and clout. The activities will involve different units within the Ministry Specific for example AAEHRD on extension issues, as well as other key agencies at national and district. The Ministry will also work closely with BAPPENAS, both in the identification / confirmation of specific priorities for policy activities under READSI, and in drawing on that agency's experience with its own on-going knowledge management and policy dialogue initiatives. The activities will thus link to the policy dialogue platform on irrigated agriculture under BAPPENAS, supported by the IFAD-funded IPDMIP. Given the earlier start-up of this platform, it is expected that READ SI can draw lessons learned in terms of operations and institutional set-up. Further, there is a thematic complementarity, particularly around the issue of rice seeds, which will benefit both investments; and on this issue in particular, there will be close collaboration between the projects.
- 94. While some policy analysis may be conducted within the Ministry of Agriculture, the project will also draw on local knowledge and analytical capacities where necessary. Such expertise can be found in institutions such as the Indonesian Center for Agricultural Social Economics and Policy Studies (ICASEPS), research institutions within the Indonesia Agency for Agricultural Research and Development (IAARD), both of which report to MoA; as well as the universities, such as the Institut Pertanian Bogor, (the Agricultural University).
- 95. The overall expected outcome for this component is a supportive policy and institutional framework for smallholder agriculture, including:
 - (a) increased capacity to supply, and demand to use, analytical guidance for public investments and formulation of effective agriculture policies;
 - (b) Increased capacities of public institutions (particularly the Ministry of Agriculture) so that they have the knowledge and skills to identify, analyse and implement national policies, as well as to mainstream successful models in their regular programme of activities;
 - (c) systematically strengthened knowledge management and M&E systems to generate evidence-based lessons, including from both positive and negative experiences, and developing mechanism for these to be used to inform public investment decisions; and
 - (d) well documented programme knowledge and data to engage in policy dialogue aiming at addressing identified policy issues and promoting the mainstreaming of successful models into national policies.
- 96. The component is expected to be able to support activities across the entire policy cycle, from the identification of policy issues, to policy analysis, approval, implementation and monitoring. It will have a focus on addressing priority policy analysis and operational effectiveness issues relevant to smallholder agricultural development in Indonesia, and specifically those relevant to the policy and institutional challenges associated with the scaling up of READ.
- 97. Specific priorities will be agreed through each annual work plan and budgeting process and in coordination with the key government agencies involved (MoA and BAPPENAS). The first set of priorities, arising from the discussions held during design, may include:

with Bappenas

(a) assessment of rice seed sector and fertiliser policies and approaches, linking to the IFADsupported Policy Dialogue Platform on Irrigated Agriculture in BAPPENAS and aiming to informing the 2020-2025 National Medium-Term Development Plan.

with Set-Gen MoA

- (b) strengthening of both strategic knowledge management and policy analysis capacity within MoA, and the culture of drawing on evidence for policy-making decisions, under the leadership of Set-Gen.
- (c) assessment of the strengths, weaknesses and key success factors from the READSI experience of its PPPs in the cocoa sector and how these lessons can be more widely replicated in MoA in support of its strategic objectives.
- (d) with Set-Gen and READSI evaluation of alternative approaches for improving the effectiveness and efficiency of central investment programmes in the agriculture sector via Indonesia's decentralized implementation modalities, using READSI as a practical pilot for example by:
 - (i) Piloting support to District governments to develop improved evidence-based local agriculture development strategies and investments plans, and
 - (ii) Facilitating new dialogue between central and provincial investment programmes of MoA and district authorities to achieve greater harmonization of investments within a District to better support local agricultural development plans.

with READSI/AAEHRD

- (e) developing processes and tools for the initial district institutional capacity assessment and the subsequent institutional strengthening processes that are necessary to support the wider roll-out of the READ programme into new districts and that may be of wider relevance to other central investment programmes delivered by District governments.
- (f) Strengthening of strategy and approaches to develop a demand-driven public extension service that responds to farmer demand, including: i) an HR development strategy to establish and sustain a suitably skilled and motivated cadre of extension workers; and ii) an improved framework and systems for the targeting, performance management and resourcing of this cadre of improved extension workers within a decentralized government system.

F. Lessons learned and adherence to IFAD policies

- 98. **Lessons learned from READ.** Key success factors, as identified by the implementing partners of READ, include:
 - (a) its relevant core approach of smallholder empowerment and service delivery for production increase:
 - (b) a simple design with a strong poverty alleviation focus;
 - (c) the generally strong and motivated management at national and district level; and
 - (d) the combination and integration of technical expertise from different service providers, including public extension agents, NGOs and private sector.
- 99. Additional lessons learned that are relevant for the forthcoming READ SI programme are:
 - (a) integrating empowerment with targeted technical support increases effectiveness;
 - (b) diversifying extension service improves the capacities available for rural communities;
 - (c) involving the private sector can strengthen service delivery, access to new technologies and access to markets;
 - (d) involving a neutral facilitator in negotiating a private public partnership can ensure mutual beneficial agreements;

- (e) involving village elders in decision making processes ensures greater participation and smoother implementation;
- (f) the phasing of activities can help reduce the risk of elite capture if decisions concerning high value investments, such as infrastructure, are delayed until later in the programme to allow the social capital and confidence of poorer target groups to develop to ensure their voice is properly represented in these major decisions;
- (g) a decentralized management structure ensures flexible and targeted programme activities.
- 100. In terms of targeting, lessons to be drawn from READ, as well as the IFAD country portfolio. IFAD-supported projects have been generally effective in identifying poor households, using government indicators and poor household lists combined with participatory selection of project beneficiaries. The fact that many IFAD-supported projects provide comparatively small financial support packages and expect considerable active participation from participants in return, supports the self-targeting nature of interventions. This broad approach will be replicated in the targeting strategy for READ SI as it was in READ. The expectation of consistent participation in group activities and the lengthy mobilisation process also appears to have been effective for the inclusion of indigenous people. However, regarding this last point, more consistent M&E is required to be able to draw conclusive lessons on responses to the needs and priorities of indigenous people and indeed how these may differ from the wider community.
- 101. There are a number of areas in which targeting strategies have proven less effective and the design for READ SI will learn from these; (i) social mobilisation, inclusion and capacity building must be successfully completed before economic activities begin, particularly those related to infrastructure; (ii) economic and livelihoods analysis, both preparatory and participatory, should support the identification of economic opportunities types; (iii) capacity building should be linked to tangible programme opportunities, whether these are economic or social and finally (iv) M&E should be simple and support the generation of knowledge on key development challenges, such as those listed above.
- 102. In terms of IFADs policies and strategies, READ SI is fully aligned with goals and objectives of IFAD's 2016-2025 Strategic Framework, the Indonesia 2016-2019 COSOP and relevant policies including those on environment and natural resource management, gender equality and women empowerment and indigenous people, as well as with the strategies on rural finance, private sector partnerships and climate change. In addition, READ SI will place focus on two areas of strategic importance to IFAD:
 - (a) Nutrition is now mainstreamed within READ SI and has additional activities compared to READ
 - (b) Scaling-up is at the heart of READ SI, and includes dimensions of replication into new geographical locations, evolution and adaptation of field activities so they are suited to a wider range of contexts, and building a programmatic and management platform for even wider scaling up and mainstreaming of the READ approach. The pathway will be embedded within IFAD's *Operational Framework for Scaling up Results*¹⁶.

Implementation

A. Approach

103. READ SI remains a farmer-centred programme, enabled through the integrated approach at the village level anchored by the social mobilization processes. This core implementation approach is based on the successful approach developed by READ post-MTR.

104. The villages, and especially the programme mobilized agricultural and livelihoods groups are therefore at the heart of the implementation approach with services and support organised

¹⁶ https://www.ifad.org/documents/10180/5218aafd-78cf-4565-b4f4-2c5487892df2

around these groups. To ensure farmers remain at the heart of the programme, the joint teams of Village Facilitators and *PPL* are the most critical members of the overall implementation setup, so particular attention will be given to recruiting, training, coaching and monitoring these teams so they can perform to a consistently high standard as demonstrated under READ. As much as possible, the programme will aim to involve high performing READ facilitators in the old READ villages. As part of the farmer-centred approach the mix of key activities will respond to the demands of the READ SI households in each village, for example the specific crops and livelihoods to be supported, with households free to choose which groups to join.

- 105. READ SI will invest in improving the quality of PPL support to farmers by working with the ATCs in Makassar and Kupang to review their PPL training approaches. Important improvements will be training which is more responsive to farmer needs including the needs of different farming systems in different locations as well as responding to the particular extension needs for less educated farmers and women.
- 106. READ SI will also support a transitional approach to more genuine empowerment of farmers, for example by reducing the size and scope of subsidies and donations, with a greater emphasis placed on supporting farmers to make their own choices on how resources should be invested to support them as well as increasingly contributing to those investments. This is seen in the increased choice for farmers on the agricultural and livelihood activities but also in the approaches to be used to support investment in machinery and small infrastructure.
- 107. From a programme management perspective, the READ SI approach is based on:
 - (a) district-led decentralized implementation for the core READ SI activities, especially Component 1;
 - (b) effective central level management, with a small high quality NPMO assisted by PPSUs;
 - (c) working with specialist partners and service providers to bring additional expertise into programme implementation, including on:
 - (i) social mobilization (a specialist implementing partner, continued from READ)
 - (ii) rural finance (a new specialist implementing partner plus new partnerships with banks, MFIs and OJK)
 - (iii) cocoa technical expertise (expanding the partnership with MARS Cocoa from READ plus establishing new partnerships with other lead cocoa firms such as Mondelez);
 - (d) systematic investment and support to the development of sustainable systems and markets especially for key services and inputs for farmers;
 - (e) performance-based management and resource allocation, enabled through rigorous MIS and M&E framework, including performance benchmarking and other key asks demonstrated in READ and CCDP.
- 108. READ SI will take full advantage of the experience of READ and the strongest managers and staff from the original READ districts will be used as key resource staff in READ SI to coach and mentor others in READ SI and will also contribute to updating the new PIM for READ SI.
- 109. READ SI will also expand elements of the original READ approach, especially including deepening and increasing the number of PPPs in the cocoa sector but also in financial services. It will also see an evolving role for the NPMO, as it transitions its systems and practices from managing a project to a programmatic platform able to operate across many more and varied districts.
- 110. Given the growing importance of village-led investment in Indonesia more generally, especially under the new Village Law, READ SI will coordinate with Ministry of Villages and other key agencies to ensure links and synergies are developed between READ SI and these other initiatives both centrally and practically at village and district levels.

111. As READ SI moves towards a programmatic approach, the framework for the selection of districts into the programme and their eventual graduation out of READ will evolve. As is already being seen in the original READ districts, the intensity and nature of supported needed from READ changes as the Districts make progress and deliver results. READ SI will therefore use a framework as illustrated in Figure 1 and described briefly below.

READ SI District graduation approach

- (a) Entry: Districts selected on a semi-competitive basis according to the criteria outlined in Chapter C above. It is anticipated that there will be more districts wanting to join READ SI than available places in the programme, mostly due to funding limits for READ SI at present. Districts wanting to join but who were not selected will be placed in a prioritized waiting list. As new places become available in the programme, either through additional funding or the removal of non-performing districts (see below), then districts at the top of the waiting list will be invited to join.
- (b) Foundation Phase: Districts joining the READ programme for the first time will implement a Foundation phase, of activities and interventions typically over 5-6 years as described for the "new" districts in this design. Their performance will be monitored and benchmarked against other districts and against the agreed expected milestones set for each district.
 - (i) Districts performing well and meeting agreed milestones will be eligible to apply to continue to a second advanced phase of READ - similar to that proposed under READ SI for the original READ districts.
 - (ii) Districts not performing well against the agreed milestones at any time will be provided with one year of intensive management support coordinated by the NPMO to address the problems and get the performance back to the required level. If performance improves to the required level, the district can re-join the main programme. If the district's implementation performance does not improve despite intensive support, the district may be removed from the programme and a district from the waiting list invited to join.
- (c) Advanced Phase: Well performing districts will be provided with a more focused, advanced set of activities and support over a 4-6 year period - both in the programme villages and in terms of the district systems, management and services - in order establish the more advanced and mature capabilities in inclusive rural development such that they can graduate from the READ programme. One of the knowledge and policy objectives for READ SI is to establish the lessons and experience on the key elements of this Advanced Phase and the graduation from the programme. Districts whose performance drops during the Advanced Phase may also be removed from the programme.

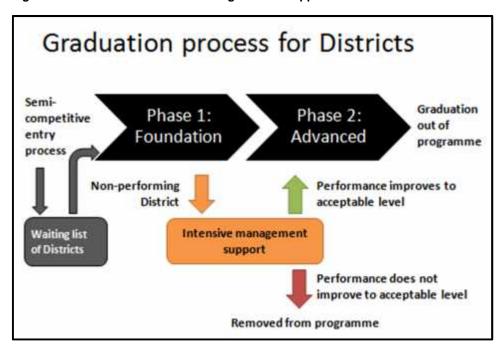


Figure 1: READ District selection and graduation approach

- 112. The nine old READ districts will enter READ SI at the Advanced Phase with clearly defined performance milestones. Those districts that do not perform well in the first year of READ SI will be provided with one additional year of intensive management support to raise performance to the required level or be removed from the programme.
- 113. <u>Institutional capacity, especially at district level.</u> A key aspects of the READ SI scaling process must be that it can be implemented in districts with different starting levels of institutional capacity and for READ SI to have the instruments to raise capacity to a consistently higher standard.
- 114. An institutional analysis of each new READ SI district should therefore be an important early step in the process of the districts joining READ SI. This should then inform district-specific coaching and institutional strengthening plans for READ SI to implement co-ordinated by NPMO and BAPPEDA from the district concerned. An indication of the likely level of capacity of the district teams in programme management will be if the district has implemented a major central government project in the last three years. For districts who have not, a programme of extended training and follow-up support on programme management will be provided over the first 2 years, with close follow-up support from the PPSU.
- 115. The development of the processes and tools for this institutional capacity assessment and strengthening process will be developed as one of the very first activities under Component 3 with financing from the IFAD grant.

B. Organizational framework

116. READ SI will follow the implementation structure of READ and will inherit the strong management foundations that have underpinned READ's success. As READ SI is explicitly a scaling-up initiative or READ and a significant part the success of READ has been attributed to its management, it is vital that this management experience from READ also guides READ SI implementation.

- 117. READ SI will be implemented at the same time as the large IPDMIP irrigated agriculture project with AAEHRD responsible on behalf of MoA for the management of both projects. This will create significant opportunities but also management pressure on AAEHRD.
- 118. To manage the risks to both projects, distinct responsibilities and teams for each of the major programmes being implemented concurrently (READ SI and IPDMIP) will be assigned within AAEHRD to facilitate proper management and accountability for the delivery of each programme.
- 119. **Steering Committee**. READ SI will be overseen by a Steering Committee which will have powers to take key decisions on the overall direction of the programme. It is proposed that the Steering Committee is Chaired by a senior official of the Ministry of Agriculture and Co-chaired by BAPPENAS.
- 120. Members of the Steering Committee should include representatives of:
 - (a) Government Central: Ministry of Villages, Ministry of Home Affairs
 - (b) Government Sub-national: Representatives of READ SI Districts
 - (c) PPP partners: from cocoa sector, banking sector and other related associations if needed
 - (d) Other key implementing partners and stakeholders, such as farmers' organizations
- 121. For effective work and decision making, members will be appointed for not less than one year and total membership of the Steering Committee should not exceed 20 persons
- 122. **Executing Agency** will be the Ministry of Agriculture on behalf of GoI and the Agency of Agricultural Extension and Human Resource Development will be assigned as the National Programme Management Unit on behalf of MoA.
- 123. **Ministry of Finance** will act as the official Representative of the Government of Indonesia as the Borrower/ Recipient. In this role MoF will be responsible for: (i) Fulfilling the government fiduciary oversight and management responsibilities; and (ii) Providing sufficient counterpart contribution in a timely manner to finance the programme activities, including payment of government staff salaries; (iii) Timely processing WAs, approval of procurement actions and other necessary documents according to the agreed operating procedures.
- 124. **NPMO** will be led by a Programme Director supported by three Deputy Programme Directors. The role of two of the Deputy Programme Directors is to provide overall coordination and oversight of all programme activities within a number of provinces and ensure adequate senior presence and support of the programme management out in the READ SI districts. In addition, the third Deputy PD will oversee financial management, procurement and programme administration issues, including planning, M&E and reporting.
- 125. While the NPMO has overall responsibility for programme delivery, each of the Components have specific implementation arrangements. :
 - (a) Component 1: BAPPEDA and their relevant technical agencies e.g. BAPELLUH, DINAS Pertanian will have prime responsibility for programme delivery within their districts. Staff from the specialist implementing partners on social mobilization, agricultural extension and rural finance assigned to each District will work as an integrated part of the District implementation team and be based in the relevant agency team (similarly at sub-district level). The District teams will be provided with technical backstopping and monitoring by the corresponding provincial agencies, especially BAPPEDA and BAKORLUH, as well as from the NPMO teams. There will be a more systematic process for engagement of Sub-district (Camat) and village heads (Kepala Desa).
 - (b) Component 2: The NPMO will have primary responsibility for delivery of activities under the four sub-components. In the case of cocoa and rural finance, PPP's will be a central mechanism. Under sub-component 2.1, the Directors of collaborating ATCs will be accountable to the NPMO to provide more relevant in-service training to agriculture extension staff.

- (c) Component 3: Will be operationally led by a unit of MoA with the relevant mandate under the Direction of the Secretary General of MoA. The NPMO will provide overall coordination and management support to the component.
- 126. **Specialist implementing partners** for social mobilization and rural finance will be contracted centrally by NPMO and operate as an integrated part of the implementation teams, hosted by the relevant units at national, provincial, district and sub-district level. For this purpose, two specialist service providers will be procured as institutional service contracts by the NPMO rather than hiring individual consultants. This will be similar to the arrangements for the social mobilization TA adopted under READ.
- 127. **Provincial Programme Support Units** (PPSU) will be set-up in each Province. PPSU will primarily focus on programme administration functions, such as financial reporting, M&E and planning. They are considered necessary to provide closer support and backstopping to the District PMOs given the increased geographical coverage of READ SI. The PPSU are a support unit and as such will not lead any activities nor direct activities in districts. PPSU are expected to be hosted by the provincial agency responsible for extension (currently BAKORLUH) and will also host the provincial staff of the contracted specialist implementing partners for Social Mobilization and Rural Finance.
- 128. **District Programme Management Office** (DPMO) will be set up in each district hosted by BAPELUH. DPMO will primarily focus on implementation of district level activities, primarily described in Component 1. DPMO will fall under the guidance of BAPPEDA and be hosted in BAPELUH with support from Dinas Pertanian (Agriculture), Dinas Perkebunan (Estate) and Dinas Peternakan (Livestock).
- 129. **Senior Technical Assistance** will be highly focused. There will be a small amount of senior national and international technical assistance, primarily at the NPMO level and weighted towards the start of the programme to help establish the new programme systems and approaches. This senior TA will explicitly focus on advising and providing senior professional support in specific areas of Programme Management to the NPMO and will not be used to substitute for capacity in the programme team.

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

Planning.

- 130. Planning processes and schedules within READ SI will be harmonized with the mainstream planning process of GoI, both centrally and at district level.
- 131. **Annual AWPB Approval Process:** During the final quarter of each financial year, the READ SI NPMO will prepare the AWPB for the following year. The AWPB will be prepared by consolidating (i) the plans from each district, primarily covering Component 1; (ii) plans associated with each of the sub-components under Component 2 and for Component 3, primarily prepared by the relevant NPMO teams; and (iii) plans for overall management of READ SI.
- 132. The AWPB will be submitted by the Programme Director through Ministry of Finance and approved by the annual meeting of the Steering Committee. Because of the risk of timing difficulties arising, the AWPB will be deemed approved if there is no comment by the members of the Steering Committee or no meeting is held after a lapse of time of two weeks after submission of the AWPB for review by the Steering Committee.
- 133. The AWPB will cover both the IFAD loan and grants within a single AWPB though highlighting which activities are specifically supported by the grant.
- 134. Districts are the primary level of intervention for READ SI and so the primary intervention planning will be done at district level. This includes all activities under Component 1. Planning

in the district will be led by BAPPEDA (the district planning and development agency) and harmonized with the local planning processes and will build on inputs and plans from each village and sub-district.

Monitoring and evaluation

- 135. The M&E and Knowledge Management framework of READ SI will draw on the experience of the Coastal Community Development Project (CCDP) to monitor and gain knowledge about programme poverty reduction and livelihoods impacts and how these can be scaled-up and replicated into a programmatic approach. The M&E of READ provided few insights into the dynamics of poverty reduction at the household level or the factors that explain the success of different activities. Instead, information is derived mainly from: (i) extrapolation from agricultural yields; (ii) extrapolation from an improvement in the incidence of poverty at the provincial level; and (iii) the evident support for READ, both within the government and amongst the beneficiaries. READ SI will provide an improved M&E and knowledge management design which, in as far as it relates to targeting, will include:
 - A weekly/monthly dashboard that shows progress on key outputs and objectives, including gender;
 - Sex-disaggregated database on all outcomes, outputs and indicators related to individuals or households;
 - Household level analysis of poverty impact that enable an understanding of how different interventions (rice, maize, cocoa, off-farm etc.) impact different poverty causes (land-poor, remoteness, infrastructure poor etc.);
 - Regular knowledge sharing and exchange meetings and workshops; and
 - Social media to support knowledge management outcomes.
- 136. For data collection, READ SI will build on the experience in the wider region and introduce tablet-based electronic data collection directly into a centrally maintained MIS system. This is intended to reduce the time burden of M&E data collection and also improve timeliness and reliability of data in order to make the M&E system more robust and valuable as a management tool.
- 137. To support this move to e-M&E, all field staff will be provided with tablets and smartphones to facilitate this and efficient group based routine communication e.g. via WhatsApp.

Learning and knowledge management

- 138. READ SI is the first phase in the scaling-up of the core READ approach and also comes at a time of increased investment by GoI in agriculture creating a strong demand for evidence-based learning and policy development.
- 139. Given the strong reputation of READ, READ SI is therefore expected by MoA, BAPPENAS and others to generate practical knowledge of what works (and what doesn't work) and how to scale-up investments in the successful approaches on a more programmatic basis. Effective and efficient learning, knowledge management and communication are therefore central to READ SI longer term objectives. Accordingly, READ SI will invest in good quality, evidence-based knowledge management in order to contribute to policy development processes.
- 140. A IFAD grant of USD 1 million is to support specific efforts on knowledge management within READ SI and also to contribute to broader policy and strategy processes in MoA and other government stakeholders at national, provincial and district level such as BAPPENAS and district governments. The grant will also be available to support policy processes in other aspects of agriculture and MoA beyond immediate relevance to READ SI. (See Component 3)
- 141. Within MoA, part of the grant is also expected to support a unit working on knowledge-based policy processes under the direction of a senior MoA leader, possibly the Secretary General. Via the grant, READ SI will also strengthen institutional capacity related to knowledge

management and evidence-based policy processes within MoA. In this context, the programme will support targeted institutional strengthening activities in these areas. This is expected to be done in close coordination with the work under the IPDMIP project on policy support in BAPPENAS.

142. Within READ SI implementation itself, the benchmarking process outlined above will enable the programme to quickly identify examples of good practice in different aspects of the READ approach. These examples of good practice can then be quickly documented and rolled-out within the rest of the programme. READ SI is therefore expected to be able to implement a system of continuous improvement. The process of identifying and documenting best practice will also be a useful source of field evidence to feed into the wider policy processes in MoA.

D. Financial management, procurement and governance

- 143. READ SI will apply standard government procedure for ODA financed programmes.
- 144. **FM and Fund flow** will use "Tugas Pembantuan/TP or Co-Administration Task" method to districts and "de-concentration" to province, similar to READ. A final decision on this to be taken prior to negotiations.
- 145. It is noted that AAEHRD will also managed IPDMIP which will use on-granting. For simpler management systems in AAEHRD there are benefits to both programmes using the same mechanism and on-granting is believed to be better suited to larger decentralized investment delivery and district-level ownership but this is untested by AAEHRD.
- 146. **Procurement** of goods, works and services will be undertaken in accordance with National Procurement Rules and Regulations (*Peraturan President Republic Indonesia Tentang Pengadaan Barang/Jasa, Pemerintah*) and its operational instruction as amended from time to time as long as it is consistent with the IFAD Project Procurement Guidelines. The use of the EProcurement system (which includes the E-Catalogue and E-Shopping Systems) is allowed for all NCB, Shopping and Online-shopping packages for goods; civil works and consultancy services. The executing and implementing agencies shall ensure procurement of goods, works and consultancy services shall be subject to IFAD prior review in accordance with the prescribed level of risk as assessed by IFAD regardless of the automated processes of the E-procurement system.

E. Supervision

- 147. READ SI will be jointly supervised by GoI and IFAD. Formal joint supervision missions will be conducted at least once per financial year with additional implementation support missions mobilized as necessary. At least one additional implementation support mission will be mobilized within the first 6 months of programme implementation and at least one additional implementation support mission during the second year. The newly established IFAD country office will provide continuous supervision and implementation support beyond the missions.
- 148. A Mid-Term Review will be jointly conducted by GoI and IFAD around the end of Year 3 of the programme, or earlier if required.
- 149. IFAD's participation in the joint supervision of AIMS will be under its policy of direct supervision, in line with the IFAD Supervision and Implementation Support Policy.

F. Risk identification and mitigation

150. The main risks of the programme relate to the selection of priority crops, partnerships, elite capture and programme management capacity and continuity between READ and READ SI. Key risks are summarized in the table below and a more detailed draft risk log is included as Annex 1.

Table 1: Key Programme Risks

Risk

Priority crops do not sufficiently offer market opportunities for smallholders.

Partnerships with private sector (cacao PPPs and FSP) not beneficial for smallholder farmers.

Elite capture of programme benefits.

Limited implementation capacity

Extension staff lack capacity to respond to farmer needs and deliver relevant support

Delayed contracting of specialist service providers for social mobilization (and rural finance to a lesser extent) substantially delays programme start up or undermines SMs central role in village process

Mitigation

Priority crops to be supported in addition to rice, cacao and vegetables will be selected in close consultation with all relevant stakeholders and based on participatory market assessment. Rice and cacao were demonstrated to be the main driver of increment financial impacts for households under READ. In more remote locations, such as the border districts in west Kalimantan and NTT, READ SI will be flexible to accommodate farming systems with less market and more subsistence focus.

Based on IFAD's experience in Indonesia and other countries, PPPs will be facilitated following careful due diligence to ensure they deliver clear benefits to READ SI supported communities. For example:

The partnership with MARS builds on the PPP under READ which demonstrated positive benefits to smallholders.

With Mondelez, their Cocoa Life initiative is built around a well defined integrated sustainable community development model for cocoa producing communities and has benefited from >10 years of field implementation globally and +3yrs development in Indonesia.

This will be addressed by (i) providing adequate training on good leadership to the designated leaders and possible installation of a complaint mechanisms; (ii) sensitizing implementing agencies and partners; (iii) selection of crops/activities targeted at women and small farmers; (iv) making information on sub-project selection and financing widely available; (v) requesting MOA to provide an anti-corruption plan for the programme to be approved by the anti-corruption agency; and (vi) creation of a mechanism for resolution of grievances at the community level.

"Big ticket" programme investments in villages, such as infrastructure and machinery, will be delayed to the third year of village interventions and only eligible to groups members who would have had to complete all programme activities for the previous two years. This is intended to dramatically reduce the risk of elite capture for these higher risk investments

AAEHRD has an excellent but small team that was the core of the success of READ. The READ SI programme and IPDMIP represent a dramatic expansion of the work load of this team and represents a major potential risk to both new projects.

Significant additional support will need to be planned for AAEHRD to cope with this workload. There must also be regular and close monitoring over the first 2 years of implementation to identify emerging problems early and put in place corrective measures.

District capacity is variable. READ SI will implement an institutional capacity assessment with all new district and implement a targeted strengthening plan with clear milestones. Institutional incentives have been built in to the programme design through the use of district benchmarking coupled with the District graduation process, both of which are intended to drive self-improvement.

Work with ATCs in Makassar and Kupang to review their training approaches from the current "one size fits all" mentality to better reflect the skill sets required by PPLs in the field. Changes are likely to include more practical and less classroom training, functional processes to ensure ATC staff receive timely feedback on training needs and quality, and tailor-made training for different farming systems, literacy levels as well as gender specific.

Agreed process for continuity with READ partner NGO to be approved by IFAD and GOI prior to effectiveness. This may be considered to be set as a pre-condition for Programme Effectiveness.

Costs, financing, benefits and sustainability

A. Costs

151. The total programme costs, including physical and price contingencies, duties and taxes are estimated at USD 87.28 million over a five-year implementation period. Programme investments are organized into three major components: (i) Village agriculture and livelihoods development (55.8% of the costs); (ii) Services inputs and market linkages (18.8% of the costs); and (iii) Policy (1.3% of the costs). NPMO and provincial offices programme management costs represent 6.6% of the total programme cost while district offices costs¹⁷ are 11.8% of the total cost. An unallocated amount of USD 5 million, or 5.7% of the total programme cost, is also included in the budget in order to grant financial flexibility to the programme. A summary breakdown of the programme costs by components is shown in Table 2 below.

Table 2: Programme costs by component

¹ Indonesia

READ Scaling-up Initiative

Project Components by Year -- Totals Including Contingencies

	Totals Including Contingencies (US\$ '000)					
	2018	2019	2020	2021	2022	Total
A. Village agriculture and livelihoods development						
1. Community mobilization	2,365	2,247	2,292	2,292	2,284	11,480
Agriculture and livelihoods	17,103	5,378	7,745	3,015	34	33,274
3. Savings, loans, and financial literacy	525	534	1,105	254	-	2,417
4. Nutrition	126	494	382	382	135	1,519
Subtotal	20,119	8,653	11,524	5,942	2,453	48,690
B. Services inputs and market linkages						
Agricultural extension services	1,814	1,356	1,150	703	964	5,987
2. Financial Institutions	301	611	349	349	349	1,958
Seed supply and market systems	958	93	77	69	63	1,260
 Cocoa farmer support services and inputs markets 	5,390	657	373	373	362	7,156
Livestock production and health services		14	11	3	3	31
Subtotal	8,464	2,731	1,960	1,496	1,741	16,391
C. Policy	275	275	275	275	-	1,100
D. Districts, provinces and NPMO management						
District project management	3,166	1,758	1,795	1,804	1,814	10,336
NPMU and PPSU project management	1,395	1,165	1,142	1,001	1,064	5,766
Subtotal	4,561	2,923	2,936	2,805	2,878	16,102
E. Unallocated		-	2,000	2,000	1,000	5,000
Total PROJECT COSTS	33,418	14,582	18,695	12,519	8,071	87,284

B. Financing

152. An IFAD loan will cover USD 58.88 million, or 67.5%, of the total programme cost. The Government of Indonesia will contribute USD 15.07 million (17.3%) by financing salaries of all NPMO, provinces, districts and sub-districts staff and by waiving taxes and duties. The programme beneficiaries are expected to contribute USD 5.84 million (6.7% of the programme cost) - mostly to co-finance the purchase of basic and advanced agriculture mechanization under sub-component 1.2 - and "private sector partners" — which are companies investing on cocoa-related activities - will finance USD 6.49 million, or 7.4%, of the total programme cost. The proposed financing plan is summarized in

¹⁷ Costs that are strictly related to the direct implementation of programme activities.

Republic of Indonesia Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI) Final project design report

153. Table 3 below.

Table 3: Programme Financing Plan

Indonesia READ Scaling-up Initiative Components by Financiers (US\$ '000)

	The Gove	rnment	IFAD L	.oan	IFAD G	rant	Benefici	iaries	Partn	ers	Tot	al
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Village agriculture and livelihoods development												
Community mobilization	1,044	9.1	10,436	90.9	-	-	-	-	-	-	11,480	13.2
Agriculture and livelihoods	3,121	9.4	21,121	63.5	-	-	5,838	17.5	3,195	9.6	33,274	38.1
3. Savings, loans, and financial literacy	220	9.1	2,198	90.9	-	-	-	-	-	-	2,417	2.8
4. Nutrition	178	11.7	1,341	88.3		-		-		-	1,519	1.7
Subtotal	4,562	9.4	35,096	72.1	-	-	5,838	12.0	3,195	6.6	48,690	55.8
B. Services inputs and market linkages												
Agricultural extension services	3,684	61.5	2,303	38.5	-	-	-	-	-	-	5,987	6.9
Financial Institutions	178	9.1	1,780	90.9	-	-	-	-	-	-	1,958	2.2
Seed supply and market systems	404	32.1	856	67.9	-	-	-	-	-	-	1,260	1.4
Cocoa farmer support services and inputs markets	560	7.8	3,298	46.1	-	-	-	-	3,298	46.1	7,156	8.2
5. Livestock production and health services	3	9.1	28	90.9	-	-		-		-	31	-
Subtotal	4,828	29.5	8,265	50.4	-	-	-	-	3,298	20.1	16,391	18.8
C. Policy	100	9.1	-	-	1,000	90.9	-	-	-	-	1,100	1.3
D. Districts, provinces and NPMO management												
District project management	4,038	39.1	6,298	60.9	-	-	-	-	-	-	10,336	11.8
NPMU and PPSU project management	1,548	26.8	4,218	73.2		-		-		-	5,766	6.6
Subtotal	5,587	34.7	10,516	65.3	-	-	-	-	-	-	16,102	18.4
E. Unallocated			5,000	100.0		-		-			5,000	5.7
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0

154. For detailed information on programme cost and financing, reference is made to Appendix 9, which includes a more elaborate explanation, as well as a complete set of summary and detailed costs tables in its Attachments.

C. Summary benefits and economic analysis

- 155. READ SI programme objective is to individually and collectively empower rural households with the skills, confidence and resources to sustainably improve their farm and non-farm incomes and livelihoods. Benefits will derive from (i) community mobilization, (ii) village agriculture and livelihoods development, (iii) improved services, inputs and market linkages, including enhanced financial services, and (iv) improved nutrition.
- 156. **Number of beneficiaries.** The programme target groups are: (i) the poor and near poor who have the potential to generate economic returns from agriculture with programme support; and (ii) landless and land-poor, including women-headed households, who will be included in activities directed at homestead gardening, improved nutrition and financial literacy. The programme is expected to benefit about 382,500 direct beneficiaries or 76,500 households, assuming an average household size of five members. About 50% of the total programme beneficiaries are expected to be women.
- 157. **Summary of financial models' results.** Five illustrative crop models and one livestock model were prepared to demonstrate the financial viability of the investments: (i) cocoa crop model, (ii) cocoa partly rehabilitated crop model, (iii) paddy crop model, (iv) chilli crop model, (v) copra crop model, (vi) goats livestock model. The table below summarizes the main results of the crop and livestock models, which have been used as building blocks for the economic analysis. All models generate attractive results in terms of NPV, IRR, return to family labour and B/C ratio.

Table 4: Financial models summary

IDR '000	*Income WOP	*Income WP	WP Investment first year	NPV @ 12%	IRR	Return to family labour	B/C ratio
Crop							
Cacao - 1 ha	7,050	10,494	8,613	5,927	47%	312	1.57
Cacao - rehab - 1 ha	7,050	18,645	15,975	6,149	17%	495	1.50
Paddy Paddy - 0.5 ha	7,061	10,643	4,901	12,441	52%	370	1.55
Chili - 0.1 ha	1,423	6,424	1,290	19,274	-	338	3.22
Copra -1 ha	4,630	8,550	2,265	5,409	28%	201	1.54
Livestock							
Goats	1,740	5,241	1,960	4,443	32%	138	1.75

^{*} Net of family labour

- 158. **Economic Rate of Return**. The overall economic internal rate of return (EIRR) of the programme is estimated at 19% for the base case. The net present value (NPV) of the net benefit stream, discounted at 10%, is USD 50.7 million. The economic analysis is more detailed presented in Appendix 10.
- 159. **Sensitivity Analysis.** In order to test the robustness of the economic analyses results, a sensitivity analysis has been carried out. The sensitivity analysis shows the economic impacts that a decrease in programme benefits up to -50% will have on the programme viability. Similarly, it shows how the economic viability of the programme will be affected by an increase of up to 40% in programme costs; and by a one to three-year delay in programme implementation. The analysis confirms that the economic viability of the programme remains attractive as a positive NPV and ERR above 10% are preserved in each case analysed.

Table 5: Sensitivity Analysis

	Assumptions	Related Risk	ERR	NPV \$ Million
Programme base case			19%	50,693,502
	-20%		15%	28,517,580
Decrease in programme benefits	-30%	Market/price fluctuations (changes in market demands). Unexpected climatic changes. Low crop yields. Delays in	14%	17,429,619
	-40%	Trainings. Problems with the partnerships.	11%	6,341,658
	20%		16%	38,656,280
Increase in programme Costs	30%	Market/price fluctuations (changes in market demands). Procurement	15%	32,637,670
	40%	risks.Problems with the partnerships.	12%	14,581,837
Delays in programme implementation	1 year	Delays in having the Project approved by	16%	31,276,557
	3 years	all parties. Any other unforeseable event.	12%	11,680,109

D. Sustainability

- 160. The sustainability of the economic benefits to READ households was already considered to be high under READ, as these were primarily achieved through adoption of improved production practices on farms based on knowledge and skills gained from the project and knowledge once learned is not easily forgotten.
- 161. READ SI hopes to go even further in terms of sustainability of impacts. The design maintains the core READ approach and then has additional elements intended to raise sustainability even further.
- 162. Component 1 includes additional feature such as:

- (a) The focus on financial literacy and savings will increase households capacity to cope with shock and recover afterwards, making previous gains more sustainable;
- (b) Further developing the READ initiative of linking savings and loan groups to banks, will increase the sustainability of the groups as they will be both more valued by their members and also subject to greater management discipline and transparency; and
- (c) Providing support for machinery investment to micro-service enterprises owned by farmers/farmers groups rather than giving machinery for free, is likely to increase ownership and hence proper operation, maintenance and cost recovery resulting in greater sustainability of the machinery investments.
- 163. Component 2 is almost entirely geared towards building more sustainable support services and markets for critical services and inputs to serve farmers demands. These include: more sustainable, market-based local supply of quality rice seed; livestock production and health services and inputs (vaccines and anthelmintic); stronger links between farmers and banks as well as better supervision of MFIs, and; improved cacao support services based on private provision of advice and inputs.
- 164. Under Component 2, agricultural extension service will also be strengthened at an institutional level from the sub-district up to the ATC. However, the sustainability of these investments in the public extension systems rely on continued commitment of funding from the government unless elements of "user pays" services are adopted. An important contribution of READ SI to the sustainability of public extension services is to provide robust evidence of the economic value and high rates of return from investing in good quality, efficient public sector agricultural extension, especially in comparison to input and infrastructure lead investments (e.g. UPSUS), in order that extension can gain an increasing share of scarce public resources.
- 165. From an environmental perspective, READ and READ SI both have the opportunity to improve the profitability of cacao to a level where it is an attractive choice for more farmers and so current upland land used for maize and other secondary crops is likely to be diverted to cacao (and existing cacao plantings sustained) which is less vulnerable to unpredictable rain-fall and also helps preserve soil fertility and reduce erosion, especially on sloping land.

{Extract from recent draft COSOP Report]

- 167. **A fast growing country.** A member of the G-20,Indonesia is a fast growing middle-income country (MIC) with the fourth largest population in the world. The archipelago consists of more than 17,000 islands, hosting a population of about 253 million and close to 300 ethnic groups speaking around 250 languages. Indonesia's population is largely concentrated on the western part of the country (around 80% of the population lives on the islands of Java and Sumatra) and is increasingly urbanised. With a 3% annual urban growth, over 50% of Indonesians now live in urban centers, generating a soaring demand for consumption goods and in particular food products. Young people constitute around one third of the population but more than half of the under 30 live in urban areas as a result of strong youth internal migration.
- 168. Over the past decade Indonesia has progressed into a dynamic electoral democracy, achieving democratic transition as well as a remarkable economic performance. Between 2002 and 2012, the economy annually grew at an average rate of 5.5%, boosted by domestic consumption and a growing middle class, strong investment flows and a boom in commodity exports. Revenue growth was further sustained by macro-economic stability brought by a prudent macro-economic management, with healthy public finances and low budget deficits, debt-to-GDP ratio and inflation. While around 25% of the GDP is produced by Jakarta, the revenue generated by small and middle size cities is rapidly growing under the combined effect of increased population and productivity, and the majority of the fastest growing cities are out of Java.
- 169. **Uneven distribution of benefits.** Steady economic growth has led to gradual poverty reduction. The number of people living below the poverty line of IDR 312,328/month (USD 21.7) has dropped from 24% in 1999 to 11%, or 27.73 million people, in 2014. The pace of poverty reduction has however been slowing down over the last years and the 2010-2014 national development plan target to reduce poverty to 8-10% could not be achieved. Besides, another 27% of the population or 68 million are near poor who live with less than UDS 2 a day or just above the poverty line. They are highly vulnerable to shocks such as illness, extreme weather or price volatility, which can easily push them back into official poverty. In fact it is estimated that about 25% of Indonesians have fallen under the poverty line at least once in a three year period. Despite progress in health and education, Indonesia's Human Development Index of 0.684 remains below the average of 0.703 for East Asia and the Pacific. Malnutrition remains significant: the prevalence of stunting among children under five years of age rose from 36.8% in 2007 to 37.2% in 2013.
- 170. Furthermore the benefits of economic growth have been unevenly distributed. As poverty was decreasing, the Gini coefficient has raised from 0.32 in 1999 to 0.41 in 2012, showing that income distribution has become increasingly unequal. Poverty is lower in the cities (8%) and higher in the rural areas (14%), where a majority of smallholders lacking access to services and markets are unable to tap the potential offered by economic growth. The deterioration of the nutritional status is more severe in the rural areas, where access to social and economic infrastructure is lower. Pronounced regional disparities exist, with the highest poverty rates affecting Eastern Indonesia. However densely populated Java hosts the largest numbers of poor.
- 171. **Agriculture.** While the GDP share of agriculture has come down to 12% (2014), it is still the main source of income for one third of the population and for 64% of the poor. With rich volcanic soils and a tropical climate suitable for growing a variety of crops, Indonesia is a major global producer of tropical products such as palm oil, rubber and, to a lesser extent, copra, cocoa, coffee and spices. The sector has been growing by an average 4.6% over 2004-2009, but this has been attributed mostly to a shift from food staples to high value crops as well as an expansion of cultivated areas. There is enormous potential for increasing crop productivity as a

majority of smallholders still operate close to subsistence level. Low availability of modern inputs, lack of appropriate technologies, low access to irrigation (less than 50% of the 7.2 million irrigated hectares are fit for use), high post-harvest losses and limited access to finance, extension and other support services contribute to low yields and low returns. Difficult access to markets due to limited connectivity in remote areas, high transaction costs, the lack of storage and cold chain infrastructure and farmers' lack of market information and marketing skills further affect productivity and earnings. The share of the national budget accruing to the agriculture sector doubled from 2.7% in 2001 to 5.6% in 2009. However heavy central spending on subsidies (inputs and credit) made available to the vast majority of farmers has constrained resource allocation to the provision of public goods and services such as research, extension and infrastructure. The lack of an enabling environment as well as increased land fragmentation in the more densely populated areas contribute to the number of farmer households (26.2 million in 2013) decreasing by an average of 500,000 every year, mostly affecting families with less than one hectare of land.

- 172. **Fishing and aquaculture.** Around 6.4 million people are engaged in inland and marine fishing and aquaculture. Artisanal producers using traditional means account for 95% of the production of 15.26 million tons (2012), of which aquaculture accounts for 62% and has an average annual growth rate of 34%. Aside from constituting an important source of proteins that the government is promoting to improve food security, marine products have considerable potential for exports, which have been steadily growing over the last years, reaching USD 3.9 billion USD in 2012. Limited access to boats and fishing gear, practices of destructive and illegal fishing, and poor management by aquaculture operators leave considerable scope for modernising and improving production. The Eastern part of the country also suffers from a lack of infrastructure such as port facilities, electricity, transport facilities and fuel supply for vessels.
- 173. Rural women. Most of rural women work as home-based workers, plantation workers or on the family's farm. Whether employed in the formal or informal sector, they earn on average 17% less than men. Poor women are often physically overworked, increasingly taking over primary production as men migrate. The lack of basic social infrastructure, including access to water, sanitation and energy, and traditional social roles contribute to increasing their burden. Indonesia's Civil Code stipulates that men and women have equal ownership rights and the 1974 Marriage Law formally adopts the concept of joint ownership of property purchased during marriage. However only few parcels of land are registered in the joint name of husband and wife, because of a lack of awareness and of traditional norms. By law, women also have equal access to financial services, and have the right to independently conclude contracts. However law provisions lack proper enforcement and married women find it difficult to engage in formal financial activities such as opening a bank account. Women have significant decision-making powers within the household but have limited access to information and formal decision-making structures. They are poorly represented in farmers' groups, whose members are chiefly (male) heads of households, so that extension activities seldom include women, except for nutrition and family planning. Poor women-headed households (3 million in the poorest three deciles or around 12 million people) stand higher risks of being affected by shocks.
- 174. **Rural producers' organisations.** There is a large number of informal farmers' groups based on traditional solidarity and self-help systems across the country, which offer good opportunities for developing membership-based organisations extending services to members. Structured farmers' groups are not frequent but they exist across value chains, usually as the result of external assistance. Main services provided include input supply, collective marketing, certification (in particular in the cocoa sector), water management (water users' associations), and advocacy and land tenure. The widespread lack of legal recognition of producers' organisations is motivated by past negative experience with state-controlled cooperatives, but it prevents organisations from becoming trusted partners and accessing credit from financial institutions. Other obstacles include the lack of recognition by local authorities, limited structuring beyond the grassroots level and weak technical and management capacities. There

are however successful examples demonstrating that, with appropriate support, empowered producers' organisations can play a key role in supplying small-scale producers with services enabling them to raise productivity, match market requirements and earn premium prices. Producers' organisations also have a key role to play in voicing their members' concerns and in defending their interests in policy making processes up to the national level.

- 175. **Migration.** First spurred by the authorities under the transmigration programme, internal and, increasingly, international migration is a common response to poverty and the lack of economic opportunities. It is estimated that almost one in two people migrated at least once across the archipelago, attracted by urban informal labour markets or by international migration and that around 500,000 Indonesians are driven into international migration every year. About 6.5 million are currently officially working abroad and another 2 to 5 million are believed to be abroad as undocumented migrant workers. In 2012, net remittances to Indonesia (excluding internal flows) reached an estimated USD 7.2 billion, which would benefit a population of between 38 and 57 million people at home. The majority of international migrants (68%) are low-skilled women coming from poor rural areas, who work as domestic workers in other Asian or in Middle Est countries and who are vulnerable to exploitation. While Indonesia has managed to substantially reduce the cost of remitting (6.6%), migrants still have limited access to formal financial channels because of remoteness and financial illiteracy. Because of a lack of information, BDS and financial services, few migrants manage to set up profitable and sustainable businesses upon their return and are forced to migrate again once their savings have run out.
- 176. Agri-business. There is a growing interest of domestic and global agribusiness in sourcing from small-scale producers, which opens up new avenues for supplying smallholders with services, new technologies and possibly also access to finance, with scale. The oil palm sector pioneered a successful hub and spoke model with state-owned enterprises, which has later been successfully expanded by the private sector. Leading global and local agribusiness have created the Partnership for Indonesia's Sustainable Agriculture (PISAgro), which aims at developing public and private partnerships around ten commodities (of which six for the domestic market) to improve sustainable production, farmers' livelihoods and food security. There is much potential to develop the processing and conditioning of agriculture and marinebased food products to supply urban markets. Substantial development of the domestic agribusiness sector will however hinge on improving the business environment - Indonesia currently ranks 114 over 189 against the Ease of Doing Business Index, far behind Malaysia (18), Thailand (26) or Vietnam (78). Key factors restraining investment in agribusiness include: the prevalence of state companies in the production and distribution of input supplies; multiple layers of regulation and taxes, also resulting from decentralisation; poor access to capital; insufficient road infrastructure, especially to remote areas; unreliable energy supply; and corruption.
- 177. **Financial inclusion.** Despite rapid development of Indonesia's financial sector in recent years, it is estimated that less than half of the rural population use banking services. By December 2015, about Rp 255 trillion or 9.1% of the total commercial bank business lending benefitted agriculture (including forestry) and most of it went to larger, commercial plantations. BPRs extended to this sector Rp 4.6 trillion or 11.9% of their loans to businesses. Indonesia has also experienced fast growth of the microfinance sector, pushed by the Gols' KUR program and the banks' compulsory 20% lending target to MSMEs. Micro enterprises and farmers are reached by a vast array of NGOs active in promoting micro finance activities, a growing number of cooperatives and a variety of public district or village-based institutions and revolving funds. Nonetheless, the majority of smallholders cannot or do not make use of formal finance, because of low financial literacy, lack of collaterals, or being afraid of the consequences of not being able to repay the loan according to schedule. Furthermore there is a lack of risk management mechanisms to offset risks attached to agriculture production and price volatility. Although many people do not trust in insurance, it is common that banks ask borrowers to insure their vehicles, their businesses (fire), and their life (as collateral substitute). The Gol

started in 2015 with agriculture insurance (rice) and extended it to cattle in 2016. Established in 2011, Otoritas Jasa Keuangan (OJK), or the Indonesia Financial Services Authority, is responsible for the regulation and supervision of banks and non-bank financial institutions, as well as financial education and services as well as consumer protection. To raise capacities in the sector, OJK is planning to create a Knowledge Centre that would provide learning resources to stakeholders in the financial sector from Indonesia and other countries.

- 178. **Key challenges.** Despite regular increase in the production of cereals and tubers, Indonesia continues to suffer from *food deficits*. A population expected to reach 300 million by 2035, of which more than 75% in the cities, will generate expanding pressure on agriculture and marine production. Meeting the growing domestic demand for food products and reducing the country's dependence on imports will not only require an increase in agricultural productivity but also developing the competitiveness of domestic productions. The implementation of the ASEAN Economic Community will open new commercial opportunities but will also toughen competition with neighbouring countries. Substantial increases in productivity and competitiveness will hinge on the *modernisation of the agriculture sector and on attractiveness to young men and women*. Most of the reduction in the farmers' population has hit the 15-24 age group, which decreased by 1.21million between 2009 and 2013.
- 179. Climate change constitutes another important challenge. Climatic risks are expected to increase significantly, with increasingly erratic weather patterns, extreme weather events, coastal erosion, and the progressive loss of coral reefs from ocean acidification. Deforestation and peat land degradation further contribute to an estimated 75% of the country's greenhouse gas emissions. Adaptation measures are needed in both the agriculture and fisheries sector to develop climate adaptation and offset elevated risks of crop failure, marine resource losses and food insecurity.
- 180. Competition for land is increasing in some areas as residential and industrial areas expand, along with plantations: it is estimated that land conversion from food crops to other functions is 10's of thousands pf hectares per year. Insufficient and conflicting spatial planning with limited participatory processes, costly and slow titling procedures do not offer adequate protection against the conversion of farming land, which is further facilitated by farmers' limited awareness of the legal framework or of the value of land and by the lack of recognition of customary land rights.
- 181. Sustainable fisheries management is becoming a matter of concern as catch levels have been declining in some areas, because of overexploitation and lack of community involvement in the management of coastal areas and marine resources.

Appendix 2: Poverty, targeting and gender

A. Poverty and Target Groups

182. Steady economic growth has contributed to gradual poverty reduction with a fall in the total number of people living below the poverty line from 24% in 1999 to 11% in 2015. However, the incidence of rural poverty remains high at 14.7% with significant numbers, 27.73 million, living below the poverty line of IDR 333034 in 2015. Another 27% of the population or 68 million are near poor who live with less than USD 2 a day or just above the poverty line. Indonesia's HDI of 0.684 remains below the average for the East Asia and Pacific regions and malnutrition remains significant: the prevalence of stunting among children under five years of age rose from 36.8% in 2007 to 37.2% in 2013. Rising inequalities, with an increase in the Gini Coefficient from 0.36 in 2005 to 0.41 in 2014, are threatening to roll back progress made in poverty reduction and further entrench poverty.

183. Rural poverty remains greater than urban poverty, both in absolute and relative terms. While the GDP share of agriculture has come down to 12% (2014), it is still the main source of income for one third of the population and for 64% of the poor. Declining land sizes, complex and insecure tenure arrangements together with a lack of appropriate technologies, infrastructure, rural finance and input and output markets results in sub-optimal use of the already small landholdings and low labour productivity. Small farms below 0.5 ha dominate with a share of 57% in Java and 37% off-Java and only 13% of farms off-Java are larger than 2 ha. Many households depending on agriculture do not own any land at all and many farmers access land to grow subsistence food crops through share-cropping (20.4% off-Java) followed by fixed rent arrangements (16.4%). It is however recognized that the security of land usage varies substantially from village to village, including under share cropping and fixed rental. As such READ SI will need to be able to provide additional support on improving security of land usage arrangements in villages where this is a barrier to further investment and improvement of production practice. This is only expected to be the case in a minority of village and, where it is an issue, largely concerning rice crop land but not affecting cocoa and other estate and upland crops.

184. There is considerable variation in the poverty profile of Sulawesi Island and its six Provinces. Three of the six Provinces (Sulawesi Tenggara, Gorontalo and Sulawesi Tengah) have rural poverty rates above the national average, whilst the other three (Sulawesi Selatan, Sulawesi Utara and Sulawesi Barat) have rural poverty rates lower than the national average. Whilst as a region Sulawesi Island is not as poor as Moluccas and Papua, it has a high population density of people living below the poverty line. Incomes from agriculture still constitute around half of total rural incomes in the Sulawesi Provinces, although this figure does not account for high numbers of unemployed and underemployed earning non-farm incomes. The proportion of unpaid family workers in agriculture has declined and shifted towards profit-generating non-farm activities, with most of the reduction in the farmers' population experienced in the 15-24 age group.

185. Table 1 details the incidence and numbers of poor across the six Provinces of Sulawesi Island as compared to the national average. The table focuses on Sulawesi provinces as it is from these that the new READ SI districts will selected.

Appendix 2: Poverty, targeting and gender

Table 1: Incidence of Poverty Sulawesi Island

Province	Total poor population	Poor rural population	Rural population	Gini efficien	Co-	Rural poverty line
	Sept 2015 (000s)	Sept 2015 (000s)	below poverty line 2014 (%)	2005	2014	(Rp./person/month) Sept 2015
S.Utara	217.15	159.14	11.41	0.32	0.42	302378
Gorontalo	206.51	179.51	23.20	0.36	0.41	274581
S.Tengah	406.34	327.08	15.89 (2013)	0.30	0.37	376496
S.Selatan	864.51	707.34	13.25	0.35	0.42	274140
S.Barat	153.21	130.69	13.31 (2013)	na	0.35	269080
S.Tenggara	345.02	288.25	16.92 (2013)	0.36	0.41	282230
Indonesia	28513.57	17893.81	14.37	0.36	0.41	333034

Source: BPS 2014, 2015

186. The Human Development Index (HDI) (a composite measure that includes life expectancy, income and education) for most Sulawesi Provinces are just below the national average of 0.684, with only Sulawesi Utara having a higher HDI at 0.696. However when the HDI is adjusted for inequality to take account of distribution across all three dimensions of the index, the HDI for 2014 falls to 0.599, a loss of 18.2% due to inequality in the distribution of development. Rising inequality in income distribution and in access to land is widely recognised as a key challenge and threatening to roll back progress made in poverty reduction. Nutrition, not represented in the HDI, continues to be a challenge as economic growth and poverty reduction has not been linear with nutrition outcomes. The prevalence of chronic malnutrition (also called stunting, or height-for-age) actually worsened between 2010 (35.6%) and 2013 (37.2%) in Indonesia. In Sulawesi data on key nutrition indicators for 2014 reveal a complex picture with some Provinces scoring significantly lower than the national average; table 2 combines data on the HDI and key nutrition indicators.

Table 2: Human Development Indices and Nutrition

Province	HDI 2014	•	Key Nutrition Indicators 2015 as % of total population		
		Stunting	Under Nutrition	Wasting	2013 (%)
Sulawesi Utara	0.696	34.8	16.5	9.9	1.08
Gorontalo	0.651	38.9	26.1	11.7	2.90
S. Tengah	0.664	41.1	24	9.4	5.13
S. Selatan	0.684	40.9	25.6	11	12.01
S. Barat	0.622	48	29.1	10.8	11.94
S. Tenggara	0.680	42.6	23.9	11.4	10.45
Indonesia	0.684	37.2	19.6	12.1	8.60

Source: Human Development Report (2014) and World Food Program (2015)

187. There is significant variation in the incidence of poverty across Sulawesi Districts, explained, amongst other factors, by: differences in availability, access and quality of arable land, isolation and access to infrastructure (particularly irrigation and roads), diverse social structures and their economic mobility, conflict and sectarian violence. The Agency for Agricultural Extension and Human Resource Development (AAEHRD) will gather information on key poverty indicators from the District, which will

support the choice of programme districts. In the meantime, Annex 1 presents some further information on poverty at the District level.

188. Indigenous People. Sulawesi Island is both ethnically diverse and home to a number of Indigenous People (IPs). Many of the ethnic groups, such as the Bugis, Minahasa and Torajans are relatively economically mobile, as well as having elaborated internal social structures, wealth disparities and inequalities. There are ten major ethnic groups in Sulawesi Island (the Bali, Banngai, Bugis, Buol, Gorontalo, Jawa, Kaili, Minahasa, Saluan and Toraja), many of which have further distinctive sub-divisions. These ethnic groups, such as the Bugis and Toraja, whilst minorities on the national scale, often form the majority ethnic groups at the district level in Sulawesi¹⁸. However there are also numerous Indigenous People's. masvarakatadat, characterised as a group of people from the same ancestral lineage who have a set of distinctive ideological, economic and political systems, as well as territory. There is no aggregated data on the comparative poverty levels of IPs, however it is evident that these IPs are disproportionately represented amongst the poor because they live remotely (either because they have been marginalised or because of their high dependence on shifting agriculture); because socio-cultural factors have precluded their inclusion in mainstream development and because of slow and incomplete recognition of adat rights over land and natural resources. The main livelihood strategy of Indigenous People is shifting cultivation with sago, maize and root crops supplying subsistence, agricultural labour, migration and sometimes cocoa as a cash crop. Further information on IPs in the short-listed districts will be collated during the district selection and socialisation workshops. (see below).

189. **Institutional and policy context of rural poverty in Sulawesi**. Within the overarching policy framework of Indonesia, which supports rural poverty reduction via conditional cash transfers, development funds for infrastructure via the Village Fund, agricultural input and interest rate subsidies, the district governments of Sulawesi have their own decentralised approaches and priorities. Despite the elaborate institutional support structure to support rural poverty reduction there are some general commonalities: (i) the poor are not well represented in local authorities and rural producers organisations; (ii) subsidies and free inputs are poorly targeted; (iii) benefits from infrastructure investments are incidental, rather than targeted and (iv) rural finance, though improving, is not accessible to land-poor farmers. In addition policy initiatives to support agri-business and private-public partnerships that benefit the poor – such as for Cocoa in READ - have been challenged by, amongst other factors: (i) the prevalence of state companies in the production and distribution of input supplies; (ii) multiple layers of regulation and; (iii) poor access to capital and infrastructure. These factors combined, as well as the progress of READ, suggest that institutions and interventions to address poverty have to be rigorously targeted to have the intended poverty reduction effect.

190. Table 3 presents a typology of the programme target group by their assets, capacities, needs, priorities and proposed pathways in which the programme can provide differentiated support. The households have been divided into the following broad types, although there is evidently a continuum between them: (i) households in which access to arable land and sufficient labour enable potential economic returns from agriculture; (ii) households that generate economic returns from agriculture but on land that is share-cropped or under long-term tenure; (iii) households that generate subsistence and/or livelihood returns from agriculture as part of a broader livelihood strategy and (iv) households whose main returns from agriculture are in the form of wages. The relative poverty levels of these four target group types will depend on a number of factors, mainly; access to irrigation, remoteness and market integration and access to alternative income sources, such as remittances. However, very broadly, households that have land, fixed share-cropping or long-lease arrangements will be less vulnerable than the livelihood/subsistence and wage labour households.

191. Economic returns are those in which anticipated returns from investments in agriculture are equal to or above that from a migrant wage at minimum wage rates and subsistence/livelihood returns

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¹⁸For instance, Gorontalo, SulawesiUtara and Sulawesi Selatan have well below the average national ethnic fractionalisation, although they are all home to ethnic minorities, respectively the Gorontalo, the Minahasa and the Bugis.

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are those in which programme investments can reduce household vulnerability and push the households income above the poverty line. The minimum wage rates are set by Provinces and in the Sulawesi region they range from IDR 1,875,000 per month in Gorontalo to IDR 2,400,000 in Sulawesi Utara.

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Table 3:Target Group Typology (to be developed further for final design)

Characteristics	Needs and Priorities	Main pathways for support
Economic farmers estate crops/food crops need more on this	s target group, likely percentage etc.	
 Between 0.5-1.5 hectare of estate crops and 1-2 hectares of arable land. Poor and near poor (>IDR 300,000 per capita per month or less). Agricultural production is main source of income. Limited access to appropriate extension and improved inputs. High production costs and post-harvest losses. Finance mainly from traders and informal sources at high interest rates, no financial literacy. Food insecurity levels 3-4.* Vulnerable to health, climate, economic shocks. May receive conditional cash transfers. Low levels of education (primary, secondary) Limited political/economic influence. Economic farmers – food crops share-cropping	 Technical inputs of improved seed, fertilizer and appropriate adapted extension services. Improved infrastructure (especially irrigation) and mechanization to improve farm efficiency. Financial literacy and cheaper rural finance. Improved market access, penetration and terms of negotiation. Support to reduce production costs and post-harvest losses. Risk negating strategies such as weather and crop insurance. Improved nutrition outcomes through better understanding and adoption of good nutrient practices in home. Improved capacity to act collectively around common interests. 	 Increase returns to physical and human capital through inputs, technical assistance and demand-driven extension services. Provide targeted infrastructure support to resolve critical production obstacles. Improve financial literacy, SCG discipline and build capacity to access rural finance. Integrate the poor into product and knowledge/information markets to enable greater market participation. Strengthen capacity to organise around collective problems and joint interests. Improve understanding of nutrition and provide the means to pursue household nutrition goals with available resources.
 Cultivate between 1-2 hectares of share-cropped/long-leased land. Poor and very poor (>300,000 per capita per month or less). Agriculture is the main source of income. Food insecurity levels 3-4, but vulnerable to decline to 1-2.* Limited access to appropriate extension and improved inputs. Seasonal and entrenched indebtedness with no access to affordable rural finance, no collateral. Risk-averse and no agri-business skills. Low levels of education (primary, secondary). Migration &non-farm employment. Vulnerability to health, climate, economic shocks. Receive conditional cash transfers. Limited political/economic influence. 	 Technical inputs of improved seed, fertilizer and appropriate adapted extension services. Infrastructure support sensitive to share-croppers status, tenure and ownership issues. Financial literacy and cheaper rural finance. Reduced post-harvest losses through mechanization/village level processing. Improved market access, penetration and terms of negotiation. Risk negating strategies such as weather and crop insurance. Improved nutrition outcomes through better understanding and adoption of good nutrient practices in home. Improved capacity to act collectively around common interests. 	 Increase returns to physical and human capital through inputs, technical assistance and demand-driven extension services. Provide infrastructure support to resolve critical production obstacles that are not linked to land ownership. Improve financial literacy, SCG discipline and build capacity to access rural finance not based on land collateral. Integrate the share-croppers into product and knowledge/information markets to enable greater market participation. Strengthen capacity to organise around collective problems and joint interests. Improve understanding of nutrition and how to pursue household nutrition goals.

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Characteristics	Needs and Priorities	Main pathways for support
Livelihood/Subsistence Households		
 Less than 0.5 ha in homestead and arable land. Poor and very poor (>300,000 per capita per month or less). Food insecurity levels 3-4, but vulnerable to decline to 1-2.* Agriculture is only one source of income and does not provide economic returns. No access to extension advice/agricultural inputs adapted to small land sizes. Limited non-farm livelihood options available. Can be indebted with no access to affordable finance and no collateral. Low levels of education (primary, secondary). Vulnerability to health, climate, economic shocks. Receive conditional cash transfers. Limited representation in political/economic structures. 	 Cropping choices that focus on food security and nutrition from small plots/kitchen gardens. Access to non-farm rural employment and business development opportunities. Financial literacy and cheaper rural finance to support non-farm investments. Improved nutrition outcomes through adoption of more nutritious crop varieties, better nutrient management in home. Improved capacity to act collectively around common interests. 	 Increase returns to physical and human capital on homestead gardens through inputs, technical assistance and demand-driven extension services. Develop non-farm income generating options and related technical assistance. Provide infrastructure support to resolve critical production obstacles that is not linked to land ownership. Improve financial literacy, SCG discipline and build capacity to access rural finance not based on land collateral. Integrate into relevant product and knowledge/information markets. Strengthen capacity to organise around collective problems and joint interests. Improve understanding of nutrition and the means to pursue household nutrition goals with the resources available.
Agricultural labourers need more on percentages etc.		T
 Functionally landless, may have some homestead. Poor and very poor (>300,000 per capita per month or less). Food insecurity levels 3-4, but vulnerable to decline to 1-2.* Agricultural wage labour main form of income. Limited non-farm livelihood options available. Can be indebted with no access to affordable finance and no collateral. Low levels of education (primary, secondary). Vulnerability to health, climate, economic shocks. Receive conditional cash transfers. Limited political/economic influence. 	 Higher real wages and improved capacity to negotiate terms of employment. Access to non-farm rural employment and business development opportunities. Financial literacy and cheaper rural finance to support non-farm investments. Access to cheaper, more nutritious food. Improved nutrition outcomes through adoption of better nutrient management in home. Improved capacity to act collectively around common interests. 	 Develop non-farm income generating options and related technical assistance. Improve financial literacy, SCG discipline and build capacity to access rural finance not based on land collateral. Integrate into relevant product and knowledge/information markets. Strengthen capacity to organise around collective problems and joint interests. Improve understanding of nutrition and provide the means to pursue household nutrition goals with the resources available.

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Characteristics	Needs and Priorities	Main pathways for support
Women		
Though spread across poverty levels they have the following additional characteristics: Limited property rights/ownership of productive assets High burden of labour Lesser education Lesser organizational representation/ access to market related information.	 Increased access to advisory and technical services tailored to gender influenced constraints. Improved access to productive assets and information networks that enable them to pursue economic goals. Financial literacy and independent capacity to access rural finance. Improved balance between domestic work and agricultural labour. Support in ensuring optimal household nutrition. 	All of the above relevant depending on levels of poverty and access to resources.
Indigenous People		
 Marginalised by political, economic and governance systems. Incomplete and complex recognition of adat rights. Livelihood systems still dominated by shifting cultivation and/or a subsistence orientation. Low levels of education as well as limited access to information networks prevent optimisation and adaptation of development interventions. 	 Recognition of adat rights and customs and inclusion in mainstream economic and governance activities. Interventions and activities that build on the social and cultural specificities of IP livelihood strategies. 	IPs that meet poverty targeting criteria to be included in programme activities. The social mobilisation and PRA process to specifically include IPs in targeted villages. The principle of free, prior and informed consent to be upheld in all IP majority villages. Financial literacy, livelihood, agriculture and nutrition activities to be adapted to the needs and priorities of the IPs (whether in the majority or minority in the village). M&E with IP disaggregated information to enable lessons to be incorporated into programmatic scaling-up relevant for other regions with large IP communities.

^{*} Food insecurity ratings are explained in the appendix.

B. Targeting Strategy and Design Options

- 192. Sulawesi Island presents diverse development challenges that reflect those experienced across Indonesia. These include, amongst others: (i) how to protect poverty reduction gains and support inclusive growth in the context of growing inequality, especially in access to land; (ii) how to improve economic efficiency and labour productivity in agriculture; (iii) how to support agricultural labourers who will lose wages as a result of growing efficiencies and mechanisation; (iv) how to support the transition of large numbers of rural poor from fully agricultural livelihoods to those also dependent on non-agricultural income; (v) how to balance resources between remote low population density locations with very poor households and less remote high population density locations with less poor households; (vi) how to develop the capacity of the poor to protect their own interests in commercial, financial and policy realms and (vii) how to ensure that gains in household income are also reflected in the nutritional status and well-being of household members.
- 193. READ has already made considerable progress in developing responses to these development challenges. Scaling-up the approach on Sulawesi Island as a whole in READ SI will support the programmatic objectives of the government by using a proven model as a vehicle for interventions and activities that address defined challenges and develop replicable development responses.
- 194. <u>Lessons for targeting strategy.</u> The experience of READ, as well as the IFAD country portfolio, provides some lessons for targeting strategy of READ SI. IFAD supported projects have been generally effective in identifying poor households, using government indicators and poor household lists combined with participatory selection of project beneficiaries. The fact that many IFAD supported projects provide comparatively small financial support packages and expect considerable active participation from participants in return supports the self-targeting nature of interventions. This broad approach will be replicated in the targeting strategy for READ SI.
- 195. There are a number of areas in which targeting strategies have proved less effective and the design for READ SI will learn from these; (i) social mobilisation, inclusion and capacity building must be successfully completed before economic activities, particularly those related to infrastructure, begin; (ii) economic and livelihoods analysis, both preparatory and participatory, should support the identification of economic opportunities types; (iii) capacity building should be linked to tangible programme opportunities, whether these are economic or social and finally (iv) M&E should be simple and support the generation of knowledge on key development challenges, such as those listed above.

Targeting Design Options

196. There were a number of options for targeting and capacity building that were considered and rejected during the course of the design, including:

- Group Institutional/Cooperation. Supporting the institutionalisation of groups into cooperatives, PTs, or other forms of legally registered groups to enable collective action and aggregation. This design option was discussed and rejected for the following reasons: (i) the poor record of cooperatives in Indonesia and their unproven performance in delivering benefits to the poor; (ii) the broad lesson, drawn from READ and other projects, that groups are more sustainable when aggregation and institutionalisation is based on locally assessed demand and opportunity. However, whilst not a programme objective, programme beneficiaries will be provided with information on options for formalisation and in the case of READ groups that are well established, assistance may be given to pursuing this route.
- PPPs in the Cocoa Value Chain. The suggestion made by the CPMT, to include the smallholders, the 'Producers' in the cocoa value chain work of the programme, was given much consideration. Whilst the core idea of drawing Producers into the public-private partnership via contracts and/or formalised rights and responsibilities over cocoa production is tempting it was rejected as unrealistic given the current dynamics and structure of the cocoa sector in Sulawesi with multiple layers of traders between producers and the main cocoa businesses.

- Revolving Fund to SCG. READ provided technical production inputs in the form of revolving funds to groups. This option had mixed success, some groups are still revolving these funds, many other groups have disbanded without any savings. The READ SI design has chosen to separate the technical inputs (provided free if the applicant has attended training, participated in groups and shown savings discipline) and the SCG activities of the programme. The experience of READ, as well as other projects, shows that groups are more likely to save and benefit from related social capital formation if the savings are their own.
- Group formation based on SCG vs Activity. The hardest design choice was whether to support group formation around SCG activities or group formation around a chosen agricultural or livelihood activity. The rationale for the former is that SCG activities require social capital, whereas the agricultural/livelihood activities are based around household needs and only need group work for training inputs. Despite this, the groups will be formed around an activity focus for the following reasons: (i) the SCG activities will be made in the context of similar economic activities; (ii) it enables the VF and PPL to coordinate their capacity building inputs more effectively; (iii) it is easier to identify options and develop proposals for infrastructure if the groups have a common activity focus.
- 197. The following, drawn on the experience of READ and the IFAD portfolio, and reflecting the programmatic and scaling-up objectives of the government, are the key elements of the targeting strategy.

Targeting Strategy

- 198. **The target group**. The target group will include: (i) landless and land-poor, including womenheaded households, who will be included in activities directed at homestead gardening, improved nutrition and financial literacy and; (ii) the poor and near poor who have the potential to generate economic returns from agriculture with programme support. The first target group will be involved in 'livelihood' activities, with the recognition that agriculture is a declining yet critical aspect of household livelihood strategies, whilst the second group will be formed around the selected agricultural commodities. The objectives and monitoring indicators for the performance of the 'livelihood' and 'agriculture' interventions of the programme will differ. Women will constitute 50% of the overall target group. As noted below, the programme has provisions for including Indigenous People in the targeted villages.
- 199. **Geographic Targeting**. The programme will be implemented in approximately 18 of the six Provinces of Sulawesi Island. The long list of districts will be compiled from those that have both high poverty levels and agricultural potential. It is expected that 20% of READ SI sites will be drawn from existing villages in Sulawesi Tengah, West Kalimantan and NTT that can be supported to access more sophisticated and differentiated development interventions. The short list of districts will include those that: (i) have high poverty levels; (ii) agricultural potential accessible to the target group; (iii) District governments willing to contribute to programme objectives through resource and policy support and (iv) enable the programme to address diverse and varied development challenges and that can further develop READ as a programmatic platform for rural development. The new districts will be selected before the inception of the programme in a series of socialisation workshops that will enable a greater focus on detail, particularly regarding district government willingness to contribute to programme objectives. District level data on Indigenous People, which cannot be correlated with poverty from the data available at the national level, will also be considered in more detail during these socialisation workshops.
- 200. **Village Selection.** The same factors poverty, agricultural potential, commitment to programme poverty objectives will be used to select villages for the programme. The village will be selected immediately after programme inception by the DPMO and BAPPEDA. Whilst the AAEHRD is the agency with overall responsibility for programme implementation, the district planning agency, BAPPEDA, has overall responsibility for ensuring effective decentralisation of government services and coordinating line agencies. Village selection should therefore be done in close cooperation to

ensure that programme interventions benefit from and contribute to wider development processes being planned.

- 201. Indigenous Peoples. The programme area is home to a number of indigenous peoples and/or ethnic minorities. In case a village that was shortlisted on the basis of its poverty and agricultural potential is inhabited by indigenous peoples and/or ethnic minorities, the programme will ensure that: 1) before the selection of the village in question is finalised, the district-level "socialisation process" will include consultations with local indigenous peoples and/or ethnic minorities. The village facilitators will be trained to facilitate these consultations, taking into account the customary institutions and governance arrangements, as well as the traditional authority structures, of the indigenous peoples and/or ethnic minorities concerned; and 2) the consultations will produce a short stakeholder consultation report (in local language and in Bahasa), which will include an in principle agreement broadly based on the notion of free prior and informed consent; the reports will be posted on the programme's website. Once the decision to include the village in question is finalised, the programme will ensure that: (i)the baseline survey accounts for IP households; (ii) IP households, whether or not they are in the majority, are explicitly included in the social mobilisation process and (iii) programme activities and the PRA process will ensure that needs and priorities of all households, including IP households, are explicitly explored and recorded. In addition, as noted in appendix 4, grievance and redressal systems will be made available for all participating households. Two areas in which potential IP influenced needs will be anticipated and explored is in the support for locally grown crops as well as preferences, needs and priorities that will affect programme nutrition interventions. In addition, financial literacy training, which will include modules on household economy, will be enhanced to address issues emerging as relevant to IPs through the PRA and mobilisation process. The programme will also ensure that the concerns of indigenous peoples and/or ethnic minorities are included during the local planning process aimed at accessing financing under the Village Fund and other GoI programmes for which the village in question is eligible.
- 202. **Direct Targeting.** Programme interventions will be targeted directly to the target group who will identified through village poverty lists triangulated with participatory targeting based on income, asset ownership and non-income dimensions of poverty adjusted to local realities. The 1-7 scale of criteria used in READ was considered too complex as well as not flexible enough to account for village level differences in poverty types. Further, participatory targeting, through PRA, enables the identification of poor households to be linked to poverty and livelihoods analysis that can be used for planning purposes. Appendix 4 provides more detail on the process for direct targeting.
- 203. **Self-targeting.** The self-targeting aspects of the design are supported through extensive livelihood and economic analysis during the design work (to be completed). The distinction between 'livelihoods' and 'agricultural growth' objectives ensure that interventions respond specifically to the priorities, assets and labour capacity of the identified target groups. The early stages of social mobilization and planning will support target group inclusion to ensure that implementation is developed around local needs and constraints, and considered to be relevant and affordable. READ SI will also further improve the self-targeting strength of the design by placing controls over the allocation of resources and interventions around infrastructure; this was the principal intervention that attracted the better-off in READ before the mid-term. In short, not only will the interventions be targeted to the needs of the poor, but the participation and capacity building required to access benefits will be a deterrent to the less poor.
- 204. **Empowerment and Capacity Building.** Measures to build capacity and include those who have less voice and power are an integral part of the READ approach. The extensive social mobilisation process is a tested method, further outlined in Appendix 4, to engage the poor, whilst specific measures to build the capacity of the poor include:
 - Financial literacy training and support for SCG to build the social and human capital.
 - Capacity to plan and act collectively to further common interests.
 - Capacity for organisational planning.

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- Demand-driven extension training to develop skills in agricultural/livelihood activities.
- Nutrition training to support the human capital at the household level.
- Improved access to affordable rural finance through bank linkages, improved understanding
 of options and capacity to negotiate terms of trade.
- Improved capacity to plan infrastructure investments and represent needs and interests to the village government.
- Inputs and activities directed toward supporting sustainable transition away from a culture of input dependency.

205. **Procedural.** A number of procedural measures have been put in place to ensure that the programme will be able to deliver the planned benefits to the target group.

- An SM service provider will be appointed from programme inception to ensure that all the social mobilisation, inclusion and targeting work is undertaken to a high standard.
- The programme will appoint a SM Consultant within the NPMO who will have responsibility for inclusion targets.
- The PPLs recruited for the programme will have training, in additional to extension training, in basic social mobilisation skills, as well as training in how to ensure that due process, with regard to free, prior and informed consent, is followed in villages populated by IPs.
- The availability of human resources, including the target number of women, to fulfil VF and PPL positions has been verified during the design.
- Detailed terms of reference are provided with the design, which outline responsibilities for social mobilisation.

206. **Enabling.** A number of enabling measures create and sustain a policy and operational environment favourable to social and gender inclusion, including:

- READ SI was designed in close cooperation with stakeholders at all government levels who
 are aware of the social and gender inclusion agenda.
- There is already widespread policy support for agricultural interventions that can deliver poverty impacts.
- District governments have replicated the READ approach following project closure, showing both commitment to the approach and capacity to implement.
- Preference will be given to eligible Districts that are willing to support READ SI through supportive policy measures.
- Component 2 will address many of the policy and regulatory factors causing systemic and structural constraints to poverty reduction through agricultural growth.

C. Gender Strategy

207. Despite the national commitment to gender equality and the supportive policy framework the GDI (sex-disaggregated HDI) for Indonesia was 0.706 for males and 0.655 for females. This reflects lesser progress in education, health, life-expectancy and command over economic resources. The gender Inequality Index for Indonesia was 0.494 in 2014 and the country ranks 121 out of 157 countries. The maternal mortality rate (228 per 100,000) is one of the highest in Southeast Asia.

¹⁹The Gender Inequality Index (GII) is a new index for measurement of gender disparity that was introduced in 2010. This index is a composite measure which captures the loss of achievement, within a country, due to gender inequality, and uses three dimensions to do so: reproductive health, empowerment, and labor market participation. The value of GII ranges between 0 to 1, with 0 being 0% inequality, indicating women fare equally in comparison to men and 1 being 100% inequality, indicating women fare poorly in comparison to men.

Women's participation in the labour force is high, but women in general earn less than men whether employed in the formal or informal sectors. Poor women are often physically overworked, increasingly taking over primary production as men migrate and get little reward or recognition for their labour. Despite significant and increasing decision-making power and responsibility, women generally do not own productive resources and have lesser access to information and formal decision-making structures. Women's economic activities tend to be channelled through female dominated informal trading and labour networks whilst social activities are either similarly informal or religious. The main government support structure for women at the community level is the *Pemberdayaan dan Kesejahteraan Keluarga*(PKK) the essential women's organization throughout Indonesia.

- 208. Sulawesi Island is ethnically and culturally diverse, however apart from some very conservative pockets and perhaps some ethnic minorities (to be explored during final design) there are no evident barriers to women's participation. Like elsewhere in Indonesia, ownership and control of property remains an issue and control over decision-making is usually exercised in the household and administrative (including public office) domains; it is rare to find women as key decision-makers in the commercial sphere. Female illiteracy has declined, however pockets of it remain and are linked to poor household nutrition outcomes, as shown in table 2.
- 209. Reflection on the experience of gender inclusion in READ before and after the MTR, as well as the performance of gender in the IFAD country portfolio in general, is instructive. The lesson in brief is that whilst there is a de fault tendency to exclude women from programme activities there is no cultural barrier to their inclusion (with a few inevitable exceptions) and that with a simple gender strategy and clear objectives inclusion rates of 50% are entirely realistic. The exception is CCDP, as fisheries is dominated by capture fisheries, clearly in the male division of labour. READ in the first phase had gender targets however the lack of operational guidelines and clear responsibilities for gender resulted in low levels of female participation. Early emphasis on infrastructure investments further alienated women from directly participating as these were planned and decided by male dominated UPDDs. At mid-term there were 124 male groups and 19 female groups and 295 mixed groups with 7375 male participants and 2723 female participants.
- 210. The participation of women in READ at project completion was 51% with a general recognition that women's groups performed comparatively well against all major indicators (organisational, administrative, financial), including 10,148 women in 494 groups. The number of female Village Facilitators (VFs) and PenyuluhPertanianLapangan(PPLs) or Field Extension Workers increased to nearly 50% with no reported gender obstacles to their performance; in fact when gender was brought up female VFs were generally considered to be more suited. Three main factors seem to explain this dramatic improvement in project gender performance: (i) the definition of clear targets with responsibilities assigned to pursue these; (ii) putting the resources directly in the hands of the beneficiaries rather than routing these through male dominated Village Fund Management Unit(UPDDs) and (iii) developing interventions geared to women's expressed interests, ie: homestead gardening and off-farm interventions. Regarding the latter, challenges remain: of the 15,350 farmers who were members of the agriculture commodity groups only 4,700 were women. Whilst not in itself an issue, it will be important for the READ design process to further ensure that READ SI supports women's economic as well as social empowerment.
- 211. The READ SI approach to gender inclusion includes a number of measures detailed further in Appendix 4. These include:
 - (a) Gender targets of 50% for programme participants and VFs (mission fieldwork suggests that this is a realistic target).
 - (b) Gender sensitive selection of interventions to maximise returns to women's labour and support their social and economic empowerment (the process is explained in depth in Annex 4).
 - (c) The mainstreaming of gender into the social mobilisation process, as outlined in Annex 4.

- (d) Direct targeting of homestead gardening interventions to women.
- (e) A secret vote on infrastructure choices to enable women to express preferences.
- (f) The inclusion and prioritisation of women as Financial Literacy Facilitators on financial literacy training.
- (g) A gender inclusive programme management and implementation team, including the appointment of private service providers with experience in gender and social inclusion.
- (h) Adherence to best practice in gender sensitive monitoring and evaluation of programme impact.

D. Targeting Risk Mitigation

212. There are a number of risks associated with the targeting strategy; Table 4 outlines these as well as proposed mitigating strategies.

Table 4: Risks and Mitigation Strategies

Risk	Mitigation Strategy				
Delayed SM service provider contracting delays SM	Procedures put into place before programme inception.				
Difficulty identifying livelihood and agricultural interventions for poor households.	Extensive economic and poverty analysis to support realistic programme interventions.				
Landless and sharecroppers not able to fully benefit due to lack of tenure.	Interventions on financial linkages and infrastructure support take into account lack of collateral and tenure of this poor target group.				
Dependency culture reduces interest in programme activities with limited 'free' inputs.	Extensive SM, economic capacity building and second tranches encourage transition.				
Women's involvement restricted to 'livelihood activities' with limited economic return.	Support for women to participate in commodity groups, targeting as financial literacy focal points, VFs mentor women in leadership positions.				
Programme supported increases in farm efficiencies and mechanisation increases unemployment	Support for non-farm income opportunities and homestead gardening.				

E. Appendix 2 - Annex 1: District Poverty and Development Data

- 213. The AAEHRD is compiling current district level data on the following: poverty levels and numbers, employment, key income sources, average size of landholding by type (irrigated, arable etc.), migration and remittances, education and literacy, access to services and nutrition (stunting, wasting, malnutrition). These, together with the list of Disadvantaged Districts, will be used to develop a short-list of districts to be included in the Programme. As noted above, the short list of Districts will include those that: (i) have high poverty levels; (ii) agricultural potential accessible to the target group (iii) District governments willing to contribute to programme objectives through resource and policy support and (iv) enable the Programme to address diverse and varied development challenges and that can further develop READ as a programmatic platform for rural development. The districts will be selected before the inception of the Programme.
- 214. The tables below are drawn from the Food Security and Vulnerability Atlas (World Food Program 2015). They provide a composite food security and vulnerability analysis, classifying districts into food and nutrition security priority groups according to the severity and causes of the food and nutrition security situation. This recent Atlas provides a good indication of overall poverty levels as it examines: (i) normative food consumption to production data; (ii) poverty levels; (iii) access to infrastructure such as roads, electricity, water; (iv) levels of stunting and (v) life expectancy.
- 215. Districts are ranked into priority groups, based on how they score against a composite of these indicators. Districts designated as priority group 1 are those most vulnerable to food and nutrition insecurity, while districts in priority group 6 are the most food secure. Districts in priority groups 1 and 2 are severely vulnerable to food and nutrition insecurity; those in priority groups 3 and 4 are moderately vulnerable, and significantly better off than those in groups 1 and 2. Districts in priority groups 3 and 4 have similar levels of food and nutrition insecurity, but differences in the underlying determinants driving vulnerability distinguish group 3 districts from those in group 4. Priority groups 5 and 6 are the least vulnerable to food and nutrition insecurity. In sum, Sulawesi Districts are spread across priority groups 3-4 in Sulawesi Tengah and Gorontalo, whilst the other Provinces have Districts mainly in priority groups 5-6, with some pockets in priority group 3.
- 216. Table 1 below provides a ranking of all Sulawesi districts, whilst table 2 provides a short-list of 35 districts with poverty rates higher than the national average of 14%, with the exception of ToliToli and Sigi in Sulawesi Tengah, which will be included because they are READ districts. As explained, this short-list will be integrated with recent data on agricultural potential, indigenous populations, particular development challenges relevant for generating lessons and district willingness to support Programme objectives. Socialisation workshops will be held prior to Programme inception to introduce Programme objectives and finalise geographic targeting.

Table 1: District composite food security and vulnerability ranking

No	District	NCPR (%)	Pov (%)	Road (%)	Elec (%)	Water (%)	Life (year)	Stunt (%)	Flit (%)	Health (%)	Rank	Priority	Population
	Sulawesi Utara	0.23	8.5	3.05	2.06	30.11	72.62	34.83	1.08	3.16			
283	BolaangMongondow	0.09	8.91	1.50	2.90	32.30	72.06	-	3.20	3.50	338	5	220,093
284	Minahasa	0.25	8.81	0.00	0.88	31.21	72.80	-	0.11	4.07	376	6	316,884
285	KepulauanSangihe	2.27	12.19	11.38	12.04	19.83	73.55	-	2.22	1.20	315	6	128,732
286	Kepulauan Talaud	0.99	10.27	2.61	2.24	29.19	72.57	-	1.90	3.27	367	6	85,171
287	Minahasa Selatan	0.20	10.08	0.00	0.54	22.98	72.76	-	1.05	9.04	378	6	198,901
288	Minahasa Utara	0.44	8.02	4.58	0.47	31.76	73.09	-	1.33	2.29	380	6	193,906
289	BolaangMongondow Utara	0.21	9.61	1.87	5.35	37.45	70.42	-	1.47	2.80	258	5	71,530
290	SiauTagulandangBiaro	3.26	11.36	16.13	6.36	25.35	69.00	-	0.48	1.08	239	5	64,575
291	Minahasa Tenggara	0.20	16.10	1.39	0.10	27.23	70.34	-	0.86	1.39	324	5	101,761
292	BolaangMongondow Selatan	0.30	15.28	1.23	2.21	15.60	71.47	-	1.21	7.41	309	5	58,762
293	BolaangMongondowTimur	0.31	6.92	2.50	0.12	29.70	71.51	-	1.09	2.50	370	5	65,511
	Sulawesi Tengah	0.34	14.32	8.76	11.9	42.27	67.21	41.06	5.13	2.47			
294	BanggaiKepulauan	3.28	16.30	2.78	24.19	21.37	64.85	-	6.02	1.39	114	3	176,869
295	Banggai	0.31	9.81	4.15	5.13	34.95	69.03	-	5.99	3.26	268	6	334,561
296	Morowali	0.46	15.92	12.78	12.96	56.94	65.95	-	5.20	4.51	73	4	214,091
297	Poso	0.33	18.22	4.12	6.99	39.37	65.52	-	4.11	0.00	166	3	226,389
298	Donggala	0.40	17.18	7.78	19.68	38.29	66.29	-	6.69	1.80	113	3	284,113
299	Toli-Toli	0.43	13.86	5.71	9.75	30.47	64.82	-	5.60	0.00	198	3	217,543
300	Buol	0.78	15.06	0.00	18.20	35.71	65.95	-	2.40	0.00	159	3	137,479
301	ParigiMoutong	0.27	17.03	4.28	13.39	50.85	66.02	-	7.18	1.17	106	4	428,359
302	TojoUna-Una	0.30	20.61	24.14	15.95	44.33	64.22	-	5.37	3.45	64	3	141,906
303	Sigi	0.17	12.27	22.60	17.45	41.65	66.00	-	5.66	9.60	75	4	220,061

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No	District	NCPR	Pov	Road	Elec	Water (%)	Life	Stunt	Flit (%)	Health	Rank	Priority	Population
NO	District	(%)	(%)	(%)	(%)	water (76)	(year)	(%)	FIIL (/0)	(%)	Naiik	Filolity	Fopulation
	Sulawesi Selatan	0.17	10.32	5.08	4.82	31.18	70.6	40.91	12.01	0.59			
304	KepulauanSelayar	0.63	14.23	15.91	10.13	15.75	68.08	-	10.88	0.00	202	5	124,553
305	Bulukumba	0.18	9.04	2.21	4.19	26.99	72.62	-	13.03	0.00	333	6	400,990
306	Bantaeng	0.10	10.45	0.00	7.33	12.53	74.59	-	19.22	0.00	347	6	179,505
307	Jeneponto	0.12	16.52	0.00	0.60	18.27	65.40	-	23.20	0.00	200	3	348,138
308	Takalar	0.33	10.42	4.00	1.46	21.15	70.30	-	15.01	0.00	295	6	275,034
309	Gowa	0.18	8.73	2.40	6.37	38.66	72.04	-	18.53	0.60	227	6	670,465
310	Sinjai	0.33	10.32	2.50	11.77	26.90	72.83	-	12.07	0.00	288	6	232,612
311	Maros	0.20	12.94	1.94	2.12	46.45	73.55	-	15.10	0.00	242	6	325,401
312	Pangkajene Dan Kepulauan	0.41	17.75	0.00	4.22	40.17	69.16	-	14.25	0.00	167	5	311,604
313	Barru	0.28	10.32	1.82	9.53	19.91	69.52	-	13.98	1.82	278	6	168,034
314	Bone	0.14	11.92	3.49	8.86	26.31	70.56	-	13.33	0.54	243	5	728,737
315	Soppeng	0.13	9.43	1.43	4.76	16.63	71.93	-	11.07	0.00	375	6	226,202
316	Wajo	0.10	8.17	1.70	5.83	28.37	72.11	-	17.04	0.00	332	6	389,552
317	SidenrengRappang	0.10	6.30	1.89	1.41	36.61	73.38	-	13.39	0.00	354	6	277,451
318	Pinrang	0.11	8.86	7.41	2.21	40.66	72.81	-	10.66	0.00	251	5	357,095
319	Enrekang	0.28	15.11	2.33	4.27	22.87	75.66	-	12.53	0.00	294	5	193,683
320	Luwu	0.23	15.10	14.10	7.71	37.37	74.68	-	10.99	5.73	158	5	338,609
321	TanaToraja	0.34	13.81	17.61	11.93	36.15	74.28	-	11.90	0.63	157	5	224,523
322	Luwu Utara	0.17	15.52	12.29	7.44	38.86	72.03	-	9.91	0.00	178	5	292,765
323	LuwuTimur	0.25	8.38	0.78	7.34	42.21	71.29	-	7.47	0.00	302	6	250,608
324	Toraja Utara	0.41	16.53	5.30	10.36	38.36	73.66	-	15.99	0.00	174	5	220,304

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No	District	NCPR (%)	Pov (%)	Road (%)	Elec (%)	Water (%)	Life (year)	Stunt (%)	Flit (%)	Health (%)	Rank	Priority	Population
	Sulawesi Tenggara	0.49	13.73	6.6	8.88	28.17	68.56	42.6	10.45	4.05			
325	Buton	0.89	15.25	2.89	8.63	17.36	69.38	-	21.15	0.83	183	5	261,119
326	Muna	0.63	15.32	1.68	11.11	17.82	66.66	-	16.37	1.26	190	3	276,817
327	Konawe	0.25	16.58	4.03	5.19	31.52	68.32	-	10.54	3.46	172	5	250,491
328	Kolaka	0.45	16.20	2.22	11.58	35.64	67.74	-	9.98	1.48	150	5	329,343
329	Konawe Selatan	0.39	12.45	4.67	6.79	21.82	68.24	-	8.43	3.30	254	6	275,234
330	Bombana	0.44	14.28	6.43	19.76	28.18	68.52	-	8.71	5.00	138	5	146,072
331	Wakatobi	1.79	17.40	8.00	3.34	34.64	68.60	-	10.60	0.00	240	6	94,953
332	Kolaka Utara	1.41	17.41	3.01	17.64	23.15	66.13	-	7.05	0.75	153	3	126,845
333	Buton Utara	0.49	17.53	6.59	33.64	28.36	69.32	-	12.12	3.30	87	5	56,631
334	Konawe Utara	0.71	10.62	7.48	11.97	31.04	67.93	-	8.66	15.65	134	6	53,657
	Gorontalo	0.19	18	3.94	10.28	45.99	67.54	38.92	2.9	1.09			
335	Boalemo	0.09	21.79	4.65	21.11	43.61	68.64	-	5.16	1.16	105	4	137,476
336	Gorontalo	0.23	21.57	2.90	11.52	40.17	69.57	-	3.52	2.42	146	5	363,146
337	Pohuwato	0.19	21.47	0.95	8.33	52.85	68.17	-	3.65	0.00	142	4	500,622
338	Bone Bolango	0.61	17.19	5.45	9.33	47.41	69.28	-	1.29	0.00	165	4	146,773
339	Gorontalo Utara	0.24	19.16	7.32	13.74	43.52	67.37	-	3.99	1.63	139	4	107,092
	Sulawesi Barat	0.36	12.23	16.98	14.92	37.56	68.34	48.02	11.94	2.93			
340	Majene	2.02	15.26	7.32	3.32	22.50	66.11	-	8.74	0.00	170	3	158,036
341	PolewaliMandar	0.37	18.02	7.78	9.16	22.19	65.62	-	15.13	1.80	122	3	409,648
342	Mamasa	0.29	13.92	39.23	18.58	61.25	71.48	-	11.73	7.18	56	4	146,292

Notes:

NCPR: Normative Consumption to Net Per Capita Production Ratio

Poverty: People Below Poverty Line (%)

Road Connectivity: Villages without access to roads by four wheel drive (%)

Electricity: Households without Access to Electricity (%)

Water: Households without access to clean drinking water (%)

Life expectancy by years.

Stunting: Stunting Children < 5 years (%)

Flit: Female Illiteracy (%)

Health More than 5 Km from facility (%)

Rank: District Rank

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Table 2: Short-list of 35 Districts based on NPCR, Poverty and Food Security Criteria

No	District	NCPR (%)	Pov (%)	Road (%)	Elec (%)	Water (%)	Life (year)	Stunt (%)	Flit (%)	Health (%)	Rank	Priority	Population
	Sulawesi Utara	0.23	8.5	3.05	2.06	30.11	72.62	34.83	1.08	3.16			
291	Minahasa Tenggara	0.20	16.10	1.39	0.10	27.23	70.34	-	0.86	1.39	324	5	101,761
292	BolaangMongondow Selatan	0.30	15.28	1.23	2.21	15.60	71.47	-	1.21	7.41	309	5	58,762
	Sulawesi Tengah	0.34	14.32	8.76	11.9	42.27	67.21	41.06	5.13	2.47			
294	BanggaiKepulauan	3.28	16.30	2.78	24.19	21.37	64.85	-	6.02	1.39	114	3	176,869
295	Banggai	0.31	9.81	4.15	5.13	34.95	69.03	-	5.99	3.26	268	6	334,561
296	Morowali	0.46	15.92	12.78	12.96	56.94	65.95	-	5.20	4.51	73	4	214,091
297	Poso	0.33	18.22	4.12	6.99	39.37	65.52	-	4.11	0.00	166	3	226,389
298	Donggala	0.40	17.18	7.78	19.68	38.29	66.29	-	6.69	1.80	113	3	284,113
299	Toli-Toli	0.43	13.86	5.71	9.75	30.47	64.82	-	5.60	0.00	198	3	217,543
300	Buol	0.78	15.06	0.00	18.20	35.71	65.95	-	2.40	0.00	159	3	137,479
301	ParigiMoutong	0.27	17.03	4.28	13.39	50.85	66.02	-	7.18	1.17	106	4	428,359
302	TojoUna-Una	0.30	20.61	24.14	15.95	44.33	64.22	-	5.37	3.45	64	3	141,906
303	Sigi	0.17	12.27	22.60	17.45	41.65	66.00	-	5.66	9.60	75	4	220,061
	Sulawesi Selatan	0.17	10.32	5.08	4.82	31.18	70.6	40.91	12.01	0.59			
304	KepulauanSelayar	0.63	14.23	15.91	10.13	15.75	68.08	-	10.88	0.00	202	5	124,553
307	Jeneponto	0.12	16.52	0.00	0.60	18.27	65.40	-	23.20	0.00	200	3	348,138
312	Pangkajene Dan Kepulauan	0.41	17.75	0.00	4.22	40.17	69.16	-	14.25	0.00	167	5	311,604
319	Enrekang	0.28	15.11	2.33	4.27	22.87	75.66	-	12.53	0.00	294	5	193,683
320	Luwu	0.23	15.10	14.10	7.71	37.37	74.68	-	10.99	5.73	158	5	338,609
321	TanaToraja	0.34	13.81	17.61	11.93	36.15	74.28	-	11.90	0.63	157	5	224,523
322	Luwu Utara	0.17	15.52	12.29	7.44	38.86	72.03	-	9.91	0.00	178	5	292,765
324	Toraja Utara	0.41	16.53	5.30	10.36	38.36	73.66	-	15.99	0.00	174	5	220,304

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No	District	NCPR (%)	Pov (%)	Road (%)	Elec (%)	Water (%)	Life (year)	Stunt (%)	Flit (%)	Health (%)	Rank	Priority	Population
	Sulawesi Tenggara	0.49	13.73	6.6	8.88	28.17	68.56	42.6	10.45	4.05			
325	Buton	0.89	15.25	2.89	8.63	17.36	69.38	-	21.15	0.83	183	5	261,119
326	Muna	0.63	15.32	1.68	11.11	17.82	66.66	-	16.37	1.26	190	3	276,817
327	Konawe	0.25	16.58	4.03	5.19	31.52	68.32	-	10.54	3.46	172	5	250,491
328	Kolaka	0.45	16.20	2.22	11.58	35.64	67.74	-	9.98	1.48	150	5	329,343
330	Bombana	0.44	14.28	6.43	19.76	28.18	68.52	-	8.71	5.00	138	5	146,072
331	Wakatobi	1.79	17.40	8.00	3.34	34.64	68.60	-	10.60	0.00	240	6	94,953
332	Kolaka Utara	1.41	17.41	3.01	17.64	23.15	66.13	-	7.05	0.75	153	3	126,845
333	Buton Utara	0.49	17.53	6.59	33.64	28.36	69.32	-	12.12	3.30	87	5	56,631
	Gorontalo	0.19	18	3.94	10.28	45.99	67.54	38.92	2.9	1.09			
335	Boalemo	0.09	21.79	4.65	21.11	43.61	68.64	-	5.16	1.16	105	4	137,476
336	Gorontalo	0.23	21.57	2.90	11.52	40.17	69.57	-	3.52	2.42	146	5	363,146
337	Pohuwato	0.19	21.47	0.95	8.33	52.85	68.17	-	3.65	0.00	142	4	500,622
338	Bone Bolango	0.61	17.19	5.45	9.33	47.41	69.28	-	1.29	0.00	165	4	146,773
339	Gorontalo Utara	0.24	19.16	7.32	13.74	43.52	67.37	-	3.99	1.63	139	4	107,092
	Sulawesi Barat	0.36	12.23	16.98	14.92	37.56	68.34	48.02	11.94	2.93			
340	Majene	2.02	15.26	7.32	3.32	22.50	66.11	-	8.74	0.00	170	3	158,036
341	PolewaliMandar	0.37	18.02	7.78	9.16	22.19	65.62	-	15.13	1.80	122	3	409,648
342	Mamasa	0.29	13.92	39.23	18.58	61.25	71.48	-	11.73	7.18	56	4	146,292

Appendix 3: Country performance and lessons learned

217. The recent COSOP preparation mission summarized the country performance and key lessons as below.

Past Results, Impact and Performance

- 218. Portfolio. Since IFAD started its partnership with Indonesia in 1980, fifteen loan projects have been developed, totalling USD 827 million, of which USD 416 million financed by IFAD. IFAD's support has focused on the poor, food insecure and ethnic minority communities in rain-fed, upland, coastal and other marginalised areas. Most projects have targeted Eastern Indonesia because of the higher incidence of poverty in this part of the country, weaker institutional capacity and lower level of engagement of other donors and the private sector. The country programme has also given prominence to women empowerment and the transformation of gender relations in socio-economic development.
- 219. The current country programme includes three investment projects, with a fourth project to be approved end of 2015, totalling USD1,410 million, of which 244 funded by IFAD as shown by Table 1. Four country grants adding value to the investment programme are currently being implemented, for a total of USD 10.7 million.

Table 1 – IFAD Investment Projects in 2015

Projects	Duration	Total financing (USD 000)	IFAD (USD 000)	Direct and indirect beneficiaries
National Programme for Community Empowerment in Rural Areas Project (PNPM)	2009-2016	216 770	69 000	118 000 000
Smallholder Livelihood Development Project in Maluku and North Maluku (SOLID)	2011-2019	65 000	49 000	578 000
Coastal Community Development Project (CCDP)	2012-2017	43 250	26 000	320 000
Integrated Participatory Development and Management of Irrigation Project (IPDMIP)	2016-	1 085 000	100 000	>4 000000
Total		1 410 000	244 000	>122 000 000

220. CPE. In 2013, IFAD's Independent Office of Evaluation undertook a second country programme evaluation (CPE), which focused on operations since 2004. The CPE assessed overall portfolio achievement as moderately satisfactory. Project objectives were considered relevant, but project designs were deemed complex and insufficiently focused. Furthermore it was found that most recent projects covered very large geographical areas with low population density, which led to spreading resources too thinly. The building of institutions, and in particular of self-help groups, empowering smallholders and opening access to savings and credit, was a crosscutting feature of the portfolio. Women empowerment was another strong feature of the portfolio. Women increased their decision-making and financial management capabilities in their households, accessed functional literacy or started micro-enterprises. However the CPE noted that insufficient attention was given to developing production or supporting value chain inclusion. Sustainability was another problematic area, because of still limited local capacities and of weak project knowledge management systems limiting the ability to learn from experience and to sustain success. Project cost per beneficiary household ranged from USD 126 to a high USD 1,414, which the CPE attributed to high transaction costs in remote areas.

- 221. On the country programme management, the CPE concluded that the 2009-2013 COSOP was strong on goals and expectations but that the implementation framework was weak. Results related to non-lending activities were deemed limited, particularly given Indonesia's MIC status, which would have warranted increased policy dialogue, knowledge management and partnership building. Synergies across projects and between lending and non-lending activities were deemed insufficient. The CPE concluded that IFAD had largely acted as a project-based organisation in Indonesia and recommended a paradigm shift, whereby IFAD would take up a leading role in supporting productive, competitive and high value smallholder agriculture, by promoting and scaling up agriculture innovation in partnership with the government and other strategic partners, such as producers organisations and the private sector.
- 222. Strategic change. Building on the CPE, IFAD has embarked on a major reorientation of the country programme. To better align the Fund's programming with the government's mediumterm planning cycle, an interim country strategy (2014-2015) was endorsed in 2013, which gave emphasis to strengthening producers' organisations, enhancing productivity and marketing and developing enabling government policies and capacities in the agriculture and fisheries sector. Ongoing projects were restructured to focus on productive activities and market access, along value chains building on target areas potential. New models for partnering with private stakeholders have been built in the farming sector and in the broad sector of marine resources. Strategic alliances have been developed with development partners (including with the Asian Development Bank (ADB) in the key sub-sectors of irrigation and rice), building on IFAD's expertise in promoting small scale rural enterprises. New country and regional grants explore innovative approaches, support knowledge sharing and policy development. They also bring in new international partners and expertise in programme-related areas, such as high productivity cocoa farming (Swisscontact), roots and tuber development (International Potato Centre), nutrition-sensitive value chains, certification-based supply chains (Agrofuturo Global, Sustainable Commodity Initiative and Institute for Ethical and Environmental Certification), sustainable management of peatland (ASEAN Peatland Forest Project), knowledge to policy models in the irrigation sector, and farmers' organisations participation in the policy dialogue. A country office is opening in Jakarta and the country team staff is building up, both in-country and at IFAD headquarters. These developments, which took place over the last year and half, lay the foundation for the 2015-2019 country strategy.

Lessons Learned - from CPE

- 223. Main lessons derived from the CPE, annual COSOP reviews and consultations held in preparation to the new COSOP point to the following issues:
 - (a) Targeting remote areas: working in remote areas entails specific constraints, including lower local capacities, lower infrastructure endowment, less market and partnership opportunities and costly logistics issues. Projects can generate significant and sustainable improvements in the livelihoods of communities in marginalised areas, provided such constraints are recognised and addressed in project design. This calls for projects with adequate financial and human resources, longer duration and carefully designed packages combining productive infrastructure, sustainable service delivery mechanisms and the capacity building of local organisations;
 - (b) Empowerment and group formation: empowerment through group formation and capacity building should not constitute an end in itself but rather a means to facilitate activities that can increase household incomes. IFAD strategy should focus on strengthening producers' organisations so that they generate direct benefits to their members, including accessing technical and financial services, engaging with markets, reducing transaction costs, partnering with private companies and

Appendix 3: Country performance and lessons learned

- enhancing their bargaining position. Group sustainability, individual motivation, ownership and incentive mechanisms for participation should be clearly established;
- (c) Role of communities: village communities can play an important role in promoting development change by motivating groups, participating in the allocation of project resources to increase transparency and monitoring their utilisation;
- (d) Productive investment: investment in physical infrastructure such as irrigation, postharvest and processing facilities has generated high economic returns through increased productivity and value-added. However sustainability is often problematic. Institutional arrangements for operation and cost recovery need to be agreed upon prior to investment, build on public-private partnerships and be supported by capacity building programmes;
- (e) Access to financial services: self-help groups (SHGs) have been encouraged to mobilise savings and manage revolving funds. Savings mobilisation has enabled individuals and groups to access credit from the formal financial sector. However SHGs have had limited sustainability because of insufficient capacities and low viability. On the other hand, Indonesia has a diverse financial sector, which has tried some unique innovations to enhance outreach to rural areas but access to finance remains a constraint for small producers in the agriculture and fisheries sector. Projects should partner with commercial banks, MFIs and other types of financial institutions to support the access of small producers and their organisations to a range of financial products meeting their needs and matching their capacities, including savings, loans, access to remittance and insurance products;
- (f) Participation of non-state actors: the lack of qualified government staff in some remote target areas has hampered the development of viable and sustainable self-help and producers' groups. To provide support services and strengthen the capacities of local groups, projects should promote innovative models relying on a larger range of service providers, including producers' organisations themselves where they have a comparative advantage, private companies involved in the trading and processing of agriculture/marine commodities and in the provision of inputs, and non-governmental organisations (NGOs);
- (g) Participation of the private sector: experience in the cocoa (READ) and marine resources (CCDP) sub-sectors have demonstrated how private companies can contribute to enhancing the livelihoods of rural small scale producers, by facilitating their access to inputs, technology, advisory services and markets. Projects should facilitate and support partnerships linking private companies and small producers and their organisations, with a view to generating mutual business benefits by reducing transactions costs, sharing risks and improving efficiency and reliability for sourcing products and services.

Lessons learned from READ.

- 224. Key success factors for READ, as identified by the implementing partners of READ, include:
 - (a) its relevant core approach of smallholder empowerment and service delivery for production increase;
 - (b) a simple design with a strong poverty alleviation focus;
 - (c) the generally strong and motivated management at national and district level; and
 - (d) the combination and integration of technical expertise from different service providers, including public extension agents, NGOs and private sector.

- 225. Additional lessons learned from READ that are relevant for the forthcoming READ SI programme are:
 - (a) integrating empowerment with targeted technical support increases effectiveness;
 - (b) diversifying extension service improves the capacities available for rural communities;
 - (c) involving the private sector can strengthen service delivery, access to new technologies and access to markets;
 - (d) involving a neutral facilitator in negotiating a private public partnership can ensure mutual beneficial agreements;
 - (e) involving village elders in decision making processes ensures greater participation and smoother implementation;
 - (f) the phasing of activities can help reduce the risk of elite capture if decisions concerning high value investments, such as infrastructure, are delayed until later in the project to allow the social capital and confidence of poorer target groups to develop to ensure their voice is properly represented in these major decisions;
 - (g) a decentralized management structure ensures flexible and targeted project activities.
- 226. In terms of targeting, lessons to be drawn from the experience of READ, as well as the IFAD country portfolio, provides some lessons for the targeting strategy of READ SI. IFAD supported projects have been generally effective in identifying poor households, using government indicators and poor household lists combined with participatory selection of project beneficiaries. The fact that many IFAD supported projects provide comparatively small financial support packages and expect considerable active participation from participants in return supports the self-targeting nature of interventions. This broad approach will be replicated in the targeting strategy for READ SI as it was in READ.
- 227. There are a number of areas in which targeting strategies have proved less effective and the design for READ SI will learn from these; (i) social mobilisation, inclusion and capacity building must be successfully completed before economic activities, particularly those related to infrastructure, begin; (ii) economic and livelihoods analysis, both preparatory and participatory, should support the identification of economic opportunities types; (iii) capacity building should be linked to tangible project opportunities, whether these are economic or social and finally (iv) M&E should be simple and support the generation of knowledge on key development challenges, such as those listed above.

228. READ SI will maintain the core set of integrated activities in programme villages that were the foundation of the original READ's success. Building on this proven foundation, the component structure will be re-organized to better enable the advancement of complementary aspects of the READ model outside the villages as well as the move to a programmatic approach capable of being implemented in a wider range of local settings. The Components and Sub-components are described in detail in this Appendix and are:

Component 1: Village agriculture and livelihoods development (all districts)

- 1.1 Community mobilization
- 1.2 Agriculture and livelihoods
- 1.3 Savings, loans and financial literacy
- 1.4 Nutrition, including early childhood nutrition (i.e. "the first 1000 days")

Component 2: Services, inputs and market linkages

- 2.1 Agricultural extension services (all districts)
- 2.2 Financial services (all districts)
- 2.3 Seed supply markets and system (all districts)
- 2.4 Cocoa farmer support service and markets (Sulawesi districts)
- 2.5 Livestock production and health services and markets (NTT districts only until MTR)

Component 3: Policy and strategy development support

I. Component 1: Village agriculture and livelihoods development

Summary

229. The Outcomes and main indicators for the Component are:

Outcome 1: Improved household incomes and	7. 50% real increase in labour productivity (as net farm income per day's labour) for >45,000 smallholders (60% of participating households)
livelihoods are enabled through improved productivity and profitability of farm and non-farm activities and better management of household finances and nutrition.	8. Average yield increase for flagship and other crops for households supported on the specific crop by: a. cocoa: >150% b. rice: >30% c. other crops: >30% for other crops/livestock selected by farmers for support
	9. 80% of participating households have affordable access to and use of sufficient seasonal & investment finance – whether from CBFOs, FSP ²⁰ loans or own savings
	10.50% women participating in the programme adopt improved mother and child nutrition behaviours, set-up integrated homestead and provide ongoing mutual support
	11. 80% of all machinery and infrastructure supported have easy and equitable access for all intended beneficiaries and are well maintained at the end of the programme

²⁰ CBFO - community based financial organization, FSP = financial service providers e.g. banks, MFIs

- 230. This Component is the core of the programme focusing on the proven READ approach of community mobilization closely integrated with agriculture and livelihood development within programme villages with Village Facilitators and technical extension staff working hand in hand in each village. It includes all activities within the villages.
- 231. For presentational and budgeting purposes only, the elements of the integrated village process are summarized below around the four complementary dimensions which will run in parallel with the programme supported households and common interest groups :
 - i. Community mobilization
 - ii. Agriculture and livelihoods
 - iii. Savings and credit
 - iv. Nutrition, including early childhood nutrition (i.e. "the first 1000 days")
- 232. Around 80% of READ SI villages are expected to be "new" READ SI villages while around 20% will be "old" villages that were also part of the original READ project or the MoA own initial READ replication in West Kalimantan and NTT. Differentiated intervention strategies will be adopted in new versus old villages.
- 233. The four dimensions above will remain relevant to all READ SI villages, however the original READ villages will be at a more advanced stage of development in terms of the programme focus areas and so will be supported with a selected set of more advanced interventions, which are summarized at the end of this section. This will enable these advanced interventions to be tested and refined in a limited number of villages before being rolled-out later to new programme villages which will enable READ to continue to innovate around emerging critical issues while delivering strong impacts with increasing efficiency in new villages
- 234. Each of the four dimensions of the component are described as sub-components below but will in fact be implemented as a single integrated process in the village, with Village Facilitators and agricultural extension staff (PPLs) working hand-in-hand as a single team to coordinate and deliver the integrated process as has been the foundation for the success of READ to date..

1.1 Community Mobilisation

Overview

- 235. The rural poor who form the primary target group for READ operate in an environment in which there is very little effective support for their needs. Technical and financial services are not tailored to livelihood complexity, earmarked input services often do not reach their target and infrastructure investments are rarely planned around the needs of the poorest community members. Recent policies decentralise resources to the village level, yet in the absence of deliberate attempts to include the poor it is likely that this group will continue to be excluded from key services and their voices remain unheard.
- 236. The experience of READ shows that community mobilisation can change these dynamics. Subcomponent 1.1 draws on the lessons from READ to develop a design for Social Mobilisation that will support poor people to mobilise around their economic interests and use social capital developed through Savings and Credit Groups (SCG) to promote their interests and influence wider planning processes. A number of lessons from READ are relevant, these include:
 - (a) Social mobilisation and technical support should be combined to provide a comprehensive service that outlines economic options and the means with which to pursue these.
 - (b) Specialist social mobilisation services are critical and the quality of this work is fundamental to achieving Programme outcomes.

- (c) It is important to start the social mobilisation process at the very start of engagement in the villages.
- (d) The PPLs should be trained in basic aspects of social mobilisation that should be integral to their extension skills, to be replicated in further contexts, even though they are not expected to lead SM activities by themselves.
- (e) The VF should be drawn from the village or nearby to ensure the sustainability of the process.
- (f) Financial resources for inputs and infrastructure should not be mobilised until after the social mobilisation process is established and the quality has been verified.

Additional Outcomes and Outputs

- 237. In addition to the component level Outcomes listed above, the Community Mobilization activities will have the following additional Outcomes:
- 238. Sub-component 1.1 will have the following outcomes:
 - Groups performing well with active membership pursuing economic, livelihood and financial outcomes (target of 80% scoring 3 or higher in a 1-4 scale of performance).
 - Women's groups performing well with active membership pursuing economic, livelihood and financial outcomes (target of 80% scoring 3 or higher in a 1-4 scale of performance).
- 239. Sub-component 1.1 will have the following outputs:
 - The establishment of an organisational structure for social mobilisation.
 - Identification and mobilisation of the target group around common interests.
 - Target group capacitated to pursue their economic and livelihood interests.
 - Target groups capacitated to fully engage with mainstream development processes within the village, including through the new Village Law

Main Investment Activities

- 240. Main activities include:
 - 1. Establishment of an organisational structure for social mobilisation.
 - 2. Identification and mobilisation of target group around common interests.
 - 3. Target group capacitated to pursue their economic and livelihood interests.

Activity 1. Establishment of an Organisational Structure for Social Mobilisation

- 241. The key lesson of READ after the mid-term is that specialised social mobilisation services, together with technical services and locally selected Village Facilitators are able to provide an effective platform for local development. Moreover, the integration of all programme components and activities depends heavily on effective social mobilisation. The programme will therefore establish a cadre of Village Facilitators and appropriate management structures from the outset, which will not only serve the activities under Component 1.1, but also all the other sub-components in Component 1. The development of social mobilisation services has the following broad elements:
 - a) Recruitment of a Social Mobilisation service provider as a Specialist Implementing Partner (SIP SM)
 - b) Recruitment of Village Facilitators (VFs) initially under the SIP SM
 - c) Programme support for social mobilisation and integration of lessons into AAEHRD

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(a) Recruitment of a Social Mobilisation service provider

- 242. The AAEHRD has experience, through READ, of social mobilisation with a solid performance record and tangible outcomes. READ brought in a Social Mobilization service provider, the NGO Equator, as a Specialist Implementing Partner (SIP) who worked as an integrated part of the READ implementation teams at both District and national level. The READ experience has been that the Specialist Implementing Partner for social mobilization is able to ensure consistently high levels of social mobilization activities in the programme while at the same time building the capacity and understanding activities within the District government teams, such that the local government is able and will to takeover these activities and VF personnel after they are established and working well. This successful model of transitional support from a SIP will be continued under READ SI.
- 243. READ SM will contract an established service providers to manage and coordinate the social mobilisation process. In an evolution of the READ approach and reflecting the transitional nature of the role, the individual Village Facilitators will initially be recruited, contracted and trained by the SIP until MTR after which their contracts will be transferred to the district authorities so promote their transition and future sustainability of their roles.
- 244. The SM service provider will be expected to have proven experience of inclusive social mobilisation and the capacity to rapidly establish the organisational structure for Sub-component 1.1. The importance of establishing the framework for social mobilisation early in READ SI activities is a key lesson from READ.
- 245. Given the strong performance of SM activities in READ and the need for rapid set-up and deployment of the VF teams, there is a compelling cases for continuity in the SM core team READ to READ SI. The feasibility of ensuring such continuity within current procurement policies will be confirmed during design finalization.
- 246. A single service provider for all programme Provinces will be procured and centrally managed on behalf of the AAEHRD by the Senior Social Mobiliser within the NPMO team. The following posts are envisaged, based on the structure that worked well in READ:
 - 1 x National Social Mobilisation (SM) Manager one
 - 4 x Provincial Social Mobilisation (SM) Managers one per two districts
 - 24 x District SM Coordinators one per district, with one extra in districts with very remote sub-districts
 - 144 x Sub-district SM Supervisors one per sub-district and/or 1 per ten villages
 - 450 x Village Facilitators 1 per village
- 247. The READ SI NPMO will include a fulltime SM Consultant, who will supervise the SM service provider and National SM Manager and will be responsible, on behalf of the READ SI Programme Director, for ensuring overall performance. Within the districts, the staff of the service providers will work as a fully integrated part of the District Management Unit (DMU) and will also be expected to build capacity of their government counterparts in aspects of professional social mobilization. Their day-to-day activity planning will be mainstreamed within the overall programme activity plans in the districts and sub-districts. Professional oversight and backstopping will be via the SM service providers' teams from sub-district to district to provincial to central levels. Their terms of reference are attached in the annex to Appendix 5, but the main responsibilities include:
 - (a) Review Lessons from READ. One of the first tasks of the service provider will be to gain a detailed understanding of the progress and process of social mobilisation in READ and to incorporate best practice from this experience into the procedures for READ SI.
 - (b) <u>Capacity building and training on SM</u>. The SM service provider will conduct a training needs assessment and develop and manage the training to develop capacities for

social mobilisation throughout programme management at all levels in the programme (sub-district, district, provincial, national). The needs assessment will follow a review of the READ training course and feedback from READ SM service provider on how these could be improved. Training will be developed for SM District Coordinators, Sub-district supervisors, VFs, PPLs as well as other government staff and stakeholders e.g. Camat, provincial teams, village heads. The SM Service Provider will provide all the training apart from the module for PPLs, which will be integrated into their training on extension skills. Appropriate to their role in the programme, there will be thorough training on the objectives, methods and implementation modalities of READ SI for the programme SM teams as well as other stakeholders. The Sub-district supervisors and VFs will be given extensive training in the following broad subject areas: (i) Participatory Rural Appraisal (PRA) assessment methodologies; (ii) group formation and management methodologies; (iii) gender inclusion; (iv) conflict resolution and (v) monitoring and evaluation.

- (c) Monthly meeting schedules. There will be one monthly meeting at the district level and one at the sub-district to oversee the social mobilisation and planning work. The district level meetings will be chaired by the DPMO and will be the key management review process for the delivery of social mobilisation services. The Provincial SM Manager, staff from the DPMO and BAPPEDA will attend the monthly meetings, as well as other government staff on an "as needs" basis. The purpose of these meetings will be to: monitor the progress of the VFs and Penyuluh Pertanian Lapangan (PPLs); review the quality and efficiency of social mobilisation outcomes, and; address issues that cannot be addressed at the village level and require higher level support.
- (d) Knowledge products and IT innovation for social mobilisation. The programme Implementation Manual (PIM) has been a useful document for READ, which has been actively used, and frequently revised, to guide programme implementation. A lesson from READ was that it was often too long and complex to support VFs and provide the group members themselves with an understanding of the programme. The service provider will provide simple (suitable for semi-literate) and short (one-two page) information material to be used by the VFs and PPLs on, for example, the following subjects: (i) the READ SI objectives, opportunities and expectations of participants; (ii) the PRA process for target group selection; (iii) principles of inclusion and gender; (iv) guidelines to support group selection; (v) principles of good group governance and (vi) proposal writing for infrastructure investments.

In addition, the SM service provider will use IT innovations, in particular video, to support effective and inclusive social mobilisation. Social mobilisation in READ SI seeks to be short, output driven and mindful of the time constraints of the target group. Short videos, for example, of PRA exercises, or graphic illustrations of good governance, will enable the messages to be communicated more effectively.

To support the understanding of VFs, PPL and other programme teams, the NPMO will prepare a READ SI "Pocket Book" - a simplified and condensed version of the PIM focus on the key facts and ideas that everyone needs to know. AS the name suggests, this should be a small format book that can be fit easily into a packet so it can be carried at all times in the field and referred to when answering questions from farmers and others about READ SI. An electronic version of the READ SI Pocket Book should also be produced, and designed to be read and searchable on small tablets and smartphones.

(e) Monitoring and Evaluation (M&E). The SM service provider will support the M&E as well as the learning agenda of the programme as it supports and drives an agenda to scale up the READ SI approach. Details are provided in Appendix 2 on targeting methodology. In support of this, all VFs and SM team will be provided with tablets (or

similar) in order that they can directly record monitoring data electronically into purpose design forms that can reduce the time burden while improving accuracy, reliability and usability of data being collected in support of evidence-based management for results.

(b) Identification and recruitment of village facilitation services

- 248. The experience of READ demonstrates that it is possible to recruit and train VFs to provide social mobilisation to a high standard in a relatively short time. Further, it is broadly agreed that it is more effective as well as sustainable, to have VFs recruited from the local community. The fact that there are many VFs who are still operating in the READ villages and that these have been recruited by local government after READ finished to provide ongoing support, is indicative of the feasibility and success of the approach.
- 249. The SM service provider will support the DPMU to recruit the VFs after READ SI has been socialised in the village. Given the time-frame of training and planning requirements, it will not be possible to recruit the VF from amongst the group identified as programme participants, but the SM Supervisors at the sub-district level should ensure adequate follow-up to ensure that the nominees are suitable. The VFs will typically be in their 20's-30's, have successfully completed high school level education, be energetic and enthusiastic and have a good understanding of the local community. Women are expected to form a majority of VFs; in READ there has been no barrier to recruiting female VFs and their performance has been favourably reviewed. It is expected that about one VF per village will be recruited.
- 250. There will be an intensive programme of initial VF orientation and training followed by on-the-job coaching managed by the SM service provider. READ SI will employ high performing VFs from READ to provide guidance, even outside their own District, and adapt the training to address on-the-job experience of capacity requirements for social mobilisation. Skills and knowledge of VF's should be kept up-to-date by periodic refresher training and activities. A mentoring system should be introduced with stronger VFs paired with new and weaker VFs to strengthen performance, as is currently employed by the CCDP and was also practiced in some of the best READ districts.
- 251. The SM service provider will provide ongoing supervision and backstopping of the VFs, with appropriate management and supervision structures in place. The READ experience demonstrates the need to have VF supervision start from the sub-district level upwards. VFs performance should be regularly monitored and reviewed, with mechanisms introduced to recognize and incentivize strong performance and also to correct or sanction poor performance. Programme participants in the village should review VF performance after six months. Where VF performance is consistently considered poor from triangulated sources, the VF should be replaced. Provision should be made for some turnover amongst VFs, often at around 10% per year, with clear processes in place to recruit and get new VFs up to speed quickly. The experience of READ is that the mobilisation process can recover and improve rapidly if such a change is needed.
- 252. Social media and messaging apps, such as Facebook and WhatsApp, will be used to enable rapid communication, routine M&E and information sharing among peers and managers. The experience of the Coastal Community Development Project (CCDP) and READ will be useful for developing social media modalities to support on-the-job learning and VFs will be provided with smartphones, tablet and phone/data allowances to enable them to access and benefit from such social media. In exchange, they will be required to regularly report and update their activities via such social media tools.
- 253. <u>Incentives for good performance.</u> The VFs should be provided with small but significant incentives to perform well, such as travel to programme planning forum, opportunities for professional development and formal recognition by important persona for their work. Status-based non-financial benefits are often as powerful as financial rewards.

(c) Programme support for social mobilisation and integration of lessons into AAEHRD

- 254. READ has demonstrated that demand-driven services generate returns in higher agricultural productivity and therefore justify the economic investment in improved extension services. The AAEHRD however requires further exposure and capacity building in the modalities of social mobilisation and the institutional means through which lessons can be assimilated and operationalized. The design provides for this objective through two broad elements:
 - i. Supervision of programme social mobilisation activities and integration of best practice into AAEHRD.
 - ii. Mainstreaming of training of social mobilisation skills for PPLs.
- 255. i) Supervision of social mobilisation and integration of best practice into AAEHRD. Whilst the AAEHRD is the agency with overall responsibility for extension delivery, the Directorate General for Regional Development (Bangda) of the Ministry of Home Affairs has overall responsibility for ensuring effective decentralization of government services. In the extension delivery context, at District level this means working closely with BAPPEDA to ensure quality extension services result in high rates of adoption by target farmers. This is a key management point and it is proposed to focus on achievement of improved extension outcomes, such as those that match technology transfer to smallholder needs, at sub-district levels.
- 256. The AAEHRD will work in close coordination with the SM service provider to manage programme objectives and institutionalise lessons in social mobilisation that are relevant for sustainable demand-driven agricultural extension. The Social Mobilisation consultant, appointed as part of the NPMO core team, will have overall responsibility for managing the SM service provider and ensuring that lessons generated from the programme on social mobilisation are incorporated into demand-driven extension services promoted by AAEHRD more widely in MOA. The SM consultant will work closely with the SM service provider to ensure effective implementation of sub-component 1.1.
- 257. The monthly meetings at Sub-district and District level will be the main management review mechanism, enabling a consolidation of strategies and the adaptation of services to the READ SI target groups. This will also be the point at which programme activities are coordinated with those being developed by BAPPEDA to ensure improvements in extension are linked to wider initiatives to improve government services in the decentralised context.
- 258. The main tasks of the SM consultant within the NPMO are to:
 - (a) supervise the performance of the SM service provider
 - (b) ensure that PPLs participating in programme villages have received training and are capacitated to undertake social mobilisation to a reasonable standard;
 - incorporate lessons on social mobilisation modalities that can be mainstreamed into routine extension practice and support the adoption of these into PPL training and other extension training and capacity buildings activities of AAEHRD;
 - (d) understand PRA outcomes in terms of the priorities and constraints identified by different poverty and commodity resource groups and how these can inform technical response packages; and
 - (e) identify methodological and organisational pathways for the replication of the READ SI approach within the AAEHRD.
- 259. <u>Training of PPLs in social mobilisation</u>. Whilst the main mandate of PPL will be delivering technical extension they will employ the READ methodology of demand driven needs assessment and inclusive social mobilisation. They will work closely with the VF to mobilise groups, back-stop the VF and relay extension demands and priorities up the management structure so that they can be assimilated into the review and updating of the technical packages

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used by the PPL. Accordingly, in additional to their technical and extension training, activities to capacitate PPLs on social mobilization skills include:

- (a) Training of existing and new extension staff in social mobilisation methodologies; details outlined in Appendix 2. The training will be to ensure that they are equipped with skills to a sufficient standard to deliver the planned support package as well as replicate this approach in future extension delivery.
- (b) Provide reporting on group mobilisation that links extension demands to the constraints and capacities of the final user and therefore allows technical packages to be updated and made more appropriate to farmer absorptive capacity.
- 260. Training in social mobilisation will use the same modules prepared for the VFs by the SM service provider, however training provision will be delivered as part of the general package of skills training and refresher training for PPLs (see Sub-component 2.1, para 408).

Activity 2 - Social Mobilisation and Group Mobilisation Processes

- 261. The success of READ post-MTR has been widely attributed to good quality social mobilisation services combined with relevant technical support packages. READ SI will use the organisational structure and resources outlined above to enable an improved group mobilisation process that draws on best practice and lessons from READ. SM was introduced into READ for the first time only after the MTR, so key improvements will include:
 - The programme will coordinate with BAPPEDA in the selection of villages, as well as in monthly district meetings, to ensure that group mobilisation and planning benefits from and are integrated in interventions planned as part of broader decentralisation processes.
 - The investment activities in equipment and infrastructure from READ SI will be provided only after demonstrable inclusive group governance of SCG and technical training, expected to be around Year 2 or 3 of engagement in the village
 - Inclusion and targeting will be done through participatory criteria cross-checked against secondary data and village lists of poor people. READ SI will not use the typology of 7 poverty types used in READ.
 - Support with knowledge products and IT innovations to enable effective use of people's time and output oriented facilitation.
- 262. Socialisation of the Programme to the village. The DPMO will invite the Kepala Desa and Camat (head of village and sub-district, respectively) of the chosen villages to the District to explain the objectives and functions of READ SI. They will be provided with brief and clear information material to distribute in the village which emphasises the centrality of the inclusion agenda. Village socialisation will be facilitated by the DPMO and will include the Camat, the Kepala Desa, the PPL and representatives from each Rumah Tangga; a recommended number of 100-150 participants, depending on village size. During this meeting, an estimated 3 hours, the purpose of the READ SI will be explained and the next steps will be outlined. The attendees will already be asked to consider candidates for Village Facilitators. The objective of the socialisation process is to ensure that all potential participants are alerted to the purpose of the programme and to the inclusion agenda, as well as opportunities and responsibilities if they choose to participate.
- 263. PRA for selection of programme participants. The PRA will be facilitated by the VF and PPL with advisory back-stopping where possible from the sub-district SM supervisor and district SM Coordinator. The leaders of all the Rumah Tangga will be asked to participate and to mobilise poor households from their area. Secondary data will be used to ensure broad participation of poor households and will also be used to cross-check households selected for participation. The selection of households will however be based on participatory criteria. The household selection will not use the 1-7 typologies of household characteristics as used in READ as this was found to be too complex and also not adapted to the specifics of poverty in each village.

The participatory identification of poor households will enable the process to be used to identify production constraints particular to the poor in each village and therefore allow initial analysis of relevant agricultural and livelihoods interventions.

- 264. Following this process, the VF and PPLs will consult with the sub-district SM mobilisers on suitable interventions and agricultural and livelihood groups for each village to estimate broad numbers and group types for each village, to be discussed further with the participants.
- 265. PRA for mobilisation of groups. This PRA will be facilitated by the VF and PPL with advisory back-stopping where possible from the SM service provider team. The selected programme participants will be informed of the potential agricultural interventions and livelihoods interventions for the village. The programme will continue a "one household member per group" principle and the principles of balanced gender inclusion in both women's and mixed groups.
- 266. The VF and PPL will outline: (i) the objectives of group formation; (ii) the purpose and objectives of the SCGs; (iii) the technical packages and support available for each commodity and the expected returns; (iv) suitable criteria, in terms of minimum assets of land, labour and ownership needed to benefit from these and (v) the expectations of participants in each group in terms of their time and commitment. These points will be supported by simple information leaflets that provide a short and graphic description that will support decision-making.
- 267. Following this introduction, the participants will decide on which group is most suitable to their needs and capacities. Participants should be given sufficient time to go away and reflect on the options and discuss them with their family and friend before making their final decision. Hence, a second meeting is likely to be necessary to confirm group membership. The group heads and other positions will be selected on the same day.

Activity 3. Group Planning, Technical Training and Investment Activities

- 268. Group activities are directed at four principal outputs: (i) building group governance capacity around self-help SCG; (ii) technical training and resource inputs for agricultural and livelihood investments and; (iii) planning for infrastructure and service investments in support of agricultural and livelihood activities; (iv) confidence and ability of group members to collectively and individually engage in the wider village development processes, including those under the new Village Law.
- 269. A review of the approach to investment and planning in READ has the following lessons:
 - The infrastructure activities were started before social mobilisation work was complete, resulting in frequent diversion of infrastructure investments that were not well thought out or did not serve the project target groups (elite capture).
 - The project village committee, the Village Fund Management Unit (UPDD), was established before the social mobilisation work was complete and therefore did not represent target group interests. Instead of forming a UPDD or similar representative structure, the READ SI participants will link to the Kepala Desa and Camat through the VF, PPL and a committee of the heads of all groups.
 - Technical inputs for agriculture were given as a revolving fund with mixed results; whilst some groups have managed to revolve the funds, others have considered it a free input. Following this lesson, as well as general best practice, READ SI will support SCG activities around savings generated from within the group, whilst providing the small package of technical start-up inputs separately for free once participants have completed the relevant agricultural or non-farm training.
 - READ SI will not seek to establish cooperatives or prescribed institutionalisation of the supported groups as a development objective. The READ experience suggests that, despite intensive group work, most households take investment decisions separately and are able to act collectively if this suits their interests. Nevertheless, READ SI will pursue

opportunities to support collective action, aggregation and institutionalisation, especially in old READ villages, where appropriate to programme development objectives. This is expected to be particular the case for investments in productive equipment and machinery eligible for partial financial support from the programme.

- 270. Group capacity development and Savings and Credit Group (SCG) activities. small-scale self-help SCG activities are intended to form an important element of the ongoing social capital in the group and the development of group meeting discipline will be anchored around this activity. For the avoidance of doubt, these self-help SCG activities are primarily a social capital activity and for promoting good household financial discipline. They are not intended to provide a main source of finance for productive household investments in farming or non-farm activities.
- 271. In the initial six months of group work, sustained support will be provided by the VF and PPL to develop the administrative capacity of the group in meeting protocol, simple book-keeping and savings disciplines. The financial literacy and SCG support is outlined separately below. Similarly, programme interventions in support for improved nutrition will start during this early phase in group development and both are intended to bolster the capacity of the group to mobilise around supporting fundamental human and social capital.
- 272. Infrastructure Planning. The programme provides for infrastructure inputs to serve the agricultural and livelihood investment activities. These will be made available in the second and third year of programme activities in the village and subject to satisfactory performance of the village in the activities to that point. The VF and PPLs will support group members to identify appropriate investments and develop proposals that explain the costs and benefits of these choices. The proposals will be discussed in a forum of all group participants and preferred investments will be decided by a vote. The VF, PPL and sub-district SM supervisors will provide technical guidance and the proposed investments will be presented and approved at the monthly planning meeting of the DPMO. The SM Coordinator will be responsible for coordinating the infrastructure plans with BAPPEDA and linking the village groups to broader investment activities at the village level.
- 273. This sequence has the following objectives: it allows for capacity building within the group for planning; it enables the groups to consolidate their choices without interference and it allows planned investments to be integrated into wider development planning.
- 274. Village level knowledge sharing (KS) forums. The VF will organize a village and/or sub-district wide meeting to encourage discussion and knowledge sharing amongst programme participants. KS forums will be an opportunity to detail lessons learned, on-going issues, forward planning, agricultural and livelihood outcomes, financial literacy and bank linkages. Based on outcomes of KS forums, well performing groups can be visited by groups from other villages to learn directly from their experience.
- 275. <u>Linking to private services provider and markets</u>. Where opportunities arise, VFs will also support groups to identify, engage and negotiate with private enterprises and organisations to source inputs and services or market their produce.

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Social Mobilization Implementation Schedule Outline

	Lead Implementation Responsibility		Impler	nentatio	n Start/F	inish		Comments
Sub-component 1.1:		2017	2018	2019	2020	2021	2022	
1. Appointment of SM Consultant in NPMO	AAEHRD – NPMO							
2. Recruitment of SM service provider	AAEHRD – NPMO							
New staff (Yr 1: 99 staff members)	SM service provider - NPMO							
3. Recruitment of VFs	DPMO - BAPPEDA							
450 VFs After Village Socialisation								
4. Training for New and Existing Staff								
Preparation of training modules	SM service provider							With Training Spec TA
Social mobilization skills for PPL	SM service provider - ATCs							With Training Spec TA
Training for new staff	SM service provider							With Training Spec TA
Training for VFs	SM service provider							With Training Spec TA
3. Village Socialisation	SM service provider - DPMO							
4. PRA for participant identification	SM service provider (VF, supervisors)							
5. Village Nutrition Mapping	VFs, PPLs, Supervisors							
6. Group Establishment	VF, PPLs, Supervisors							
Identification of needs and priorities	VF, PPLs, Supervisors							With Extension Spec TA
Selection of members, heads, treasurers	VF, PPLs, Supervisors							With Extension Spec TA
7.Training and Group Capacity Building								
 SCG, principles and operation 	VF (supervisors mentor)							
Group governance principles	VF (supervisors mentor)							
Financial literacy	Consultant – VF (supervisors mentor)							
 Nutrition 	Consultant – VF (supervisors mentor)							
 Infrastructure planning and proposal 	VF (supervisors mentor)							
8. Infrastructure Planning								
 Inclusive planning & priority setting 	VF, PPLs (supervisors mentor)							
 Submit proposals to DMU 	SM Coordinators QA							
9. Other Training and Visits								
 Group to group sharing forums 								
Cross village visits								
10. Monthly SM Review Meetings	VF/PPL/Supervisors/Coordinators							
11. Prizes: Nutrition Village, Best Group etc.								

1.2 Agriculture and Livelihoods

- 276. The sub-component will cover the following main categories of crops and livelihoods and supporting investments:
 - (a) Food crops
 - (b) Estate crops
 - (c) Homestead gardening
 - (d) Livestock (in NTT only before MTR)
 - (e) Agricultural machinery and infrastructure
 - (f) Non-farm livelihoods
- 277. Different sets of activities will be implemented in new vs old READ SI villages as outlined below.

PART A - Proposed Investment Activities: New READ SI Villages

Table 2: Summary of Proposed Activities in New READ Villages.

Crop	Activity	Detailed Activity		
Rice	Farmer training	Crop production & post harvest FFS (incl. Marketing + business)		
		Machinery O&M training (Course – district)		
	Inputs, equipment,	Starter Inputs package (production & post harvest)		
	facilities	Production equipment (Thresher, Hand tractor + equipment)		
		Improved seed - initial distribution ((for all village farmers) Post Harvest Facilities (seed storage drums, moisture meters, weighing scales)		
		Rice infrastructure e.g. irrigation repairs, farmer roads		
Cacao	Extension support Farmer training	Capacity building for Cocoa Doctors (or similar service providers)		
	Inputs, equipment,	Training of farmers – FFS		
	facilities	Crop production & post harvest FFS (incl. Marketing + business Machinery O&M training (Course – district) Starter Inputs package (production & post harvest) Production equipment (Thresher, Hand tractor + equipment) Improved seed - initial distribution ((for all village farmers) Post Harvest Facilities (seed storage drums, moisture meters, weighing scales) Rice infrastructure e.g. irrigation repairs, farmer roads Capacity building for Cocoa Doctors (or similar service providers) Training of farmers – FFS Individual training using MARS training approach Starter inputs package (incl. seedlings or side graft, hand tools) Post Harvest equip. (Fermentation boxes) Crop production & post harvest FFS (incl. Marketing + busines) Inputs financial package (incl. seeds/seedlings, tools, sprayer) Also to cover small fish ponds and small livestock within integrated homestead model. Small scale infrastructure e.g. HH irrigation Animal Production FFS 1 yr female breeding stock Starter pack incl. fodder seed, fertilizer, materials for livestock housing. Improved specialist livestock support services FFS – production, post-harvest and marketing aspects		
		Crop production & post harvest FFS (incl. Marketing + business) Machinery O&M training (Course – district) Starter Inputs package (production & post harvest) Production equipment (Thresher, Hand tractor + equipment) Improved seed - initial distribution ((for all village farmers) Post Harvest Facilities (seed storage drums, moisture meters, weighing scales) Rice infrastructure e.g. irrigation repairs, farmer roads Capacity building for Cocoa Doctors (or similar service providers) Training of farmers – FFS Individual training using MARS training approach Starter inputs package (incl. seedlings or side graft, hand tools) Post Harvest equip. (Fermentation boxes) Crop production & post harvest FFS (incl. Marketing + business) Inputs financial package (incl. seeds/seedlings, tools, sprayer) Also to cover small fish ponds and small livestock within integrated homestead model. Small scale infrastructure e.g. HH irrigation Animal Production FFS 1 yr female breeding stock Starter pack incl. fodder seed, fertilizer, materials for livestock housing. Improved specialist livestock support services		
		Post Harvest equip. (Fermentation boxes)		
Homestead gardening (Vegetables++)	Farmer training Inputs, equipment, facilities	Inputs financial package (incl. seeds/seedlings, tools, sprayer) Also to cover small fish ponds and small livestock within		
		Small scale infrastructure e.g. HH irrigation		
Livestock	Farmer training,	Animal Production FFS		
	Inputs, equipment,	1 yr female breeding stock		
	facilities	housing.		
Other crops	Similar to above	, , ,		
e.g. Copra	Farmer training Inputs, equipment,	FFS – production, post-harvest and marketing aspects		
	facilities	Simple facilities + equipment e.g. Copra Drying		

278. Extension support will be delivered at 2 levels: (i) Intensive extension to target farmers; (ii) Public Private Partnerships to support GOI farmer extension, especially for cocoa (see Subcomp 2.4).

Activity 1: Intensive Extension to Target Farmers (all crops & homestead gardening)

- 279. An intensive approach to target farmers will include using BP3K (sub-district extension units) and volunteer lead farmers (village) with support from village facilitators. The approach will be to encourage Village Heads to monitor the work of the village "extension team" comprising 3 key members: (i) sub-district extension officer (PPL of the BP3K); (ii) village facilitator; and (iii) volunteer lead farmer. The PPL will lead the extension team. It is proposed the extension team will meet on a monthly basis with the village head to discuss progress, issues and plans for coming month.
- 280. In the extension delivery context, at District level this means working closely with Bappeda to ensure quality extension services result in high rates of adoption by target farmers. Bappeda the regional planning agency will work with line agencies such as agriculture, extension, and village heads. It is proposed to focus on achievement of improved extension outcomes at sub-district levels. In this sub-component, the major aspect of delivery will be the provision of extension services that focus on farmer adoption of new technologies (not on technology transfer).
- (i) Farmer group mobilization
- 281. Preparation of farmer groups as the delivery mechanism for farmer field schools (FFS), along with other facilitation in the programme will be undertaken by the Village Facilitators with support from the SM teams of the SM service provider as described under Sub-component 1.1.
- (ii) Farmer field schools (FFS)
- 282. Production training (agronomic issues) and post-harvest training will be delivered via Farmer Field Schools (FFS). These will be the main vehicle to deliver technology support to group members and FFS will include provision of extension materials funded by READ. Any initial engagement with farmers will begin with an assessment of farmers' perceptions of problems, constraints, etc. These concerns would then be built into the FFS "curriculum".
- 283. The FFS will be delivered to clusters of about 25 farmers at convenient locations in the village. There will be FFS specifically targeted at the key crops identified as priorities. Each FFS will be delivered in a number of half day "classes" at important crop stages, covering the full production cycle from seed bed preparation to post harvest, covering technical, financial, water management aspects and post harvest aspects.
- 284. FFS will be delivered by the extension officer (PPL) in the first instance, and ultimately by lead farmers under PPL guidance. Each FFS will be repeated 2 times with each farmer cluster typically one FFS each in the wet and one in the dry seasons but with decreasing intensity, and/or moving to fresh technical messages according to farmers' needs and requests. FFS will also be a focal point for target farmers to engage with other aspects of the programme e.g. farm machinery demonstrations, improved seed variety trials/demonstrations, discussions with bank personnel etc.
- 285. In the case of cocoa farmer training in districts covered by the PPP with MARS, Mondelez or others the cocoa farmer training will be organized and delivered in accordance with the system agreed in the particular PPP.
- 286. <u>Participation in technical training.</u> The types and purpose of this training is outlined in detail in appendix 2. The technical training is intended to enable the individual programme participants to take advantage of programme investment opportunities related to agricultural or livelihood objectives at the household level. They are not intended to force farmers to plan production

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together, aggregate for marketing or in any way formalise their group status. Technical training inputs will be commodity based and may include one or two groups depending on numbers. If there are training sessions where numbers are not filled, participants from other commodity groups or non-READ participants can join. Adequate attention will be paid to ensuring that gender equality is maintained and that the training is accessible to women.

- (iii) Quality assurance, follow-up and impact surveys.
- 287. A key difference from current extension delivery will be significant efforts to measure PPL performance based on both farmer satisfaction and ultimately, farmer technology adoption rates. This will be achieved by various means including:
 - (a) client satisfaction phone surveys undertaken by an independent agency that will measure farmer feedback on training content, relevance, usability, convenience, quality of delivery, farmer responsiveness, opportunities for improvement, etc.
 - (b) technology adoption tracking at household level as part of routine follow-up by VFs and PPL with all farmers participating in extension training. This will be done via keeping of farm record books on the crops covered by training, with the keeping of records covered under both the extension training and the financial literacy training. Routine farmer follow-up will be a mainstream part of the extension approach to support farmers to adopt the technologies promoted, and the farm records books will form part of this follow-up and self learning process. Data on production practices, as well as costs, inputs, yields and incomes will be recorded in farm record books that VFs support all farmers to keep. Data from these records books will be periodically extracted by VFs to monitor the effectiveness of different activities and individual trainings.
 - (c) spot visits by District, and to a lesser extent Provincial, extension and agriculture staff to monitor and measure PPL performance;
- 288. Once this process is underway, there will be the opportunity to introduce benchmarking of PPLs and to identify best performing farmers.
- (iv) Village level farmer to farmer knowledge sharing (KS) forums
- 289. At the completion of each crop cycle, the village facilitator will organize a village wide meeting to encourage discussion and knowledge sharing amongst farmers from all FFS. KS forums will be an opportunity to detail lessons learned, on-going issues, forward planning, crop financial outcomes (including non-rice crops), PPL performance, etc. The minutes of each forum will be recorded by the facilitator and distributed to each PPL for similar KS opportunities and follow up.
- 290. District and sub-district coordinators and supervisors for social mobilization and extension will attend the farmer forums to listen to feedback and answer questions.
- (v) Cross village visits and knowledge sharing (KS)
- 291. Based on outcomes of KS forums, well performing farmers and groups can be visited by groups from other villages. READ SI will also pilot using social media among farmers to share knowledge directly among farmer groups and individuals, for example by creating and promoting "WhatsApp" groups of local cocoa farmers.
- (vi) <u>Monthly extension review meetings</u>
- 292. These meetings will be the key management review process for delivery of improved extension at District level. They will be chaired by Bappeda and attended by District staff from: (i) Agriculture; (ii) Extension; (iii) Public Works; and in addition (iv) village heads, (v) WUA and (vi) READ SI social mobilization and rural finance teams and others stakeholders will be invited to attend on an as needs basis. The purpose of such meetings will be to monitor PPL

performance, the quality and efficiency of extension outcomes (use of dashboard), input supply issues, and water supply issues. The meetings will routinely use data on farmer satisfaction and technology adoption to have evidence-based review, discussion and decision to build a process of continuous improvement in service delivery.

(vii) PPL staff mentoring by good PPL performers

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293. With good extension staff management, identification of few but relevant monitoring indicators, and sensible use of PPL performance measurement data, district extension staff will readily be able to identify their best performing extension staff. It is proposed to use these good performers to mentor, and thereby improve the performance of the poorer performing staff.

(viii) Annual prizes to best performing extension staff

294. It is also proposed to reward these good performers (both extension officers) (male or female) with small but meaningful recognition. This could be travel to another programme, additional access to training opportunities, formal recognition by the District Mayor (Bupati), etc.

(ix) Annual prizes to best performing farmers

- 295. It is also proposed to reward these good performing farmers (male or female) with small but meaningful recognition. Top performing farmers (including diversified farmers) could be recognized with exposure visits, simple cash prizes, or fuel vouchers, and especially status-based rewards such as recognition by the District Mayor (Bupati).
- 296. Implementation: Extension delivery will be monitored by AAEHRD and managed by District Bappeda. Actual extension programme delivery will be undertaken by sub-district BP3K staff (PPLs) with support from village level lead farmer volunteers and from village facilitators. It is proposed the intensive, targeted extension activities will be delivered by the "village extension team" comprised of the PPL, the village facilitator and the lead, volunteer farmer. This team will be monitored by the village head on a monthly basis to discuss progress, issues and plans for coming month.
- 297. FFS will be organized and run by the PPL in close coordination with the respective group VF. Depending on location, a village may typically have a total of 5 FFS in each year for example in Sulawesi this might be 2 rice production FFSs (incl. post-harvest), one copra post-harvest FFS, 2 integrated homestead gardening FFS. The mix of crops to be covered in each village will be adjusted according to the most relevant food and estate crops in the village as decided by the READ SI households themselves. However, within any district FFS will only be offered to cover a maximum of 5 different key crops plus livestock (in NTT) and homestead gardening in order to ensure quality of the FFS delivered while balancing this with the need to respond to the priorities of farmers. The budget for each FFS will be paid to the village administration account who will release the funds to each group treasurer as required. This process will be jointly signed off by the PPL and the overall group manager.
- 298. Participating farmers will be asked to collectively choose where and when the training sessions will be conducted to maximize participation. FFS will typically involve farmers meeting in either a set location (e.g. farmer field) or rotating around a series of different farmers' fields according to need. The FFS will meet according to a planned schedule in relation to the production cycle that ensures key points in the production or post-harvest process are met. For example, a rice production oriented FFS might meet at the following stages: (i) seedling nursery establishment; (ii) seed bed preparation; (iii) transplanting; (iv) vegetative growth stage; (v) flowering; (vi) seed set stage; and (vii) pre-harvest stage. The PPL will decide on actual details based on local crop requirements. The PPL will be required to review the FFS process with his/her FFS group after each FSS with a view to improving performance in the next training cycle.
- 299. Each FFS will have clearly stated expected outcomes both for the group and for individual members in each group (e.g. yield increases, food security, profitability) whose achievement will

be the responsibility of the PPL. FFS implementation performance, (including performance of individual members) as well as the performance of the PPL will be reviewed by group leadership. Poor group performance will be discussed and reported to DPMO management who may withhold READ group incentives until performance is improved (e.g. machinery and infrastructure grants).

- 300. Each production group will also be funded with training workshops that cover: (i) business and financial analysis; (ii) marketing; and (iii) M&E. In order to promote the ideas and practice of "farming as a business", business and financial literacy will essentially cover: (i) preparation of crop gross margins (allowing farmers to understand comparison of different yield and input parameters); (ii) building an understanding of the importance of managing seasonal finances building a working capital fund to ensure inputs can be purchased without reliance on borrowed funds; and (iii) the costing of equipment maintenance and depreciation funding. Farm record keeping will also be strongly encouraged, with VF follow-up, to enable farmers to increasingly learn from themselves and compare performance between each other to identify the most effective practices. Marketing training will ensure farmers understand the impact of product quality (post- harvest processing, grading, packaging etc.) and the potential financial benefits of group market negotiations. PPLs, with support of VF, will run these workshops under supervision of the DPMO agriculture staff members and the District RF Coordinators and they will be provided with course materials developed by AAEHRD ATC staff under the umbrella of "farming as a business".
- (x) Cocoa farmer extension delivered in partnership with lead firms (in Sulawesi)
- 301. Where cocoa farmers request technical training and support, this will be delivered through one of three modalities depending on which of the PPPs, if any, are operating in that District.
 - (a) in MARS targeted locations, where Cocoa Development Centres (CDC) and Cocoa Doctors (CD) / Cocoa Village Centres (CVC) are operating or being established then farmer training will be delivered directly by the Cocoa Doctors with backstopping by the CDC. In addition the input starter package would be purchased from the CDs/CDCs.
 - (b) in Mondelez targeted locations, where Mondelez's commercial suppliers are operating, it is expected that farmer training and follow-up would be delivered directly by cocoa agronomist of the commercial suppliers as an embedded service.
 - (c) in all other locations not directly targeted by a PPP, farmer cocoa training and FFS will be delivered by PPLs who have received advanced cocoa production and business training at the MARS Cocoa Academy. Input start packages will be sourced from local private nurseries and input suppliers in order not to undermine the local service market. Given the time that will be needed to train large numbers of PPLs at the Cocoa Academy, cocoa FFS for different groups will need to be delivered in stages over the first 3-4 years of the programme.
- 302. Further details of the expected PPP with MARS and Mondelez are described in more detail under Sub-component 2.4 and subject to further negotiation.
- (xi) Livestock farmer extension (NTT only before MTR)
- 303. Livestock training will be delivered in farmer field schools, covering the basics of animal nutrition, housing, health and reproduction. Annual flock management plans will be prepared including disease prevention, fodder production, feeding regimes and planning and monitoring including vaccination and parasite treatment, livestock inventory, mating and live weights, In addition, besides face to face training READ will document the training and provide goat group members with copies of training material for their future reference.

Activity 2: Crop and Livestock Starter Inputs Package

- 304. A specific crop input package will be available to each member of each rice, cocoa and fruit/vegetable group and other key crops covered by FFS. The start-up packages will be provided as grants on the condition that they are used to adopt the promoted techniques and packages on the households farm. Compliance will be ensured by the grants being provided using mutual guarantee mechanisms in small groups of 4-6 farmers from within the farmer field schools (FFS) to ensure adoption of trained techniques and practices as agreed.
- 305. Unlike READ, these input packages will not operate as a revolving fund within the group, but will be provided as a one-off input to each household, with the intent being that the net value of the inputs is re-used from season to season within the household for improved, and thereby more profitable, production.
- 306. Maximum value of start-up grants will vary depending on the crop/livelihood but are expected to be in the range of USD250-350 per household and will comply with prevailing government regulations on grants. In exceptional cases some start-up packages will be provided in-kind, for example goats.
- 307. To compliment the one-off crop starter input package, group members will be supported to link to mainstream banks and local MFIs to access additional credit to further invest in improved farm production (see sub-comp 2.2). This dual approach of an initial starter package plus bank linkages is intended to ensure each group member has access to sufficient finance to ensure they can purchase the required crop inputs for all their production land by the end of the programme to ensure optimal returns. For example, irrespective of their total land area, each rice production group member will have access to Rp3.0 million²¹ (USD230) which will ensure they can purchase improved variety seeds, fertilizers and other key inputs in sufficient quantities to be able to implement the improved practices trained on at least 0.5 ha.. Similarly, vegetable and integrated homestead gardening groups will use their fund (Rp1,000,000 / USD77) to fund seeds, fertilizer and other equipment such as hand tools).
- 308. To ensure READ SI rice production groups have access to high yielding varieties of seed, READ SI will contract the Indonesian Rice Research Centre (IRRC) to provide sufficient breeders seed (F-1) and provincial BPTPs on an annual basis for 5 years (2018-22) to multiply the F-1 seed to sufficient extension (F-4) seed to plant 50ha per village for a minimum of 25 villages or 1250ha in each district. READ SI will fund the first year contract with IRRC and the BPTPs, with a user pays arrangement being established after Year 1.
- 309. Other food and estate crop groups will also receive starter input packages which will be designed in keeping with the necessary inputs to start adopting the improved production systems though scaled within the available budget of the programme. In the case of cocoa, this will be designed in the context of the PPPs with MARS Cocoa, Mondelez and others.
- 310. For example, copra production groups may receive funding to construct a group level copra drying facility with a cost limit of \$667 per group. The objective will be to no longer rely on air drying but to use coconut husks and shells as fuel to operate a smoker/dryer.

Activity 3: Agricultural equipment, machinery and small infrastructure

- (i) Production Equipment for Food Crops
- 311. To increase labour productivity, READ SI will support farmers and farmers groups to invest in agricultural machinery. This will be primarily approached as a small machinery service enterprise investment. As such the approach is described under Sub-component 1.3 Activity 3 (see para 352).
- 312. In addition to on-farm mechanization investments, READ SI will also address other rice postharvest issues. In particular, READ SI will ensure the supply of one vermin proof, air tight heavy duty 200L plastic drum to each group household who produces rice for hermetic storage

²¹ In fact, the seed, fertilizer and cultivation costs are Rp 6.3m per ha.

of rice/seed. Further, each group will receive a moisture meter (to ensure drying quality meets the required criteria – not greater than 14% moisture content before storage or sale) and a set of weighing scales. The scales will empower groups to accurately monitor crop yields, to monitor the performance of the village miller and to monitor the accuracy of rice trader scales.

(ii) Production Equipment for Cocoa

313. In addition to a start up package for cocoa production, READ SI will provide funding to supply fermentation and other cocoa post-harvest equipment up to \$38 per group. [Detailed arrangements will be further defined following further discussions with MARS and Modelez on the scope/approach within the PPPs prior to programme effectiveness].

(iii) Small Infrastructure for agriculture and non-farm livelihoods

- 314. For small productive infrastructure, READ SI will support investment of approximately IDR100 million per village only in new villages. The infrastructure investments will be implemented in the second and third years of Programme activity in the village and not before. The infrastructure investment will be implemented as two IDR50 million allocations and comply with Gol regulations on participatory infrastructure investment, with beneficiary contributions allowed in-kind. Provision of infrastructure support will be subject to satisfactory performance of the groups in the village during the first two years of programme activities.
- 315. The process will involve participatory decision making in the selection and planning of the works, community planning for sustainable O&M arrangements, community supervision of construction and public community audit of works and expenditures after completion. VFs will be trained to facilitate all steps of this process.
- 316. Disbursement of funds will be via the Village Account, under the supervision of the Village Head. It is hoped that the participatory planning and decision making process used for this will demonstrate to the Village Head and other village stakeholders an effective and efficient local participatory planning process that may be relevant to other similar plans, such as those for the Village Fund provided for under the Village Law. If there is interest from the Village Head and village community to build on this approach for wider use in the village, then the VF will be made available to the village to actively support this process under the guidance of the Village Head and with backstopping from the Social Mobilization (SM) supervisors in the sub-district.

PART B: Agriculture activities in Existing (Old) READ Villages

- 317. The proposed READ SI design includes maintaining an active but reduced engagement with 10 villages per district which were part of the post MTR R-1 implementation (5 districts in Sulawesi) and the MoA READ replication (4 districts in total in West Kalimantan and NTT). The rationale for this is that there are established SHGs in these villages which can be the basis for further learning which will be relevant to the later implementation stages of READ SI. Examples of this include: (i) READ revolving fund groups which are sufficiently "mature" for proposed bank link arrangements to be operationalised immediately (see Sub-comp 1.2); (ii) SHGs or individual members of SHGs who could be encouraged to take investment loans to finance additional mechanization services (e.g. tractors, combine harvesters, flat bed dryers); (iii) SHGs who could reliably run on-farm trials of various varieties of rice and cocoa from both government and non-government sources to demonstrate their relative yield and quality merits; and (iv) Cocoa Doctors will run inter-cropping trials (e.g. cocoa under coconuts) to establish economic viability.
- 318. Integrated homestead gardening groups will be mobilized in existing READ villages and receive the same extension training and starter input packages as outlined above for new READ SI villages.
- 319. In addition, READ SI will provide further in-service training to PPL staff as well as provide sub-district office upgrades \$1,500 each. (See sub-component 2.1).
- 320. In the "old" villages in NTT, READ will provide one group in each of the 19 participating villages with 30 locally sourced female goats selected according to the following criteria. (i) Female goats aged 18-24 months i.e. having 2 adult teeth; (ii) Written veterinary approval from District Vet assuring disease and defect free status.
- 321. Half of group members will be provided with 3 adult female goats. Goats will be vaccinated prior to distribution against pasturellosis and drenched for internal parasites. After three kidding cycles (typically 18-20 months) each beneficiary will pass the original 3 adult goats to a member of a newly formed group, but keeping all the off-spring kids for herself. READ staff, will engage with the recipient women when purchasing the goats so they are satisfied with the quality

Non-farm livelihoods

- 322. Non-farm livelihood activities will also be supported based on the experience from the original READ model to provide opportunities for households with minimal agricultural land. In an evolution of the READ approach in this area, non-farm livelihood opportunities will be addressed in a more selective way based on credible local market opportunities.
- 323. There is a need to assess the market for the non-farm products/services before deciding if /what non-farm activities to support in the village. As such, non-farm livelihoods activities may not be implemented in all villages, but only those villages where credible market potential opportunities are identified. This will include the following steps:
 - (a) Step 1: Evaluate the impact of the different non-farm activities under original READ project
 - (b) Step 2: Complete local market potential scans at Sub-District and District level for credible non-farm opportunities
 - (c) Step 3: For identified opportunities, identify suitable trainers with the necessary skills and experience to conduct training and capacity building so that the groups can competitively produce what the market wants to buy. This should probably not be done by extension officers (PPLs). Training should be oriented towards these activities as a small enterprise so would also need to include enterprise training.

F. 1.3 Savings, credit and financial literacy

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- 324. Affordable seasonal and investment finance, whether loans from banks, MFIs, CBFOs including cooperatives or from own savings, is vital if households are to be able to invest in improving their farming and household enterprises to raise incomes and take the opportunities presented by READ SI technical support.
- 325. Yet, while there are many encouraging developments in the financial sector in Indonesia and expansion of coverage in rural areas, the reality for many of the READ SI target households is that they still lack reliable and affordable access to the necessary funding they need to make the most of their farming and livelihood opportunities.
- 326. There are many historic factors which have contributed to the current situation both on the farmers side in terms of the demand for savings, loans and other financial services as well on the side of the banks and MFIs in terms of the supply and delivery of suitable financial products and services.
- 327. In rural areas, there are also particular challenges in the practical mechanisms for many potential small savers and borrowers to link to banks and MFIs in part due to a mismatch in scale and the associate high transaction costs involved. This mismatch of scale is akin to similar problems faced by small farmers when selling their produce, where there is often a need for bulking and aggregation at the village or group level to improve efficiencies and reduce transaction costs before they become economical for businesses to trade with. The same is true for financial services and, while the advent of digital financial services, mobile banking and agent networks are reducing these barriers, there is still a need for increased efficiencies in linking farmers to banks and MFIs often through village or community-based financial organisations under various models of financial intermediation.
- 328. These gaps between farmers and financial service providers need to be bridged if large numbers of households are to be able to invest to fulfil their potential. READ SI will work to bridge this gap using a three-pronged attack to strengthen demand, supply and intermediation (or direct channels) to link the two, through:
 - (a) strengthen household demand and confidence in using formal financial services, including savings, loans and other financial services primarily through improvements in individual financial literacy and good household financial disciplines
 - (b) strengthen local financial intermediation mechanisms, especially the capacity and inclusiveness of CBFO and local MFIs at group, village or sub-district level that can help aggregate demand and supply of financial services at the local level in some communities
 - (c) strengthen supply of financial services from banks and MFIs into READ SI villages, through partnerships (mostly at the local district or provincial level) to improve their outreach to READ SI groups and households and their confidence and willingness to serve them with their existing range of products and services.
- 329. Given the strong need for close integration within villages and READ SI mobilized groups of all the elements of READ SI integrated approach, elements (a) and (b) are covered under Component 1, as they will be primarily implemented *within* villages coordinated by VFs with READ SI households, groups and existing CBFOs, while (c) operates mostly at the district and provincial level and so is addressed under Component 2 along with other key services.
- 330. The three core principles of the READ SI rural finance approach are to:
 - (a) remain farmer-centred, in that the central focus must remain on enabling farmers and households to have affordable access to and use of necessary funding to invest in the opportunities in agriculture and non-farm livelihoods in general, and those presented by READ SI in particular:

- (b) build on what already exists or is emerging within the financial services sector in Indonesia in general, and in Sulawesi, Kalimantan, NTT and programme districts and villages in particular.
- (c) tackle constraints on both the demand and supply sides for financial services in READ SI villages and districts as well as the intermediation between demand and supply.
- 331. These RF activities will contribute to enable smallholders to meet their seasonal finance needs through more inclusive financial services as an alternative to traditional informal loans, for example from traders, processors or off-takers or money lenders. It shall also contribute to financing mid-term farm investments, in particular tree crop development. Savings promotion as a buffer against fluctuating incomes and greater resilience is recognized as equally important as credit in addressing these issue of sustainability over the medium term and will be a key element of the supported activities on rural finance.

Additional Outcomes and Outputs

- 332. The primary outcomes is already reflected in the logframe, with the success of these activities judged by READ SI ability to ensure that "80% of participating households have affordable access to and use of sufficient seasonal & investment finance whether from CBFOs, formal FSP loans or own savings".
- 333. Beyond the main indicators in the Programme Logframe, performance against the specific objectives on savings, credit and financial literacy will a measured through additional key performance indicators:
 - (a) 60% of total programme supported households are saving regularly²² with a CBFO or other FSPs at least once per month on average (as a proxy measure of good financial discipline)
 - (b) Financial literacy levels²³ substantially increased for 50% of participating smallholder
 - (c) Capacity strengthened of existing village and sub-district level MFIs, LKM-A²⁴, CBFOs and others.

Main Investment Activities

Activity 1: Financial Literacy Training

- 334. Financial literacy in Indonesia as a whole is low. According to a 2013 survey of 8000 household countrywide by OJK, the financial literacy in Indonesia achieved 21.8% and the inclusion level 59.7%. This problem is likely to be especially acute among the poorer farmers and households who are the primary target households for READ SI.
- 335. To begin to address this, it is important first to create a safe and constructive atmosphere that promotes talking about finance. This is not always a natural things for many individuals and households who for various reasons may be unwilling at first to talk about money. As such the way in which the financial literacy training is delivered is almost as important as the content of the training.

²² may also include regular payments into financial products such as education insurance, life insurance etc.

²³ Financial Literacy measurement to use international tools e.g. OECD FL measurement tool which assess financial knowledge, attitudes and behaviours and generates a score ranging from 1-22 points. Definition for "substantial improvement" to be determined based on measurement tool used, for example an increment of 3 points on the OECD FL scale.

see: http://www.oecd.org/daf/fin/financial-education/2015_OECD_INFE_Toolkit_Measuring_Financial_Literacy.pdf
²⁴ Lembaga Keuangan Mikro Agribisnis, LKM-A - the small agribusiness microfinance institutions often attached to the
GaPokTan (Village Farmers Group Association)

²⁵ Joice, Anastasia, Lebih Sejahtera via Melek Keuangan (More Prosperous via Financial Literacy), Kompas, 13 March 2016

- 336. The financial literacy training will be delivered to the groups mobilized as outlined in Sub-comp 1.1 on Social Mobilization, above, and will be conducted in all old and new READ SI villages. The financial literacy training will take a very practical approach and will be closely integrated with the agricultural and livelihoods technical training using the focus crops or activities of the groups as the basis for learning and practicing financial literacy skills. This will therefore be done in cooperation with the PPLs and technical training modules expanded to include financial aspects. It will also be closely linked to the self-help savings and loan activities initiated within the groups that will enable participants of the financial literacy training to put their new knowledge into practice immediately for example by beginning some small but regular savings in their groups.
- 337. Basic financial literacy training will be offered alongside technical training to all farmers that receive programme support. However, it is assumed that for various reasons the attendance will not exceed 70%. The FL training will be on a voluntary basis, offered during the initial approximately twelve months of implementation in each village. The time and place of the training discussions should be decided by the participants themselves to facilitate good participation. No training attendance allowances will be provided to participants, although simple drinks/snacks may be provided during the training.
- 338. The scope of the financial literacy training should typically include several main modules, and as a minimum cover:
 - (a) financial literacy as promoted by OJK, which concerns the presentation and understanding of the role of banks and their products, benefits of saving and savings as well as opportunities that loans may contribute to realize; the various loan covenants and options outside a monthly instalment loan should deserve a special focus;
 - (b) household economy (Ekonomi Rumah Tangga), which concerns the planning of income and expenditures of households in which the erratic business cycles and mostly constant household necessities have to be understood in order to better manage times of deficits and surplus;
 - (c) business (opportunity) assessment, an introduction to analyze the financial consequences and impacts as well as manpower and management requirements on different approaches to seasonal investments and to long-term investments, concerning in particular tree crops but also cattle raising; investment in small machinery as a special business for interested individuals or famer groups should be analyzed.
- 339. There are a large number of high quality resources and training materials already available for financial literacy (FL) training for rural households, including those specifically designed for use with farmers e.g. those of Mercy Corps Indonesia. READ SI should build on these rather than develop new materials from scratch. Another sources is the internationally recognized resources at www.microfinanceopportunities.org covering:
 - Budgeting "Use your money wisely"
 - 2) Savings "You can do it!" The importance of savings and how to do it
 - 3) Debt management "Handle with care"
 - 4) Financial services "Know your options"
 - 5) Financial negotiation "communicating with confidence"
- 340. Training is often best organized in 8-12 short weekly training meetings, each lasting 1-2 hours and scheduled at times and locations that are chosen by the participants themselves as being most convenient often early in the morning or in the evening. Each session may include 20-

30 individual participants - this will be determined by the size of the group mobilized under subcomp 1.1.

- 341. FL training needs to use adult learning principles and a learner centred approach. It is not sufficient just to run awareness raising and information sharing activities. It is important that the participants have the opportunity to immediately put their new skills and knowledge into practice. So the financial literacy training should be run as an integrated part of the initial mobilization of the self help savings and loan activities of the groups.
- 342. This will be delivered via the VFs and SM teams through a cascade approach in which the VFs, backstopped by the SM service provider, help the programme supported groups to select one or two of their own members to act as Financial Literacy Facilitators (FLFs). These are typically local residents, often women, who have done well at school, are eloquent and still live in or have returned to the village long term. They are then provided with in-depth training, provided by the sub-district SM supervisors, and resources for delivering Financial Literacy training courses to their fellow group members.
- 343. As permanent and respected members of their groups and communities they are always on hand to support and coach their fellow members in how to put their new financial and business skills in to practice on their farms or other households enterprises. The FLFs gain a high level of skill and confidence and in similar projects have often been found to increasingly contribute to the management of the groups, supporting preparation of investment plans as well as helping with negotiations with traders and buyers on behalf of their group.
- 344. The FLFs will pay a small fee for running the financial literacy classes of approximately USD3 per session (equivalent to a total of USD36 for a 12 session course). This is done both as an incentive to run the classes but also to demonstrate the value of the service so that in the future the FLF may consider continuing to offer related simple services to their friends and neighbours, such as filling forms for loan applications or preparing simple business plans for a small fee.
- 345. The approach will be tested in a number of communities early in the programme and then rolled out once local adaptations have been fine tuned. These activities will be linked to the activities with local lending offices of partner FSP under Sub-component 2.2, who will be invited to provide materials and attend the relevant training session on financial services to introduce their products and services and explain how households can access these services.

Activity 2: Savings and loan activities within groups

- 346. In villages where there are existing active and well managed CBFOs (e.g. LKM-A or other village-based/community-owned organizations including Sharia compliant models such as BMT), with good governance, internal management and adequate liquidity, who serve some READ SI target households and are motivated to serve more, READ SI will facilitate programme households to join these CBFO and/or begin using savings and loans. However, in practice in many READ SI villages active CBFOs capable and willing to serve READ SI households are expected to be the exception rather than the norm (in contrast to the situation in much of Java and Sumatra). For example MOA report just 54 LKM-A in all of Sulawesi despite there being around 42,000 Gapoktan (Village Farmers Group Association) to which LKM-A are attached (see Working Paper). As such READ SI must work with the real situation on the ground in its villages.
- 347. In villages where there are not existing active and well managed CBFOs, as is expected to be the most common situation, READ SI will promote small-scale savings and credit groups as a second focal activity within all the READ SI commodity and livelihood groups mobilized under sub-component 1.1 and 1.2. This is expected to help strengthen and sustain the common bond within these groups. This is considered an important element to help maintain and amplify the social capital enhanced under READ SI and empower the members of the groups to engage

more fully in the wider development processes in their community, especially under the new village Law 6/2014 and in view of increased annual budget allocations from central government.

- 348. A second important purpose of the SCGs is to create a safe space in which members can practice and become more confident savers and borrowers and start to practice better financial behaviours and household financial disciplines, for example with regular savings no matter how small the amount. This is especially important to include for poorer and more marginal households who may otherwise not have the confidence to start using financial services from banks or MFIs.
- 349. These embedded SCG activities will be based on self-help group principles and will follow the approach promoted in READ in terms of group management, meeting protocols, internal governance and record keeping. However, in a departure from the READ approach, the SCG activities will be savings-led and the READ SI will not provide seed capital in cash or kind. This is done to increase the sense of ownership of the group funds by its members and savings led groups have been widely found to be more sustainable than those mobilized to access externally provided credit.
- 350. In terms of the loan side of the SCG activities, the lending capital will take a long time to grow (as it is from group savings and retained earnings on loans). As such, and in keeping with the self-help model, loans are primarily expected to be very small productive loans or for social or emergency purposes. It is not intended that these SCG activities will be a primary source of loans for seasonal finance or investment in farm or non-farm activities.
- 351. Mobilization and capacity building of SCGs will be led by the VFs with backstopping from the SM service provider teams and the District Financial Advisors.

Activity 3: Machinery investment

- 352. With declining agricultural labour, there is a large unmet demand for mechanization services in many villages, especially for crops with two or three harvests in one year, such as rice and corn/maize. Given the scale of this demand, it is neither feasible nor appropriate for this demand to be met by the public sector. At the same time, small machinery service enterprises are technically and financially viable, as already demonstrated by many micro-entrepreneurs across the country. In the spirit of READ SI, the programme will seek to build on what is already working rather than replace it and so will seek to stimulate greater private investment in small machinery service enterprises by farmer groups or by an individual farmers who are willing to make the investment.
- 353. Therefore, in addition to the main farmer-centred financial services activities, for farmer groups and individuals (farmer families) that are seeking to make larger investments typically for a machinery service enterprise (e.g. in hand-tractors, combined harvester machine, rice driers etc.) by accessing private bank finance or public funds (e.g. UPSUS) the VFs will facilitate these groups to link with the relevant professional and technical staff, e.g. DINAS Pertanian (District Agriculture Office), to prepare their investment proposals. VFs will be available to support the preparation of these investment proposals if needed, but with backstopping on financial and technical aspects from the District Financial Advisors (DFAs) of the District teams as well as partner FSP staff. The simple business plans for their new machinery service enterprise, must include setting user charges that are sufficient to assure full regular maintenance as well as provide funding for equipment replacement at the end of its working life (depreciation).
- 354. Because the objective for READ SI is to ensure poor farmers have better access to timely cultivation, READ SI will also facilitate links to commercial banks to enable interested group farmer(s) to borrow to fund additional tractors. In this way, the operational capacity of one tractor of around 12ha per cropping season can ensure each member has access to timely cultivation. Similarly, the labour burden on women of manual rice threshing is alleviated.
- 355. In addition to technical and business planning advice, READ SI will promote the use of small equipment and machinery that will improve the welfare of the group members. The programme will make best use of limited resources and increase sustainability by not handing over the equipment free of charge.
- 356. Those groups or individuals choosing to invest in machinery will be provided with training for up to 2 operators per investment in a course to be designed and delivered by the ATC at Makassar (for advanced equipment) or locally for basic equipment. Such training may also be delivered through partnerships with the equipment suppliers themselves, especially for advanced equipments.
- 357. **For basic equipment**, such as tractors, threshers and mobile mills, READ SI will offer small equipment and machinery grants to its groups that have demonstrated good performance over the first two years of activities, e.g. in SCG activity or adoption of demonstrated production technologies.
- 358. Basic machinery investment will be promoted via matching grants of, initially, 33% to encourage individual farmers or groups to invest in tractors, threshers, mobile rice mills to provide basic machinery services in target villages. As there is an established market for these services and known costs of investment and operation it is expected that partial loan financing is likely to be available from banks.
- 359. The use of the grant is to encourage investment from farmers in starting these service enterprises as other wealthier households who could afford to invest may have a declining interest in agriculture and hence leave a gap in the market for such investments. The percentage of the grant will be adjusted as required to achieve the lowest level necessary to stimulate investment.

- 360. The grant will be for approximately one third of the cost of the proposed equipment and machinery. There will be a cap on the total grant provided per group (approx. USD 1500 per group).
- 361. Based on business plans, grant funds may be provided to the groups as a whole or to sub-sets of members that are prepared to invest in setting up these machinery service enterprises. The effect of introducing equipment can be tripled if the groups or individuals contribute with two thirds to the investment costs, thus allowing up to 75% [or even 100%] bank financing based on a collateral value assumed to be 50% [66%]).
- 362. This support to investment in basic equipment will be provided in both old and new villages. In old villages this will be provided from Year 1 of READ SI. In new villages this will be provided after the second year of engagement in the village and be subject to satisfactory performance of the group in other READ SI activities up to that point in time.
- 363. The percentage of matching grant offered will be reviewed and adjusted if necessary based on uptake from farmers in reality. The principle will be to provide the smallest percentage grant necessary to trigger private investment in the machinery service enterprises in the villages.
- 364. Support to investments in upgrading village-based rice mills will also be considered under the similar arrangements for basic machinery.
- 365. **For advanced equipment**, such as harvesters, transplanters and driers, it is recognized that banks and MFIs are unlikely to extend finance at present. As such advanced equipment investment will be promoted through a scheme of "try before you buy" coordinated by the contracted Specialist Implementing Partner for rural finance.
- 366. Ensuring compliance with prevailing GoI regulation, READ SI will implement a scheme in which the programme offers these equipment for time-limited test trials (e.g. one year) or based on rent/leasing contracts to its groups that have demonstrated good performance over the first two years of activities, e.g. in SCG activity or adoption of demonstrated production technologies. After the test-trial, the equipment will be offered for purchase to the group using it at preferential price. In the event they choose not to purchase it, it will be passed on to another group for a new time-limited trial on the same basis until it is purchased by one of the groups. Details on type and number of equipment as well as detailed procedures will be developed as part of the detailed PIM preparation and ensure compliance with Indonesian budget regulations²⁶.
- 367. Machinery suppliers will be encouraged to participate in the schemes and to also contribute to the provision of training on the equipment use as a service enterprise.
- 368. Support to investment in advanced equipment will initially be piloted in old villages only from Year 1 of READ SI. The approach will then be refined based on experience from these initial pilots before being rolled out to all villages after Year 3 of interventions subject to satisfactory performance of the group in other READ SI activities up to that point in time and available budgets.
- 369. Especially important for these advanced machinery, those groups or individuals choosing to invest in machinery will be provided with training for up to 2 operators per investment in a course to be designed and delivered by the ATC at Makassar (for advanced equipment) or locally for basic equipment. Such training may also be delivered through partnerships with the equipment suppliers themselves, especially for advanced equipments.
- 370. Due to budget limitations, it is expected that each old village will be allowed to choose to initially test one piece of advanced machinery under this scheme chosen from either driers, harvesters, transplanters or other advanced machinery for annual crop mechanization.

²⁶ At the time of writing, current regulations mean that GoI may hand over equipment free of charge (donation)to farmers groups but not lease it for a test period and sell it without following established procedures (public auctioning).

271 It is noted that this is a different approach to

- 371. It is noted that this is a different approach to that used in READ or the current UPSUS where machinery is given to groups for free. The use of partial grants is intended to increase the sense of ownership of those receiving the machinery while still making it more affordable. With greater ownership and beneficiaries having invested some of their own money, there is expected to be a much more professional and active use, operation and maintenance of the equipment ensuring the machinery services are more sustainably available to serve local farmer demand. It can also help act as a demonstration to other farmers and FSPs of the feasibility of such investments.
- 372. The VFs, with support from FSP staff and District teams, will support interested farmers and farmers groups to prepare simple machinery service business plans and submit applications for loans from the partner FSPs. These will be based on tried-and-tested template business plans that will reflect actual realized operating and maintenance costs (based on the test period for less common equipment), pricing of services, financing costs, depreciation (to enable replacement) and cashflow.

Activity 4: Strengthening of existing CBFOs and LKM-A

- 373. Where they exist, the most compelling option for improving access to financial service is to strengthen existing LKM-A and other village-based/community/member-owned organizations (including Sharia compliant models such as Baitul Maal wat Tamwil, BMT). Such strengthening would include, for example, support to become a MFI according to Law 1/2013 on MFIs or a cooperative as well as establishing bank linkages for a range of financial services and refinancing CBFO funds and including mobile/digital financial services.
- 374. For each identified CBFO with credible potential for growth and provide inclusive financial services in their community, the DFA will conduct a capacity assessment and jointly develop a capacity building plan. In doing so, the DFA will work closely with the District agencies responsible for micro-finance supervisions as well as the READ SI SM service provider team.
- 375. Under guidance of the PFAs, the DFAs will identify CBFOs that provide inclusive financial services in their community and have a credible potential for growth asset-wise and capacity-wise (HRD). The DFAs will conduct related assessments and jointly with the CBFO management and other stakeholders, predominantly the village government, the district agencies responsible for the development and supervision of MFIs and the READ Si SM service provider team agree on a plan to improve the performance and eventually develop to become a registered MFI.
- 376. Once the individual CBFO strengthening plans have been defined and agreed with the CBFO, the DFA will coordinate delivery of the training, coaching and other capacity building activities defined in the plan. The DF Advisor will deliver more technically advanced elements of the capacity building and training, sometimes for the management teams of several CBFOs in joint training sessions, while the VF and Sub District SM Supervisors will provide more regular follow-up and day to day coaching of the CBFOs to help them put the improved management skills and process into practice.
- 377. Such support from READ SI to the existing CBFOs may also include assistance in completing formal registration with OJK, if appropriate, and also the provision of some limited quantities of equipment necessary for improved management practices (e.g. laptops / printers for electronic record keeping and reporting).
- 378. Finally, once the CBFO obtained the permit and became a registered MFI operating under OJK supervision, there will be a particular focus on supporting the concerned institution to link with a bank for refinancing.

Activity 5: Farm insurance expansion

379. In addition to the major activities above, READ SI will also partner with MoA's Dept. of Agricultural Financed (DAF) on extending the coverage and use of farm insurance products by smallholders. DAF launched new farm insurance products for rice and livestock in October 2015. They hope to extend farm insurance to cover additional crops and livestock. READ SI will collaborate and support DAF to develop, market test and promote suitable insurance products. Consideration will also be given to the feasibility of farm insurance products for cocoa orchard replanting and rehabilitation.

Implementation Arrangements

- 380. The rural finance (RF) activities under Component 1 and 2 need to be coordinated by an experienced team of Financial Advisors with experience working with farmers, farmers groups, banks and MFI and how to link them. Similar to social mobilization under READ, this is not yet an area of core competence of AAEHRD nor of the district government agencies. As such, it is proposed for READ SI that similar implementation arrangements are used for RF as for SM activities, working with a specialist implementing partner organization that has a demonstrated track record in this area. The Financial Advisors would work as a fully integrated part of the READ SI implementation teams as national, provincial and district levels.
- 381. The overall financial service team would comprise:
 - (a) 1 x National financial advisors (NFA)
 - (b) 5 x Provincial financial advisors (PFA) based on one PFA for each of NTT and West Kalimantan with three PFA to each cover two provinces in Sulawesi
 - (c) 55 x District financial advisors (DFA) with two per district -> one per district acting as overall coordinator of finance activities in the district and one as the deputy. Districts working in villages in very remote areas will be assigned an extra DFA.
- 382. These technical teams will be supported by and work closely with the VFs. At the village level the VFs will lead and facilitate all RF activities, but with more advanced training and capacity building conducted by the DFAs. The senior NFA and PFAs will provide technical backstopping and supervision of rural finance (RF) activities in the Districts, as well as delivering ToT and other activities.
- 383. Capacity building of CBFOs/MFI will be led by the DFA team who will also coordinate the FSP partnerships at the local branch level and coordinate with the District MFI supervisory agencies on a day to day basis. FSP relationship at the provincial and national level will be coordinated by the respective RF managers, as will the collaboration with OJK.
- 384. The RF specialist implementing partner organization will need to have proven experience in similar locations of, among other things:
 - (a) agricultural finance for market-oriented smallholders and farmer groups
 - (b) setting up partnership with mainstream banks to link farmers or farmers groups and CBFO, MFIs or cooperatives to the banks under linkage banking schemes
 - (c) good relationships with a range of mainstream banks interested in the rural sector in Indonesia
 - (d) designing and delivery financial and business literacy training for smallholder farmers
 - (e) CBFO / savings and loan group mobilization and strengthening
- 385. The design team have met managers from at least one current leading Indonesia NGO that has similar experience, so it is considered highly likely that READ SI would be able to hire such a service provider.

Village Facilitators roles in Savings, Loans and Financial literacy

- 386. VFs play a central role in the sub-component. In relation to savings and loan activities their main roles include:
 - (a) Oversee and implement financial literacy training to farmers
 - (b) Facilitating linkages between farmers and partner FSP staff,
 - (c) Strengthening CBFOs and SCGs
 - (d) Supporting farmers who are interested in using savings and credit services offered by partner FSPs, including support in preparing necessary simple farm investment/business plans and loan applications etc.
 - (e) Support to farmer groups and MFIs on how to access public and private funding for group investments
 - (f) Supporting internal supervisors or even acting as supervisor for those CBFOs that obtain programme support including training but are not (yet) under the supervision of OJK/district governments; the involvement of outsiders may give these groups enhanced reputation and trust, in particular among the poorer villagers, who believe that the VFs may prevent that insiders take over the group and allocate substantial loan amounts to themselves. The supervision is strongly recommended or even mandated as long as the management of these CBFOs is not certified and the savings deposits of the villagers are not insured (no support beyond training without enhanced transparency including the right to supervision). It is expected that it will still take some years until savings deposits with registered MFIs will also be covered by the Indonesia Deposit Insurance Corporation (Lembaga Penjamin Simpanan, LPS).
- 387. The VFs will assist loan applicants in those processes that these prospective borrowers regard as confusing and difficult (but which are easy and not very complicated according to most successful borrowers). The VFs can assist the farmers in their administrative processes that they consider cumbersome, for example if it concerns the provision of pass photos that are often required. In this respect, the programme supports borrowers and banks in reducing their transaction costs. Once two or three persons obtained a bank loan, the VFs may engage them to become reference persons in the village.

Exit strategy

- 388. The exit strategy is central to the entire sub-component approach, which builds on, expands and strengthens existing elements of the rural financial sector in Indonesia in general and in READ SI locations in particular and aligns with ongoing national initiatives such as those of OJK and DAF..
- 389. Partner FSPs will be selected based on their having a clear business and inclusion objective for further developing their client base among smallholder farmers. Given this, if they are able to profitably serve farmers during the time of the programme, especially according to OJK requirements with regards to an NPL ratio below 5%, then there is every likelihood that they will continue to do so after the programme closed and may even extend their client base to similar farmers elsewhere.
- 390. Furthermore, the programme will also collaborate with OJK to further strengthen the operating environment and supervision of MFIs to better serve rural households. OJK is legally required to continue these activities and the programme is providing some incremental support to accelerate these activities in programme areas.
- 391. Financial literacy skills, once acquired and practiced are not easily lost, in particular not in an environment that develops agent-based and hand phone based DFS.
- 392. Overall it is therefore highly likely, if the FSP partnerships and bank-CBFO/MFI linkage schemes, widely known in Indonesia (e.g. former IFAD funded P4K, see CPE 2014) are a success (which banks measure by an NPL ratio distinctly below 5%), that these and other

activities will be continued and farmers in programme villages will continue to enjoy far better access and use of financial services

Risks and Issues

Table 6: Risks - Rural Finance

Risk / Issue

Mitigation / Response

1 Limited outreach by partner FSPs

With BRI and BPDs as partner FSPs, the optimum outreach can be achieved. There are extremely few locations that are neither served by BRI (including one of the more than 50,000 agents), nor by BPD outlet or mobile bank units. In some selected places, a BPR with motorcycle units may show more presence than the aforementioned FSPs. The sustainability of very small BPRs is questioned in view of increasing equity requirements and subsidized small business loans (KUR) offered by BRI and BPDs.

The two aforementioned FSPs may however not necessarily provide services to CBFOs, even if they are based on provincial or district regulations or even registered MFIs. In contrast, other institutions such as registered cooperatives and registered MFIs may offer specific financial products, e.g. financing a farmers group based on the executing scheme, as they do not have to adhere to the strict banking regulations. In the absence of performance-based agreements with programme participating FSPs, accountability, market outreach and the identification of bespoke products and services might be limited. Without having solid performance monitoring, it will be less likely to facilitate proper implementation of rural finance-related activities, and that such activities generate concrete results. It is also quite unlikely to lead to an enhancement of the reputation, brand value and trust in these particular FSPs, as well as to better portfolio quality and client retention.

The principal mitigation measures will be through:

- portfolio approach, with partnership with multiple different FSPs with different scale, business strategies and capacities;
- careful selection of partner FSPs, including careful assessment of their real level of business interest in serving smallholder farmers, such as diversification or volume;
- active facilitation by VFs and other programme staff to enable FSP local staff to easily link with target farmers and communities and understand commercial opportunities of serving these clients (reducing FSP transaction costs);
- negotiation of performance-based agreements with regular review, including where appropriate incentive mechanisms within the FSP for local staff to serve READ SI smallholder farmers.

2 Distances between district capitals and villages and between villages afford travel time that reduces the outputs.

The selection criteria for the villages that get assistance will most likely not take into consideration logistic aspects and distances to FSPs. The net time available for consultancy and training might be negatively affected. A higher number of VF might be requested, in particular when the programme selects remote locations, which are difficult to access, for example during the rainy season.

3 Sustainability of the farmer groups

Working in partnership with FSPs and CBFOs (e.g. LKM-A, BMT,) to strengthen and expand these will help improve sustainability of impacts in this area. The VFs through participation in group meetings and monitoring activities can prevent members abandoning their group.

4 Misuse of group member savings

The VFs have to implement strict transparency guidelines and supervision procedures to prevent misappropriation of funds in those SCGs and MFls that obtain READ SI support. The programme will assist and support MFls in the introduction of prudential standards and independent supervision for the groups eligible.

5 Local human resources insufficient

Human resources for the financial management of a farmer group, CBFO or MFI should not be limited to its named members.

It is repeated experience that among the children of villagers one can often meet

6 Elite capture in access to financial services within FSP partnership schemes

young women, even in remote villages, who obtained a higher education in towns and cities, but returned to their place of origin. They would have the diligence, capacity and motivation to administer SCGs, CBFOs or MFIs. It would be the task of the programme to identify these persons and promote them. Candidates may often be the Financial Literacy Facilitators

Social performance strategies and track record will be a key part of the prior assessment of potential partner FSPs

Social performance will be used as a key measure in the performance-based agreements with FSPs, and will be tracked and jointly reviewed regularly. FSPs that are unable to deliver inclusive services in practice will not be eligible to continue as READ SI partner FSPs.

VFs will pay particular attention to ensure priority target groups (active or working poor, income generating women, young farmers) have the opportunity to meet (e.g. via literacy classes) local staff from FSPs and other FSPs and to understand and access their financial services.

The programme will work with partner FSPs to develop and test products (where

not already available), especially lending products, that better meet the requirements of the priority target smallholder farmers while providing profitable opportunities for the FSPs themselves in serving these customer segments. The land certificate ownership (sertifikat hak milik) is a key to bank loans. Some villagers benefitted from the national effort to issue land certificates at low cost (Proyek Operasi Nasional Agraria, PRONA), whereas many villagers own land documents that banks might refuse as collateral. The capacity of local authorities and the demand for joint land certification is unknown. Issuance of land certificates may become a bottleneck, in particular if the locations are

scattered and difficult to access (selecting villages with least accessibility and infrastructure).

7 Limited capacity to issue land certificates

loans from banks, MFIs, cooperatives and CBFOs, the danger of over-indebtedness and

subsequent poverty looms.

8. With easier access to

9. No proper answer to the question about the second way out when the income cannot repay the loan.

Awareness training to limit loan exposure will have to become a crucial part of financial literacy training even if one might risk that several potential loan applicants might withdraw their loan proposals.

Risk reducing measures are: FSPs check with BI's Debtor Information System (Sistem Informasi Debitur, SID) and the government's Credit Program Information System (Sistem Informasi Kredit Program, SIKP), family control (bank loans, in particular if land certificates serve as collateral, have to be countersigned by the spouse); maximum loan amounts and social control with regards to loans from CBFOs.

Although land serves as collateral, there are very few cases of foreclosure concerning agriculture land and village dwellings. The programme will develop strategies, preferably in cooperation with OJK, FSPs and insurance providers, and elaborate answers to the question of indebtedness if the harvest proceeds cannot settle the loan repayment obligations.

G. 1.4 Nutrition (especially early childhood nutrition)

- 393. Nutrition will receive an even more explicit focus under READ SI in recognition of the stubbornly high levels of child malnutrition despite rising incomes and improving aggregate food availability. While READ SI will place a greater emphasis on nutrition, it is recognized that there is no single solution to tackle these problems. Yet the fact that malnutrition rates remain unchanged despite rising incomes and food availability give some clues that some of the remaining constraints to better nutrition are driven by social attitudes and norms.
- 394. READ SI will therefore adopt a multi-pronged approach to improving nutrition as well as encouraging local innovation combined with evidence-based assessment to identify and scale-up promising innovations in the approach to improving nutrition.
- 395. Nutrition activities will be conducted in all old and new READ villages coordinated by the Village Facilitators, including:

- (a) technical awareness raising and training on relevant technical knowledge concerning good nutrition practices, food stuffs etc. This should be tailored to the local socialagricultural context in terms of the way the knowledge and information is presented and also the specific advice given of the food stuff available locally in different seasons that can form a part of balanced and healthy diet for different members of the family - from the very young to the very old.
- (b) Integrated homestead gardening promotion, extension and starter input packages (see Sub-comp 1.2) to increase the convenience and availability of supplementary vegetables and fruit to improve the quality of the dietary mix.
- (c) Women's group mobilization, to build social capital, around SCG, gardening and nutrition. Within these groups, the programme will foster mother to mother mutual support, and are expected within the village to have ongoing mother and child groups (with rolling membership over time) for more intensive mutual support and for the programme and other health providers to channel more focused support.
- (d) Social marketing approaches to change the aspirational and social status of good childhood nutrition cooking competition, prizes, village level awards for whole village performance, Awards from Bupati at big events etc.
- 396. READ SI is expected to give a particular focus on the most critical period of early childhood and ante-natal nutrition from conception to 24 months, the so called "first 1000 days". With this focus the District team and SM/VF teams in particular will develop, test and evaluate a social marketing approach to improving early childhood and ante-natal nutrition. The activities will focus on households with young children and recently married couples in the whole village (and not general activities with READ SI households). The intent is that the village level system should be designed to be self-sustaining without ongoing programme support once established. The village level system is expected to include, among other things:
 - (a) Social marketing events such as cooking competitions, talks, celebrations to raise the status of good nutrition
 - (b) Mother to mother support networks, through women's groups and regular mother and child meetings
 - (c) Regular monitoring within the community itself (e.g. at monthly mother and child meetings) of i) baby growth, ii) nutrition practices and iii) diarrhoea incidence with possible link to commune health centres
 - (d) Provision of weighing scales, measuring equipment to each village for use in the context of mother to mother support meetings
 - (e) Provision of household books (if not already provided by health workers) including growth charts for each child for recording progress with possible link to established systems under and practices of village health workers if possible.
 - (f) Activities to target different specific audiences involved in early childhood nutrition decision making - mothers, grandmothers, fathers - with different techniques if necessary
 - (g) Link to ante and post natal care and monitoring by government health service for example with health workers attending monthly mother and child meetings to be available to answer questions, provide advice and also to weigh and monitor development of babies and children
 - (h) Awareness raising among men and wider families as well, both on technical aspects but also for raising the aspirational status of good nutrition in their families
- 397. READ SI will actively encourage and reward local innovation by teams in Districts to work out what combination of factors works best. These team will be give freedom to develop and test

different combinations of nutrition interventions combined with close monitoring of results using three additional indicators tracked on a minimum quarterly basis to get rapid learning and feedback - both for the programme and also for the mothers involved on what is working and the progress they are making:

- (a) stunting level of children (height for age)
- (b) incidence of diarrhoea on children,
- (c) dietary diversity using a simple tool to list and categorize food stuffs eaten in the previous 24 hours
- 398. All activities should be designed to be minimal cost activities that can be continued by the community themselves once established in order to increase longer term sustainability.
- 399. Nutrition activities will be coordinated via BAPPEDA with Posyandu and volunteer health cadres in villages. READ SI's proposed four activity areas on nutrition are understood to be well aligned with overall framework on improved nutrition of GoI, coordinated by BAPPEDA at the district level and will contribute to the achievement of this GoI objective. Coordination will primarily need to be ensured at the village level with the Posyandu (village maternal and child health posts) and the health volunteers.
- 400. For integrated homestead gardening for nutrition, the recent IFAD How To Do Note on the subject provides a useful reference.

II. Component 2: Services, Inputs and Market Linkages

- 401. Component 2 deals with the key service delivery system and market linkages at the district level, and the associated systems at higher levels. These cover critical cross cutting services of agricultural extension and final services as well as more specific services linked to the flagship commodities of rice (seed) and cocoa. The key services are:
 - 2.1 Agricultural extension services (all districts)
 - 2.2 Financial services (all districts)
 - 2.3 Seed supply markets and system (all districts)
 - 2.4 Cocoa farmer support services and markets (in Sulawesi)
 - 2.5 Livestock production and health services (in NTT only before MTR)
- 402. This is an area of increased focus under READ SI and is intended to improve the performance and service delivery of these key services in a more sustainable way. It is a compliment to Component 1 and not a driver. It represents only around 19% of total programme budget and within this more than 80% will be invested in upgrading extension services, both for general extension (Sub-component 2.1) as well as specifically for cocoa (Sub-component 2.4). These service and input market activities are organized into a distinct component as the sphere of intervention is at the district/provincial/national level and the interventions are very different in nature from those under Component 1, although will have a direct impact on activities in support of Component 1 activities. Specific intervention plans and impact logics have been defined for the interventions in each of these five support service markets as outlined below.
- 403. The component Outcomes and key performance indicators are:

Outcomes 2:

Critical services and input markets In programme districts are sustainably improved in terms of quality, relevance, availability and accessibility to serve the needs to programme communities

- 11. 80% of households are satisfied with the: a) relevance, b) quality, and c) accessibility of agricultural extension and advisory services provided by the public and private sector (disaggregated by provider)
- 12. Rice Seed affordable, quality, certified "READ" seed (or equivalent) readily commercially available for all farmers as needed in the local market in 80% of rice producing programme villages
- 13. PPPs set-up and functioning well with at least 3 national scale partners to improve service delivery and input supply in cocoa or rice value chains in programme locations, including at least 2 with major cocoa businesses.
- Good quality, active local private service providers offering services and being regularly used by programme supported farmers in 80% of programme village

2.1 Agricultural Extension Services

- 404. To support and deliver the extension activities under Comp 1 and also improve the overall agricultural extension and HR development capacity in MoA, READ SI will implement an upgrading programme for extension services in programme districts, upgrading skills and extension facilities. There will also be investment in the overall extension and HR development system coordinated by AAEHRD under its mandate within MoA, including linked to its agriculture training centres (ATCs) with focus on making ATC training more relevant to PPL (and therefore farmer) needs. Major activities will include:
 - (a) HR development Skills, knowledge and training
 - (i) Extension officer (PPL) recruitment, skills training and refresher
 - (ii) Farmer extension materials review, improvement and production all crops. (ATC)
 - (iii) Review and revision of ATC extension training relevance and accessibility

- (b) Facilities upgrading
 - (i) Sub-district extension offices upgrade
 - (ii) ATC facilities upgrade linked to performance in (a) (iii) above.
- 405. The Agriculture Extension and Human Resources Division (AAEHRD) of MOA is the agency with overall responsibility for both extension delivery, as well as being the READ SI NPMO.

Main Investment Activities

Activity 1: Recruitment and Training of New and Existing Extension Staff

- 406. Recruitment of additional contract extension staff. These staff will be recruited to ensure that there is sufficient extension staff to field one PPL per target village. Because there are vacancies in a number of sub-district extension ranks, the current PPL staffing status will need to be mapped to establish the additional staffing needs. It should be noted that these staff are recruited for the purpose of implementing the programme extension related activities mainly delivered to target beneficiaries through Farmer Field Schools (FFS). If on-going extension services are to be sustained, GOI will need to consider provide financial resources to ensure sufficient extension staff continue to be employed beyond the programme and consider investing financial resources to train and support lead farmers at village level.
- 407. During the FFS process, PPL staff will identify lead farmers who are potential candidates to continue working with the FFS groups and to extend the technology to non-target farmers (farmer to farmer extension).
- 408. <u>Training of existing and new extension staff</u>. Existing and new extension staff will be trained/retrained to ensure they have are equipped with both technical and extension skills of a sufficient standard to deliver the planned technical support programme to farmers. This will include aspects of SM (see para 259) delivered by the specialist implementing partner for SM. In addition to the PPL training under Sub-component 2.1, there will be a significant investment in training PPLs and others in advanced cocoa production at the MARS Cocoa Academy in Terenge under the PPP with MARS (see sub-component 2.4)

Activity 2: Review the relevance of and accessibility to PPL training at ATCs.

409. Feedback from provincial and district extension managers as well as PPLs themselves clearly indicates that training currently on offer is interesting but of little relevance to the daily extension challenges and needs of PPLs – training is too classroom oriented, lacks flexibility to respond to different locations (including agro ecological zones, gender and literacy). ATCs at Makassar and Kupang will be assisted and encouraged to review their training products and be more responsive to active feedback from their "clients" – the extension officers. In addition, access to ATC training is currently extremely limited. READ SI will work with ATCs to endeavour to broaden access to training, including possible introduction of short courses on location (district based) and distance learning.

Activity 3: Review and update all existing relevant technical packages used by extension staff (PPL).

- 410. Provincial and district extension staff admit that farmers are not adopting some technical advice because "they are unable to understand the message". Clearly, it is not the farmer who must adjust but the extension packages need to be made appropriate to farmer absorptive capacity, including literacy and numeracy levels. Thus, in partnership with ATC staff and provincial Bakorluh, AAEHRD staff will be required to assemble existing packages and revise them to be more farmer-friendly, and more likely to be widely adopted. The packages of relevance will include matters relating to rice, cacao, copra, livestock and vegetable production.
- 411. <u>Implementation</u>: To ensure adaptability to local conditions, revision of existing technical packages will be undertaken at provincial level. Most improved farmer extension materials will be in written form but potentially also available on-line at a programme website. The review will

be undertaken with AAEHRD staff guidance with support from programme Technical Assistance – including an international training specialist in collaboration with ATC staff from Kupang and Makassar.

Activity 4: Extension training review and revision.

- 412. Extension skills are the skills needed for a sub-district (BP3K) level PPL to confidently work with farmers to transfer knowledge and to encourage them to adopt new techniques or grow diversified crops on their own farm. It is different from technical skills but equally important in ensuring good extension outcomes. Extension skills training will include extension programme management skills activity planning, budgeting and scheduling, reporting and monitoring.
- 413. To ensure extension training is relevant, the training/re-training of staff will be based on revised staff training courses that address the technical aspects of READ SI agriculture and the extension skills needed by all PPL staff.
- 414. <u>Implementation</u>: Revision of staff training modules will be supported by the recruitment of an international agricultural training specialist who will work with AAEHRD staff and with the senior staff at the Agricultural Training Centres (ATCs) to prepare revised PPL training curricula for ATCs.
- 415. Once training modules are revised, training courses for existing staff (subject to mapping) will be delivered at the agriculture training centre (ATC) of AAEHRD in Makassar. Course duration will be for 2 weeks and delivered in batches of 20 PPL per group a total of 108 courses. Courses will be delivered according to the recruitment schedule for new PPLs. At course completion, all trainees will be measured to ensure the required standards are met.

Activity 5: Facilities Upgrading

416. It is proposed to invest in the upgrade of BP3K offices and office equipment in up to 144 programme sub-districts. Specific selections will be based on a mapping and needs assessment to be undertaken by the Provincial Director of Extension. The programme will also address the need for investment in the national agriculture training centres (ATC) at Kupang and Makassar, including the need to finance the development of a vocational training course for farm machinery operation and maintenance at the ATC in Makassar and a livestock production course at Kupang. However, the investments in both ATCs will be conditional on agreement from ATCs to review PPL training effectiveness and accessibility.

2.2 Financial services

Context

- 417. In recent years, the presence of banks and access to banking services have remarkably increased and the number and type of new bank outlets or bank access points continues to increase. Most of the about 7,000 sub-district centers also in rural areas are served by a BRI Unit and often also by a BPD outlet, which offers some basic competition. Meanwhile the total number of outlets of BRI increased to beyond 10,000 (branches, sub-branches, units, "teras" offices) and more than 50,000 BRILink agents (branchless banking) and reached even beyond sub-district capitals. Banks access remote villages also with weekly services at market days using mobile bank units.
- 418. However, presently, the situation may not yet be as favourable in all sub-districts in the country, especially in poorer areas, which are the main targets for READ SI. Small villages (population below 500) have no market days and often not a business that would be acceptable to act as bank agent. The introduction of DFS will start to close gaps in the provision of financial mainstream services in rural areas but such services have only begun to be introduced over the last two years and are still hampered by incomplete mobile phone accessibility, in particular in low populated border areas.
- 419. Several suitable banks offer their facilities or have even expressed interest in becoming READ SI partner banks including the following main micro loan providing institutions:
 - (a) Bank Rakyat Indonesia (BRI) is the main distributor of the government's subsidized People's Business Loan programme (Kredit Usaha Rakyat, KUR²⁷). BRI's standard product for micro enterprises is "Kupedes" (Kredit Umum Pedesaan, Rural General Loan), a monthly instalment loan. The interest rate is about 26% effective p.a. According to preliminary figures for 2016, BRI will provide KUR Micro loans up to Rp25 million to about four million micro enterprises including farms. The loan is characterized by highly subsidized market interest rates (9 percent p.a.) and by lenient collateral requirements. The repayment to banks is backed up with a partial credit guarantee (80% for loans to agriculture).
 - (b) Regularly, Regional Development Banks (Bank Pembangunan Daerah, BPD) are jointly owned by the provinces and districts and headquartered in the respective provincial capitals. BPDs appear as suitable and interested partners as their statutory task is to support the local economy. Like all Commercial Banks, BPDs have to increase their MSME loan portfolio to 20% until 2018. For several of these institutions this is still a challenge. BPDs are supported by a program launched by the German Savings Banks Foundation for International Cooperation (SBFIC) in cooperation with their association, Asosiasi Bank Pembangunan Daerah (Asbanda), and introduces micro loan assessment tools. The cooperation trains loan officers to assess the cash flow of project proposals of MSMEs and offer them suitable micro loans (cash flow based lending). The program is active in Sulawesi. Several BPDs became participants in the Gol's KUR program.³⁰
 - (c) Most Rural Banks (Bank Perkreditan Rakyat, BPR) are smaller than Commercial Banks and their product range is limited to taking savings and term deposits and extending loans. Several BPRs and cooperatives are associated with their apex bank, Bank Andara, a Commercial Bank specialized on the technical, managerial and financial support of microfinance institutions. Bank Andara does not offer KUR loans.

²⁷ For more details about KUR see Annex.

²⁸ Some provinces were split and their BPDs serve now two provinces, for example, the BPD in Manado, North Sulawesi, serves also the new province Gorontalo; a small number of BPDs offered shares to private investors.

²⁹ BI Regulation 14/22/PBI/2012 and changes according to BI Regulation 17/12/PBI/2015 (June 2015)

³⁰ Including BPD NTT (Nusa Tenggara Timur), BPD Kalbar (West Kalimantan), BPD Sulselbar (West and South Sulawesi).

In fact, few BPRs act as KUR linkage institutions. BI supported BPDs to engage as apex institutions for BPRs in their province, however, with mixed success.

- 420. With few exceptions, BRI dominates the financial market in rural areas and cooperation with other banks will be promoted in order to prevent dependence on one supplier and to offer choices.
- 421. These banks perceive the market opportunity of offering their services to increasingly marketoriented and bankable smallholder clients that will already be receiving a bundle of technical
 support under the other Components of READ SI, thus greatly reducing the transaction cost
 and lending risk of serving such potential clients. The programme will also facilitate the
 provision of additional liquidity by selected partner banks to newly registered or strengthened
 MFI or cooperative licensed³¹ community-based financial organizations (CBFOs, among others
 54 so called LKM-A recorded in Sulawesi). The MFIs, as "Linkage Institutions", address the
 needs of their members by forwarding funds from banks either directly (executing scheme) or
 by facilitating loan contracts with a bank (channeling scheme). OJK and GoI promote these
 linkage models, which are also described in the KUR regulations as one method to provide
 inexpensive finance for MSMEs and thus is an established (though sometimes underused)
 existing product/funding mechanism for the major banks.³²

Outcomes and outputs

- 422. In addition to the main Outcome indicators on Rural Finance in the logframe, this subcomponent's performance will be monitored according to the following specific indicators.
- 423. Number of active borrowers³³ and voluntary savers disaggregated by gender (male, female, couple³⁴) and FSP before programme intervention and after three years.
 - (a) Non-performing loans (NPL) as by OJK classification for loans to farmers who obtained extension service and improved their farms by using FSP financing.
 - (b) Number of (formally registered) MFIs and under ongoing supervision by the responsible agencies at District level, the development of the number of their members. their assets and performance (NPL, profit).
 - (c) Number of active CBFOs, the development of the number of their members, development of assets and performance (NPL, profit).

³¹ OJK is also responsible for regulation of MFIs and for supporting and encouraging CBFOs and informal financial activities to register as MFIs according to Law No.1/2013.

³² KUR procedures describe the two types of linkage: (1) channeling, i.e. the bank concludes individual loan contracts with MFI members and the MFI assists the bank to identify borrowers and to collect installments, and (2) executing, i.e. the MFI becomes the bank's debtor and the end user is the MFI's debtor. Banks will conclude a loan contract only with OJK-registered MFIs or registered cooperatives.

³³ Definition: Borrower with loan classified "pass" and "substandard".

³⁴ In particular, if a land certificate is involved as collateral, banks will conclude loan agreements with husband and wife.

Republic of Indonesia

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

Final project design report

Appendix 4: Detailed programme description

Definitions of financial institutions

424. For the avoidance of confusion, a number of terms refer to specific types of organization in the Indonesian financial sector and are no longer generic terms. A brief summary is included here and these terms are used throughout this PDR.

MFI is a specific term in Indonesia defined under the Law 1/2013 on MFI. It is not anymore a generic term.

FSP is a general term and includes banks and non-bank financial institutions, OJK-registered and not registered.

OJK-registered institutions

- Banks includes (a) Commercial Banks (CB) and (b) Rural Banks (BPR) according to Law on Banking.
- Non-bank financial institutions based on national Laws include, (list not complete)
 - a Multi-finance companies, including leasing companies
 - b Special purpose financing institutions or funds, such as Permodalan Nasional Madani
 - c Insurance companies
 - d pawnshops
 - e MFI, which are institutions providing deposit and loan services, registered (a) as limited liability company (Ltd/PT) or (b) cooperatives according to Law on MFI; before registering, these institutions are CBFOs (one might differentiate MFI as term from "small financial institution", which would need a specific definition, e.g. based on total assets, which includes MFIs and small CBFOs?)

Not OJK-registered financial institutions are

Community-Based Financial Organization (CBFO), in this context are not registered with OJK,

- (a) those that should apply for a legal status as Ltd/PT or cooperative, but have not yet, including those that operate based on provincial regulation or on a government programme or project regulation (in particular those that promote voluntary savings activities),
- (b) those that are too small to fall under the Law on MFIs³⁵
- (c) non-deposit taking (revolving) funds (monthly compulsory savings of members are not regarded as a deposit-taking activity) that have also developed from governments providing "revolving funds" (e.g., Gapoktan). As some of these institutions were designed to become a "village bank", voluntary deposit activities were encouraged and sometimes introduced.

<u>CBFOs</u> differ from SCGs (see below) in that they have been founded and capitalized with government involvement (capitalization, regulation, supervision, etc.). They are community based but they are credit-led in contrast to community <u>founded</u> as savings-driven SCGs.

Not regarded as FSPs under this definition - but part of the financial infrastructure - are

- a neighbourhood savings and credit groups (SCGs) or self-help groups (SHGs)
- b arisan groups
- c money lenders

Suppliers of goods and off-takers, who buy the harvest before the time of harvesting (ijon) engage also in financing but are not regarded as FSPs, because they conclude a sales/purchase contract in which the time of payment differs with the time of handing over the goods or performing the services. The financing activity is regarded as a marketing instrument for their main business, which is not financing.

³⁵ Minimum capital for PT MFI (limited liability companies) is Rp 50 million, for cooperatives Rp 15 million.

Main Investment Activities

Activity 1: Financial Services Baseline Surveys

- 425. Baseline surveys are required of the local financial services sector, in particular concerning the institutions, their outlets and other access points in READ SI districts that READ SI interventions can build on and support what is already happening in the financial service sector locally. Among these institutions are Commercial Banks and Rural Banks, their different outlets or access points such as mobile banking units and agents, as well as OJK-approved MFIs. Further institutions are non-bank financial institutions, both formal and informal institutions. including pawnshops and single purpose savings and credit cooperatives (SCCs) in relevant sub-districts, and informal institutions and funds on programme village level.
- 426. Accordingly. the initial tasks of the District Finance Advisors (DFA) in their respective districts, backstopped by the Provincial Finance Advisors (PFA), will be to map all active FSPs and their outreach and their products including:

Banks

- (a) the location of their outlets and agents (Digital Financial Services DFS points), as well as the locations that the banks visit regularly with mobile units
- (b) a list of their products that they market in the area and the pertaining conditions
- (c) identifying which particular fields (businesses, commodities) the banks have experience in and have placed a priority for the future
- (d) channels favoured to serve rural customers, including experience with any specific financial intermediation models
- (e) identifying fields of support and cooperation

MFIs and CBFOs

- (f) establish a list of existing MFIs and CBFOs, in programme villages and sub-districts both those set up by government initiatives (Gapoktan, LKM-As, PNPM, District Development Project, IDT, to name a few) or from other parties (e.g. NGOs). This list shall include also single purpose SCCs and multipurpose cooperatives with savings and credit activities.
- (g) compile information of the legal and economic status of these MFIs and CBFOs, including the profile of the members or clients of these organizations, especially those in READ SI villages.
- (h) The data compilation will be done with the support of the VFs and teams of the special implementing partner for SM in the sub-districts.

Other non-bank financial institutions

- (i) The baseline survey will also look at products of institutions such as pawnshops, leasing or micro-insurance providers. Furthermore, the survey shall indicate the use of non-formal savings and loan activities of input providers and off-takers.
- 427. A special investigation shall be led by the National Financial Advisor (NFA) of the NPMO together with the MoA Dept of Agricultural Finance to identify the micro insurance alternatives that are available in Indonesia and the possibilities and obstacles to introduce them in all programme provinces. In addition READ SI will support DAF to extend its scheme to insure agriculture activities to more provinces and more commodities and whether hesitant insurers might cooperate in testing markets and products, perhaps with their CSR funds.

Activity 2: Partnerships with banks

- 428. Informed by the baseline surveys of the local financial services sectors, the programme will seek to establish partnerships with banks that have the most dominant presence in rural areas in which READ SI is active, namely BRI, BPDs and in some selected areas with BPRs that have established a dense net of outlets
- 429. These partnerships are necessary, because the programme will intervene as a facilitator between the farmers and the banks. In each location, READ SI will collaborate with the partner banks to extend their existing schemes and services to the programme's target farmers.
- 430. This bridge is required because banks offer standard products, which might need some slight, but sometimes decisive adjustments to be acceptable for the borrowers. The programme will therefore have to develop a trusted relationship with decision makers on local level that necessarily has to be backed by bank superiors at the higher levels. It is not envisaged that READ SI should demand from banks a general new policy. For example, banks do not normally provide loans below Rp 5 million and also micro loans with terms of four years. However, in their product descriptions they offer these products and the programme may convince them to provide them. Similarly, incorporating interest as an investment cost item in the loan amount (interest during construction, IDC) is not common, but some banks use this feature already for financing plantation development. The schemes under which banks provide loans to farm households, formerly under the interest subsidized Food and Energy³⁶ Security Loan (Kredit Ketahanan Pangan & Energi, KKPE) program with maximum loan amounts of Rp50 million³⁷ may not have allowed this flexibility. In contrast, under the present KUR program, banks could extend these more flexible and individual loans that are required for example for tree crop financing. Often, it is not profitable for a bank to engage in these activities unless a large number of same or similar loan applications are submitted (mass loan processing). Hence, one of the entry points for READ SI is to broker arrangements with interested banks and larger numbers of like-minded farmers to aggregate demand for similar financial products to make it of greater commercial interest for banks to serve this demand.
- 431. The programme will, through detailed negotiation, be open to providing support to the partner banks to develop, pilot and extend their existing products and schemes to better serve the target households either by expanding geographical coverage into new locations or developing and testing adapted products that more specifically meet the identified needs of the farm households e.g. credit products for season finance (for rice) versus more regular income (from vegetables).
- 432. Through these partnerships, READ SI will also seek to better understand the particular factors faced by local credit officers and branches that have held them back in increased lending to farmers and other rural households in the past. This may be factors such as weak governance within older co-operatives or marketing or production constraints such as a lack of technical knowledge and quality inputs for farmers that limit their yields and margins and hence reduce their likely ability to repay loans. One of the benefits of such a partnership would be a one- or two-month internship of the DFAs with banks handling micro loans in rural areas.
- 433. With a better understanding of these non-financial constraints, READ SI can tailor its interventions to address these and thereby increase the confidence and willingness of banks to serve target households. This process of identifying and addressing non-financial barriers is not a one off exercise, but rather an iterative process in which issues are jointly identified between the banks, farmers and the programme and then joint actions planned to tackle them with the regular review of progress and updating of joint action plans. Within these joint action plans, responsibility for some tasks will fall to the partner banks, some to the farmers and farmers groups, some to the local MFIs or CBFOs and some to the READ SI implementation teams or

 $^{^{\}rm 36}$ This refers to palm oil and soy beans oil being used to substitute diesel fuel

³⁷ Banks are allowed to disburse micro loans up to Rp50 million without requesting the borrower's tax number.

other programme stakeholders, e.g., Village Head (Kepala Desa), Sub-District Head (Camat) or District Head/Regent (Bupati).

- 434. READ SI will invite other banks to join, if they can contribute to a more intense provision of service due to their specialization in financing a particular commodity (here most probably cocoa) such as BNI or Bank Mandiri, which are experienced in tree crop financing. These few institutions can collectively best cover almost all programme locations and different segments of customers (e.g. from active poor to better off individuals as well as registered cooperatives and MFIs) of the programme in particular as some of these banks are actively expanding their branchless banking activities.
- 435. At the village level, a critical aspect of most partnerships is expected to be that partner bank staff, such as local branch lending officers, attend various activities and meetings of participating farmers in the village facilitated by the VFs in order to achieve delivering an appropriate and affordable portfolio of financial services that meet the different financial needs of smallholder families over time. This would include, for example:
 - (a) delivering one or more of the sessions of the financial literacy training, particularly those on bank products, the roles of savings versus loans etc. (see Sub-component 1.3);
 - (b) attending half a day of each farmer field school (see Sub-component 1.2) to introduce their services to the farmers and also to better understand the training and support being provided via the programme as well as the farming investments plans and financial needs of the farmers as their potential clients;
 - (c) providing support to farmers groups or individual farmers/investors in preparing investment or project proposals as part of loan applications for investing in equipment and machinery as an agricultural service enterprise, e.g. for threshers, rice driers, mechanized harvester or for enterprises providing fermentation boxes for cocoa.³⁸
- 436. It is expected that in quite a number of villages more than one bank is actively offering financial services to programme beneficiary households, be it through agents, mobile units or even permanent outlets. This competition and choice for farmers is considered positive and will be encouraged while paying attention to aggregate a sufficiently attractive number of farmers that would require the same product.

Linkage Institution Schemes

437. Based on findings from the Design Mission, it is expected that registration as MFI (formalization of existing CBFOs), including large savings and credit groups (SCGs), would open access to small loans (distinctly below Rp5 million per member) from banks that they would not individually provide, but to the institution ("executing scheme"). Representatives of Commercial Banks stated unanimously that, in general, they would avoid financing CBFOs or SCGs. They would appreciate if the management of CBFOs or SCGs would assist the bank in concluding individual loan agreements with the CBFO or SCG members and assist in supervision and coordinating loan repayments thus reducing transaction costs. However, loans would be based on individual appraisals and contracts with the bank ("channelling scheme"). The joint liability offered by the group members is not regarded as a valuable collateral substitute and neither will Commercial Banks accept the receivables in the books of the CBFOs as a collateral as the instrument "cession" as collateral is not introduced on this level. In this respect, it might be possible to identify a BPR, a savings and credit cooperative or a MFI that might extend a loan to a CBFO or even SCG. The BPR or MFI in turn might apply for refinancing with a bank. It is

³⁸ In this respect the PRFCs shall provide input on basic data and methodology based on internet research, which offer more decisive details than banks consider in their assessment. For example, the economy of a power thresher is described into detail in http://www.academia.edu/11215564/Studi_Kelayakan_Power_Thresher_untuk_Padi

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expected that in these cases, the total loan amount will not exceed total savings of the group members and will also not exceed about Rp 1 million or Rp 2 million per member.

Number and type of FSP partnerships

- 438. For illustrative purposes, by Year 5 of the programme there may be active partnerships with, perhaps:
 - (a) One to three national-scale banks, most probably BRI, BNI and Bank Mandiri, being active in >75% of programme locations serving farmers both directly or indirectly via a linkage institution (for example BPR, cooperative or MFIs) as a means to decrease transaction costs to serve SCG and/or SCG members.
 - (b) Provincial Development Banks (BPDs) that serve farmers. It needs to be investigated to what extent and degree of specialization these banks are also experienced in linkage or group financing and if they would be interested to become financial provider of the members of these groups or finance local e MFIs and cooperatives..
 - (c) One or two specialist banks or other FSPs that have particular focus and networks with CBFOs Sharia based savings & finance groups (BMT), for example apex banks and organizations working with BPRs, MFIs, and Sharia groups that may cover significant parts of the programme locations, e.g. Bank Andara (Andara Link) or Permodalan Nasional Madani (PNM), a GoI owned institution providing loans to MFIs for on-lending (executing scheme) and micro loans to end users facilitated by the MFIs (executing scheme).
- 439. These co-operations might be based on a tripartite agreement. For example BPR Mustika Utama Kolaka, in Kolaka, Kolaka District in Southeast Sulawesi, cooperates with PT Bank Andara³⁹ and PT Sulawesi Subur Sejahtera⁴⁰ in financing and guiding cocoa farmers with a total volume of Rp 5 billion.

Set-up and management of FSP partnerships

- 440. Partner FSPs will be chosen in Year 1 onwards through an open invitation process and selected on the basis of the fit of their products and schemes with the programme objectives in terms of suitability of products and schemes to the needs of the target farmers (e.g. seasonal finance, savings, insurance), geographical coverage, social inclusion performance (especially accessibility for the poorest farmers), financial sustainability of their schemes without public funding, and value for money in terms of the programme's necessary investment into the partnership.
- 441. Eligible partner FSPs may be private or state-owned, regional or national in scale but must already be active with a widespread presence in at least one programme province. Partnerships may be with individual FSPs or with FSP-led consortia also potentially including other non-FSP added value consortia partners. It is expected that multiple partner FSPs may be active partners within any given province or district.
- 442. FSP Partnerships will be managed through milestones and performance-based partnership agreements that are periodically reviewed and adjusted based on actually performance and future potential.
- 443. For the avoidance of doubt, READ SI will not provide lines of credit for on-lending by partner banks.

³⁹ See more at: http://www.bankandara.co.id/id/news/detailandara/48/Petani-Kakao-Sultra-Keciprat-Rp.-5-M-Disalurkan-Via-Bpr-Mustika-Utama-Kolaka-Di-Back-Up-Bank-Andara#sthash.l0BFBQkT.dpuf

⁴⁰ PT SULAWESI SUBUR SEJAHTERA (SSS) engages in agribusiness concentrating on the distribution of fertilizer for the Indonesian cacao industry.

Activity 3: OJK Collaboration

- 444. Within the context of the READ SI rural finance activities, READ SI will collaborate with OJK on two of its important initiatives that will substantially enhance READ SI's own activities on rural finance, namely (i) upgrading CBFOs to register as MFIs and (ii) strengthening supervision of these institutions. This collaboration will be closely harmonized with the similar collaboration with OJK envisaged under the IPDMIP programme the RF activities of which are also to be managed by AAEHRD.
- 445. Note that activities under the collaboration with OJK will not be double funded by READ SI and IPDMIP, but rather the programme which is ready to implement them first in the READ SI districts will do so, providing funding and management support for their delivery.
 - 3. a) Gapoktan and LKM-A Registration and Strengthening
- 446. OJK and the Ministry of Agriculture through its Directorate of Agricultural Finance (under the Directorate General for Agriculture Infrastructure and Means, Prasarana dan Sarana Pertanian, PSP) are rolling out a programme to support the application, registration and strengthening of the savings and credit units (LKM-A) of qualifying farmers groups and farmer group associations (Gapoktan).
- 447. For 2016, activities to empower and strengthen LKM-A are planned in 24 provinces, including North Sulawesi (4 LKM-A), South Sulawesi (99 LKM-A), Southeast Sulawesi (20 LKM-A), Gorontalo (7 LKM-A), and West Sulawesi (20 LKM-A). Central Sulawesi is not part of the 2016 plan.⁴¹
- 448. Presently, OJK has requested from the provincial governments data on the existing MFI candidates. This process takes more time than initially planned (January 2016) as many CBFOs are recorded or registered with different institutions or even not at all. The authorities find it difficult to identify savings and credit self-help groups as "MFIs based on the initiatives of the local people" (LKM Berbasis Masyarakat, LKM-BM). It can also be assumed that the majority of these CBFOs handle a capital of less than Rp50 million and would not qualify for registration as a PT MFI. Reservations to establish a cooperative are still widespread.
- 449. READ SI's Rural Finance team along with other field staff will work closely with the local government and teams from OJK and MoA to identify active Gapoktans and LKM-As and support them in their choice to register as cooperative or PT and qualify for government support and supervision. This process is also important especially for the poor depositors whose deposits are better protected when the MFIs are properly supervised. Many of these persons contribute small monthly amounts only to reserve their right to access an emergency loan and they have too often lost their money when loans were not repaid
 - 3.b) Strengthening District level microfinance supervisory agencies by OJK
- 450. OJK strengthening of District microfinance supervisory agencies is planned to begin in 2016, in line with the MFI law (Undang-undang Lembaga Keuangan Mikro 1/2013).
- 451. OJK, through its province capital based offices, needs to deliver training and capacity building to the district agencies that are legally responsible for guiding and supervising registered MFIs, but may not be sufficiently prepared for this task. More effective supervision will improve the sustainability of CBFOs supported under the programme, including through the FSP partnerships and the MoA-OJK LKM-A formalization process.
- 452. READ SI will therefore support OJK to implement an accelerated programme of capacity improvement in this area in all programme districts (Year 1). The programme will also monitor the development of the CBFOs and support similar follow-up/refresher capacity building in

⁴¹ List of Farmer Organisations in Sulawesi see Annex

following years, in particular to strengthen further their supervisory performance. OJK will lead these activities from both a management and technical perspective.

Activity 4: Agricultural Insurance Promotion

453. READ SI will partner with MoA's Dept of Agricultural Financed (DAF) in order to extend the coverage and use of farm insurance products by smallholders. DAF launched new farm insurance products for rice and livestock in October 2015. They hope to extend farm insurance to cover additional crops and livestock. READ SI will collaborate and support DAF to develop, market test and promote suitable insurance products. Plans and activities will be jointly developed with DAF through the AWPB preparation process. Consideration will also be given to the feasibility of farm insurance products for cocoa orchard replanting and rehabilitation.

2.3 Seed Supply Markets and Systems

- 454. The READ SI design sees this activity as a 4 step process: (i) breeding; (ii) multiplying; (iii) distributing high quality seed; and (iv) providing credible assurance to farmers that the seed they are using is of a consistently high standard. The programme will finance an initial supply of White label seed for each participating provincial PBPT agency, as well as the associated costs of multiplication, distribution and certification.
- 455. This will involve 4 distinct steps:
 - (a) Provincial BPTPs will access either Breeders (F-1) or Foundation (F-2) seed from MOA's IRRC at Subang in West Java. Where necessary, IRRC breeders seed will be multiplied to Foundation seed at provincial BPTPs.
 - (b) Under BPTP supervision, F-2 seed will be provided to "elite" selected multiplier farmers who will harvest Stock (F-3) Purple Label seed for planting by programme trained multiplier farmers. BP3K extension staff will support BPTPs in this process.
 - (c) Stock (F-3) Purple Label seed will be provided to programme multiplier farmers at scheme level who will harvest Extension (F-4) Blue label seed for planting by programme farmers. The multiplication process will also be managed by BPTP and supported by BP3K extension staff while distribution arrangements will be managed by BPTP.
 - (d) Rice seed certification process. After a review of BPTP Certification processes and standards, it is proposed that samples of all (F-2, F-3 and F-4) seed will be subject to GOI seed certification according to MOA regulations including 3 field inspections (2 at vegetative growth stage, and one pre-harvest) followed by germination testing at a MOA approved laboratory. However, to assure programme managers of the integrity of this process, random samples of seed will be independently verified by grade and certified to minimum standards of 90% purity/90% germination and compared to BPTP/MOA test results. Only once seed has been tested and verified can the relevant label be applied. This service will operate as a fee based service, paid for by the grower of the sample being tested.
- 456. However, after the initial injection of quality seed at programme expense, Programme farmers will be expected to purchase F-4 extension grade seed from the multiplier farmers who will in turn purchase F-3 grade purple seed from either elite multiplier farmers or from Provincial BPTP thus ensuring sufficient and reliable supply as well as financial sustainability.
- 457. Technical support to selected multiplier farmers in each province. With BPTP, BP3K level extension staff and Dinas Pertanian will work with qualified, certified multiplier farmers in province to train them to multiply the stock (F-3) purple seed to extension (F-4) blue seed for distribution to individual scheme farmers. In addition, this process will be preceded by multiplier farmers attending live-in training courses at BPTP provincial level. Initially, this multiplication process will be on a contract basis but after each farmer receives an initial grant of wet and dry

season new seed, multiplier farmers across the programme (around 4 farmers per province) will purchase the purple F-3 seed and then sell blue F-4 seed to farmers (i.e. as a private sector activity) within the rehabilitated irrigated areas. Selection of multiplier farmers could be linked to the proposed incentives rewards to best performing farmers as identified by the PPL extension staff

458. On-farm rice seed storage. Because farmers should typically re-use their own self-stored seed for two seasons before buying fresh seed every third season, they need to be able to store their seed in good conditions. Poorly stored rice seed undergoes significant germination losses, the programme will seek to ensure each target farmer can maintain seed quality by storing seed in an air tight, vermin proof container (hermetic storage). The programme will provide some air tight, 200L heavy plastic drums for hermetic storage as part of the rice FFS starter-package. however, to ensure more widespread availability and use of such drums (or similar) READ SI will work with local agricultural input retailers to stock the air tight storage drums. The impact of quality storage, in conjunction with proper drying (not greater than14% moisture), will significantly increases in seed germination rates (currently 60% to around 85%), in turn reducing crop seed requirements. This means that if the 200L drums are filled with properly dried and stored seed, the USD25 cost of each drum will be recovered in just one seasons from the reduced amount of seed needed to be stored due to the higher germination rates and the drums will last for many years if properly cared for.

2.4 Cocoa farmer support services and markets

- 459. The ultimate objective is to substantially raise cocoa farm incomes for very large numbers of cocoa farmers, especially in Sulawesi, making cocoa farming an attractive profession once again for small farmers and thereby moving the cocoa sector to a more competitive and sustainable footing.
- 460. In line with this, the overall objective of the sub-component is to substantially improve the cocoa support service markets in programme district so that cocoa farmers can readily access affordable good quality advice and inputs to upgrade their cocoa production without relying on government handouts. This should be achieved through four specific complementary objectives:
 - (a) strengthening and expanding the coverage of embedded service delivered within the supply chains;
 - developing high quality, affordable private service providers, including private nurseries;
 - (c) significantly expanding the cadre of private and public extension professionals who have advanced cocoa production and farm business knowledge and expertise so that this is far more widely available within cocoa communities;
 - (d) strengthening the role and capacity of District Estate Crops Dinas to backstop, mentor and nurture these private providers while not undermining them with free giveaways of inputs or advice which are unsustainable.

Public services and support to cocoa farmers

461. An important context to the service and input market for cocoa is the long running Cocoa National Movement Program (Gernas) of the Estate Crops Director General of MoA. With an annual budget of Rp1 trillion (USD76.9 million), GERNAS has distributed fertilizer and seedlings to a high percentage of cocoa farmers in Indonesia aimed at boosting productivity. Yet despite this, total cocoa production has continued to fall dramatically, having almost halved in the last 7 years according to industry estimates. The side effect of GERNAS' generous handouts has been to hold back the development of more sustainable service and input markets for cocoa. There have also been widely acknowledged technical issues with some

aspects of Gernas, especially relating to the fertilizer and the survival rate / quality of the seedlings.

462. More recently, in 2016 the budget for GERNAS was dramatically cut by >75% to only Rp235 billion (USD18 million) at a time when overall MoA budgets are increasing. This potentially implies a very different role and strategy emerging for MOA support to the cocoa sector. READ SI will therefore be open to collaborating with DG Estate Crops in MoA and the Estate Crop Dinas in the programme districts in support of this shift in direction, especially where it concerns development of more sustainable services and input markets for cocoa farmers.

Public private partnerships (PPP) in support of cocoa farmers

- 463. In support of the sub-component objectives, READ SI will expand on the PPP initiated under READ. Two PPPs for READ SI are currently being negotiated with two of the three leading chocolate makers, MARS Cocoa and Mondelez, who are at the top of the value chain in Indonesia. READ SI will be open to exploring a third PPP with the other leading chocolate maker, Nestle, if there is interest from both sides and a suitable partnership can be designed that is consistent with a shared set of common objectives.
- 464. Each of the PPPs will be individually designed, negotiated and managed and is expected to primarily focus in the Districts relevant to the partner firms supply chains. As such the activities and approach to cocoa service market development may be different from District to District.
- 465. The expected scope and status of the proposed PPPs with each of MARS cocoa and Mondelez are briefly summarized below. Ongoing discussions and negotiations are happening on both PPPs and it is hoped that these will be concluded in early 2017 and that the details of the PPP can be included in the READ SI programme documentation prior to negotiation of the financing agreement between GoI and IFAD.

MARS Cocoa - READ SI PPP (prospective)

- 466. Under READ, MARS Cocoa and the project had a successful first partnership focussed on MARS' model of Cocoa Development Centre (CDC) and Cocoa Doctors (CD) for the delivery of improved cocoa production training and support to cocoa farms in READ districts in Central Sulawesi. Under READ SI, there is a desire from both partners to broaden and deepen the partnership.
- 467. This first partnership demonstrated the potential to raise cocoa productivity and farm incomes through a system of farmer training and support delivered by local private service providers (Cocoa Doctors) that are themselves trained and supported by more specialist Cocoa Development Centre located in the cocoa producing areas. The model of CDC and Cocoa Doctors has been used by MARS in its own main direct sourcing locations in South Sulawesi. Under READ, in Central Sulawesi the CDCs and staff were set-up and trained by MARS in line with their model. The partnership with READ was a first attempt to apply this model in locations outside MARS direct sourcing areas (mostly in South Sulawesi). From a technical perspective the partnership achieved good results, for example the READ Project Completion Report found that READ cocoa farmers achieved 193% higher yields than non-READ farmers. However, the limitation to date has been in achieving sustainability of the CDCs themselves which are a vital part of the system.
- 468. The first partnership, especially the results achieved by farmers, also reinforced the value of MARS' widely acknowledged "industry leading" technical expertise in practical cocoa farming systems well suited to small cocoa farmers in Sulawesi. Much of this expertise is generated and disseminated via MARS' Cocoa Academy in Tarrenge, East Luwu District, South Sulawesi. The expanded partnership under READ SI will therefore seek to make better use of this valuable asset to raise the capacity of larger numbers of public and private cocoa extension professionals.
- 469. The new phase of the partnership is therefore expect to have four main pillars:

- (a) Human resource development for advanced cocoa production expertise for larger numbers of public and private sector cocoa professionals in Sulawesi. This is expected to have two elements:
 - (i) direct professional training of PPL, lead farmers and others at the MARS Cocoa Academy
 - (ii) development and roll-out of cocoa production courses at vocational training centre in Sulawesi guided by MARS Cocoa Academy expertise.
- (b) Piloting of improved business models for sustainable CDC operation outside of MARS's direct buying areas, especially for financial sustainability.
- (c) Accelerated cross-learning between MARS and READ SI field approaches, through READ SI working in selected districts in South Sulawesi co-located with MARS' own managed CDCs and cocoa sourcing operations.
- (d) Joint exploration and piloting of cocoa financing schemes to support orchard rehabilitation and/or replanting, including with READ SI and or MARS partner banks if feasible.
- 470. On financing, it is recognized by MARS and READ SI that financing for farmers to rehabilitate their aging orchards is vital to rejuvenating the cocoa industry in much of Sulawesi. However, it is also recognized that it is a complex problem due to the timescales and amounts of financing required by a typical small farmer. While the problems are substantial, both READ SI and MARS are keen to collaborate to see if they can begin to make progress in this area.
- 471. Each of these four pillars are briefly described below and are subject to further negotiation between the partners.

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Table 7: Priority activities for MARS PPP (provisional)

	ey success factors / Pre-conditions	Issue to be resolved
Cocoa human resource development		
Advanced ing of cocoa service providers (nursery operators, private agronomists) will be provided with advanced cocoa production and business training and then supported by READ SI/local and on this advanced knowledge. Residential training would be for a total of seven weeks, delivered in two parts: • 4 weeks advanced cocoa agronomy training at the RS Cocoa demy. A total of 200 people per year will be trained in classes of 25 people for each year of READ SI (Total 1000 people). Yr 1 will be primarily PPPs, BP3K and Bapeluh staff who will then lead cocoa service from supported cocoa groups and neighbouring communities. Cost sharing basis (proposed) READ SI / local government will: 1. READ SI provide budget for trainees to deliver FFS on return to post in READ SI new villages (320 villages) 2. Local government commits additional funds for PPLs to deliver additional advanced cocoa training to farmers outside READ SI villages. A suggested level is each PPL is given budget from the local gov. to train at least 75 non-READ SI farmers (approximately 3 FFS) per year for the three years following their training at the Cocoa Academy. 3. Travel costs to/from Makassar to be covered by either District Government (preferred) or READ SI MARS will cover	anagement after they complete training and return to work to ensure new skills, sowledge and approaches are put into actice in training/coaching farmers. EAD SI must provide clear mechanisms of follow-up of Academy trainees after an aining so that MARS have confidence is will happen well. This will be done by apeluh and BP3K managers and staff ander the guidance of BAPPEDA. As such P3K and Bapeluh manager that are approvising and backstopping these attivities also have to have the technical apacity and knowledge so need to join the training at Cocoa Academy. EAD SI NPMO will provide Quarterly ports to MARS of the farmer training and ucted by PPLs (and others) trained at the MARS Academy. This will also include that an adoption rates among farmers ained by these PPLs. EAD SI will be implemented in 320 "new" lages in Sulawesi (plus 50 old villages). I new villages where cocoa is priority op will be offered cocoa FFS based on the advanced knowledge gained by PPLs the Cocoa Academy (unless directly	The Cocoa Academy is already running at 100% capacity. In order to cope with the proposed numbers of additional trainees, it needs to increase the number of master trainers and some facilities. This may take around 1 year to upgrade, as master trainers need to be recruited and trained themselves before they can lead training courses. This needs senior management approval from MARS if they are to increase staff and advanced notice of at least 6-12 months. A pre- condition for this activity will commitment from MARS will be that the trained PPLs are provided with sufficient budget and resources on their return to work after MARS training to conduct FFS and other activities in the field with interested farmers, not only in READ SI villages but more widely in their districts (funded by the local government budgets). At its current staffing levels, the Cocoa Academy can run 2 classes at same time and has capacity to train a total of 250 people in one year for agronomy and 125 people for cocoa business. In 2015, the Academy training 274 people, so is running at 100% capacity.

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Initiative

Description

1.b Develop and launch cocoa agronomy and business courses run by partner TVET institutions themselves. READ SI and MARS will partner with Technical and Vocational Education and Training (TVET) institutions from across Sulawesi to develop, launch and market cocoa agronomy and business courses aimed at cocoa farmers and others. These courses will be run by the TVET institutions themselves at their own facilities using training modules and materials jointly developed with MARS Cocoa Academy master trainers. The Cocoa Academy master trainers will also provide master ToT for the partner TVET institutions' trainers and staff. Specific actions include:

- 1. Confirm interest from partner TVET institutions and get them to assign lead staff to guide the process from their side as well as to be trained as cocoa trainers.
- Conduct ToT of partner TVET institutions' course leaders and staff at the MARS Cocoa Academy. Master ToT courses would be for 30 people and a maximum of 3 TOT courses are expected to be necessary (subject to interest from TVET partner institutions). It is likely that the Head of the Cocoa Academy would act as the Lead Master Trainer for this process.
- Review / develop course curriculum and training material to be used by TVET institutions when training student. (General material available but needs to be tailored to TVET institution setting rather than at the Academy.)
- 4. Support TVET partner institutions to launch, market and promote the new courses.
- After the first courses have been delivered by the partner TVET institutions, there should be a joint review with the Cocoa Academy of their quality and outcomes, including feedback from students, and any necessary refinements made to the course.
- Post-training follow-up and surveys should be conducted with all students to capture lessons on adoption and impacts of training to feedback into continuous improvement of the TVET training being offered.

Key success factors / Pre-conditions

The objective is to set-up courses and trainers than can deliver good quality courses on cocoa agronomy and business in TVET institutions themselves and not only at the Cocoa Academy. This is needed in order to increase the availability and accessibility of improved cocoa agronomy and business training on offer in Sulawesi beyond the "gold standard" training provided at the residential courses in the MARS Cocoa Academy.

It is noted that since 2011, MARS Cocoa Academy has trained students from over 14 different vocational training institutions and Universities, mostly based in Sulawesi. As such there is evidently a demand for vocational training on cocoa farming business.

The key success factor will therefore be to find partner TVET institutions that are committed to develop and run cocoa farming and business courses.

This new course development and ToT to other TVET institutions is similar to the master ToT training and course development recently provided by the Cocoa Academy to some Philippine TVET institutes linked to MARS' suppliers there. As such, much of the master training material and TVET course design is already available.

Issue to be resolved

MARS, READ SI and AAEHRD will jointly identify suitable partner TVET institutions. Once these are confirmed, the detailed process for the course development and roll-out can be finalized and the number/scale of activities confirmed.

Post training follow-up and monitoring with students will be a vital part of continuous improvement of these courses. This may be new compared to routine activities of the partner TVET institutions but will need to be made a mandatory condition of their participation in this activity. READ SI will be able to provide technical and financial support to this monitoring.

<u>Cost sharing basis</u> (proposed) READ SI / partner TVET institutions:

- 1. TVET institutions commit resources to launch and run new cocoa agronomy and business courses to a minimum number of courses per year for at least three years.
- 2. travel costs of master ToT participants to Makassar
- 3. production of new training materials
- 4. promotional campaign for new course

MARS will cover

- all costs of residential training at Cocoa Academy and transport from Makassar to the Cocoa Academy
- 6. technical advice from master trainers on TVET course design

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Initiative	Description	Key success factors / Pre-conditions	Issue to be resolved
2. Piloting new business models for CDC / Cocoa doctor system operating outside MARS direct buying areas.	At least two different business models will be piloted for CDCs outside of MARS direct sourcing Districts to try to address the financial sustainability issues. 1. CDCs owned and operated jointly by their local network of CDs, as member owned-enterprises 2. CDCs operating as standalone businesses with cost recovery models including via sale of seedlings and other inputs, service fees for advice and training to farmers and CDs These models will build on the experience and lessons from the existing successful MARS set-up near their main direct buying operation in South Sulawesi, as well as the past experience from READ in districts outside of MARS' own direct buying locations. IFAD will also share experience of similar systems in other commodities in other countries in Asia. IFAD/MOA would attempt to coordinate with other major cocoa business not directly related to MARS supply chain to learn from their experiences. The pilot will be implemented in a 2 step process. 1. Quickly set-up and pilot at least 2 alternative business models and evaluate what works and what does not. This should be done from Yr 1 of READ SI. 2. Once one or more viable business models are proven, then MARS will assist in bringing in its major suppliers to adopt the successful models for wider roll-out.	Before launching the pilots, credible business plans will need to be developed for each of the different models being tested. This must be done jointly with the proposed owners/operators of the CDCs involved. Careful consideration will need to be given to ensure that the owners/operators also have strong commitment to the new CDC business, for example by sharing some of the risk. Given the need of the CDCs to generate sufficient revenue to cover their costs, it is essential that they are not operating in areas where there are large scale subsidy programmes running for fertilizer or seedlings for coca, such as the GERNAS Cacao programme, as this would essential undermine the market for paid services and inputs. The senior leadership of MoA would need to ensure coordination between the Estate Crops DG and READ SI to create the enabling conditions for these pilots to be implemented. The recent reduction in GERNAL budgets may increase the chances that this can be achieved.	How should the CDCs established under READ be moved to a more sustainable financing basis? Should they be included in the pilot of new business models. Cost sharing basis (proposed) It is proposed that these initial pilots are done on an equal cost sharing basis between READ SI and MARS, but arranged with each partner paying directly for specific costs to avoid the need for cross-payments.
3. Accelerated cross-learning between MARS and READ SI field approaches, through READ SI working in selected districts with	READ SI will operate in two of the districts in South Sulawesi in which MARS has direct sourcing operations and directly supports the CDCs ongoing operation. READ SI will implement a full set of "new" village activities in cocoa producing villages in these villages. This deliberate over-lap of activities is intended to accelerate cross-learning in three specific aspects of field practice: 1. For READ SI - it can directly move to test models in which Cocoa Doctors (CVC) deliver farmer field school training and then do follow-up with cocoa producer	For this learning to take place, there will need to be close coordination and information sharing between the READ SI district team (DPMO) and MARS teams. As a minimum, there should be quarterly coordination and review meetings between the teams, with the READ SI National PMO also attending these meetings. This will need to be supported by timely	READ SI must be able to target support to relatively poorer villages within these districts. The mechanism for village selection for READ SI within these district may need to be modified to enable it to work in poorer villages which are still within MARS areas of operation. Cost sharing basis (proposed) No additional field activities are

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Initiative	Description	Key success factors / Pre-conditions	Issue to be resolved
MARS' own managed CDCs and cocoa sourcing operations.	groups, thus moving to a full private sector service delivery model. 2. For MARS - it will provide a direct opportunity to see how having non-technical village facilitators working alongside Cocoa Doctors can increase adoption rate from technical training. e.g. VF supporting technical training but also doing follow-up with each farmers. 3. For MARS - to learn if activities on financial literacy and savings and credit group development with bank linkage under READSI increases farmers' willingness and ability of farmers to access mainstream loans to use for their improved cocoa production.	and reliable data on the impacts and effectiveness of different activities.	envisaged under this activity which primarily focuses on co-location of already planned activities and effective knowledge sharing. If significant additional costs arise due to extra activities to take advantage of opportunities from this co-location then, in principle, costs will be shared on an equal basis.
4. Joint exploration and piloting of cocoa financing schemes to support orchard rehabilitation and/or replanting	MARS and READ SI will work together, including with their respective partner banks to design and test financing schemes for smallholder rehabilitation and/or replanting of cocoa orchards. This is expected to involved tri-partite collaboration with partner banks in order to test longer term loan products as well as insurance products to mitigate risks during the rehabilitation period which may take 3-6 years. On insurance, this may also be part of the READ SI collaboration with MoA's Dept of Agricultural Finance on agricultural insurance. Preliminary discussion with commercial banks during the READ SI design process, including with Mandiri bank, indicate that while some of the GoI promoted lending products such as KUR can in theory provide long term loans bundled with loan insurance, these are not yet currently offered by the banks offering KUR in part as their systems cannot support it. However, banks such as Manadiri have expressed interest in investigating this further and possibly piloting such products as they recognize the market opportunity for this loan product. These are the types of opportunities that will be jointly pursued between MARS and READ SI during the programme.	The two biggest challenges are the length of the loan finance requires, typically 3 years to first income and total 6-7 years loan term combined with mechanism to offset the risk to the financier - for example from the farmers not adopting the agreed rehabilitation regime or from external factors such as drought. The pilots will therefore need to address these two critical barriers. Mechanisms used in other aspects of financial service delivery to small farmers may be relevant to adapt and pilot here, such as: • group guarantee mechanisms (both for financial risk but also technical compliance with the rehabilitation plan) • Aggregation and "channelling" of loans through farmers groups to reduce the transaction costs and increase the recovery rates.	This is a complex problem for which there are not currently any clear solution. As such both partners will need to be open-minded and realistic in their expectation while at the same time committed to actively developing and testing the opportunities that emerge.

Mondelez's Cocoa Life Programme - READ SI PPP (prospective)

- 472. Mondelez launched its global Cocoa Life programme in Indonesia three years ago and is active in Sulawesi and Sumatra. Mondelez state that "Cocoa Life aims to reach more than 200,000 farmers across six countries, benefiting more than a million people. Mondel z International's ultimate goal is to sustainably source all the company's cocoa supply, mainly via Cocoa Life".
- 473. Cocoa Life was officially launched globally in 2012 and is the evolution of Cadbury's Cocoa Partnership programme launched in 2008. Cocoa Life therefore draws on almost a decade of hands-on experience of sustainable cocoa community development. This is evident from the quality and coherence of the approach now being deployed in Indonesia. As of December 2015, Cocoa Life had reached 76,600 cocoa farmers in total in the six cocoa origin countries in which it works (Cote 'Ivoire, Ghana, Indonesia, India, Brazil, Dominican Republic)
- 474. Cocoa Life shares similar aspirations and working approach to READ SI, in that they:
 - (a) combines an integrated package of social mobilization with technical training and support on production;
 - (b) deal more broadly with livelihoods in the community, financial literacy and have a focus on women's empowerment
 - (c) seek to develop meaningful partnerships with other specialist implementing partners to complement their own core competencies rather than trying to cover all aspects by themselves in isolation
 - (d) measure and publish real impacts and tangible results based on similar measures (farm net incomes, yields etc.).
- 475. In terms of its scope within cocoa communities, Cocoa Life has five pillars to its work in a cocoa community:
 - (a) Farming: helping farmers men and women improve yields and earn higher incomes.
 - (b) Community: enabling cocoa farming families to create the kind of communities they and their children want to live in; including an emphasis on increasing women's participation and decision making in the community.
 - (c) Livelihoods: improving business skills and helping to develop additional sources of income to lift people out of poverty.
 - (d) Youth: activities to respect and support child rights; and making cocoa farming a more attractive profession for young people.
 - (e) Environment: protecting the landscape in which cocoa is grown to maintain ecosystems and farming land for future generations
- 476. It is also notable that Cocoa Life is explicitly aligned with Mondelez's cocoa sourcing operations. This means that Cocoa Life is implemented with farmers in their supply chains and that the buying contracts are aligned with Cocoa Life and vice versa. This would appear to greatly increase the potential for sustainability and scale. Indeed, the Cocoa Life programme managers report that they have had most success to date in raising cocoa farmer incomes in Indonesia where the technical farmer support on improved cocoa production practices are delivered as embedded services in the supply chain by agronomist and trainer working directly for the cocoa buyers (i.e. Mondelez's suppliers) as opposed to being delivered by a third party or NGO. This is an important lesson for consideration in developing a potential partnership between READ SI and Cocoa Life.
- 477. A preliminary view suggests that the two programmes appear to be potentially highly complementary in terms of their scope and focus, as illustrated in the matrix in Figure 2, but

also importantly in their desire to deliver impacts through well designed partnerships. Consequently, following initial discussions, there is strong interest from both Mondelez Indonesia and READ SI to further develop a practical partnership in Sulawesi.

- 478. Initial discussions were very positive, and suggest that there may be scope for an initial partnership in several districts in Sulawesi, possibly in West Sulawesi. This may be on the basis on Mondelez (and its suppliers companies) addressing the first pillar (on cocoa farm technical training and support via embedded services) and READ SI supporting the other pillars of community planning, livelihoods (i.e. non-cocoa agriculture, non-farm livelihoods, savings and credit, financial literacy), youth and the environment.
- 479. Currently in Indonesia, Cocoa Life's main non-commercial partners are NGOs, such as Save the Children, Swiss Contact and local partner NGOs, who primarily develop the non-cocoa aspects of the Cocoa Life package of investments. In the case of Swiss Contact they are understood to also deliver farmer training to cocoa farmers in some Cocoa Life locations. It is understood that, at present, Mondelez does not yet have a direct field partnership with Gol on Cocoa Life, but appears keen to develop one given the potential scale and outreach that such a partnership could achieve.
- 480. To further these discussion the MoA team leading the READ SI design will visit ongoing Cocoa Life pilots in Sumatra in October 2016 with the Cocoa Life Director for Indonesia to develop a practical framework for the partnership under READ SI. While on paper there appears to be a high degree of complementarity, the two programmes are not identical and will need some adaptation in the field if they are to work smoothly together. One aspect of Cocoa Life which is not explicitly covered in READ SI at the village level is environment and local landscape protection. This is something that would need to be addressed during further detailed discussions to set-up the partnership.
- 481. It is expected that a detailed partnership proposal can be developed by early 2017, so that it can be included in the READ SI final design prior to negotiation between GoI and IFAD. some budget resources have already been included in the READ SI Costab for such a partnership. These can be further detailed during the detailed design of the partnership. If the budget resources required from READ SI go beyond what has already been provisioned, then part of the USD5 million "unallocated" funds in the Costab could be re-assigned for this purpose.
- 482. It is noted that while there is strong interest from both sides at a technical level, any final partnership would be subject to approval and authorization from the senior management of Mondelez Indonesia and MoA.

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Figure 2: Cocoa Life (Mondelez) and READ SI complimentarity matrix

	Cocoa Life				
READ SI	Cocoa farming	Community Development	Livelihoods	Youth	Environment
1.1 Social mobilization					
1.2 Agriculture and livelihoods					
Cocoa					
farming					
Rice and					
other crops					
Homestead					
gardening					
Non-farm					
livelihoods					
Small					
infrastructure					
1.3 Savings and credit					
Financial & business					
literacy					
Savings & credit groups;					
Bank linkages					
1.4 Nutrition					
Women's homestead					
gardening groups					
Nutrition coaching;					
Mother & child networks					

2.5 Livestock production and health services and markets

- 483. Livestock will be a flagship product in NTT given its importance to farmer there. A vibrant livestock sub-sector in NTT demands, among other things, an effective and efficient system of animal production and health services. Over the medium term, as the local livestock sector becomes increasing market-oriented with more intensive smallholder livestock production, such animal production and health service will need to be delivered primarily by private providers operating in the villages in order to meet the demand for services from an expanding subsector.
- 484. Initially, in NTT only, READ SI will fund the training and establishment costs of 6 animal health and production technicians (AHPTs) covering 3 districts each. AHPTs will be private sector, part-time farmers. Training will be: (i) delivered at the Kupang Agriculture Training Centre; (ii) curriculum will be a tailor-made module approved/designed by READ; (iii) course duration will be 2 modules of 3 weeks each (i.e. basic plus refresher); Training costs are estimated at \$770 per trainee while AHPT establishment costs are \$2,025 each. In addition, READ SI will fund an information and awareness campaign estimated at \$500 per AHPT. It is assumed that the AHPT clinic/office refurbishment will be funded by each AHPT. This technical training at the ATC will be accompanied by a structured programme on on-the-job professional coaching and follow-up by professional livestock staff of the district DINAS which is conducted in the technicians own place of work. Such follow up should be a minimum of one visit per month for an 18 month period to ensure the technician develop the deep confidence and skills needed to be a trusted service provider in their community. Technician will be provided with a starter package of equipment and medicine and vaccines once they have completed their ATC training.

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- 485. Subject to satisfactory progress being made by the group of private livestock technicians, READ SI will then review experience from elsewhere in Indonesia and Asia on the development of networks and associations for the technicians to provide mutual professional support and backstopping and raise the sustainability of these services over the longer term. For example, in Cambodia, district-level associations of private livestock technicians have been operating successfully in some area for more than 20 years with minimal external support.
- 486. At mid-term, READ SI will review the experience and lessons from the livestock production and service market development in NTT and assess potential and appropriateness for this to be scaled-up into other READ SI districts outside of NTT.

III. Component 3: Policy and strategy development support

- 487. It is widely recognised that the agricultural sector policy environment in Indonesia has not kept pace with the changing requirements of the sector, and that the substantial policy analysis conducted in the country much of it outside Government has to date had limited influence on national policy. Today, the sector faces major challenges in its modernization, and to make use of the opportunities and meet the demand for both national food security and export, there is an urgent need to develop a policy and institutional framework that catalyses increased investments from the private sector, including small farmers themselves, and more effective use of public resources. Policies and institutions to facilitate the scaling up of READ represent an important dimension of this.
- 488. At this stage, what is critical is to bring ownership for policy analysis and its use to inform strategies and decisions within Government, and in particular the Ministry of Agriculture. In the context of READ IFAD provided limited support to enable the Ministry to conduct some basic policy analysis itself: this it did, and it strongly benefitted the scaling up process. Now, the Government of Indonesia has requested IFAD to continue this policy support and expand it, to possibly also inform the preparation of the 2020-2025 National Medium-Term Development Grant. Towards this end, IFAD has allocated a USD1 million grant to support policy and knowledge management activities, and the associated capacity building work on which they depend.
- 489. In line with READ SI's programmatic approach, the objective of the component is to strengthen policy and institutional framework for smallholder agriculture. This will include informing national policies and programmes, documenting and scaling up best practices and building public capacity to effectively deliver services in support of inclusive rural growth.
- 490. The grant will be housed within the MoA, in order to ensure a direct link between policy analysis, recommendations and operations, and to build the in-house capacity (and demand) for analytical work. The funds will be administered, and the activities led, by the NPMO, where the Knowledge Management Officer will have specific responsibility for facilitating, and supporting, the implementation of the activities. This will not only ensure accountability, but it will also assist the process of ensuring that successful piloted innovations inform new programmes and policies and further READ SI's scaling up agenda.
- 491. The activities will be guided by and implemented in close coordination with the MoA's Secretary General's (Set-Gen) office, so as to ensure the policy-level buy-in and clout. The activities will involve different units within the Ministry Specific for example AAEHRD on extension issues, as well as other key agencies at national and district. The Ministry will also work closely with BAPPENAS, both in the identification / confirmation of specific priorities for policy activities under READSI, and in drawing on that agency's experience with its own on-going knowledge management and policy dialogue initiatives. The activities will thus link to the policy dialogue platform on irrigated agriculture under BAPPENAS, supported by the IFAD-funded IPDMIP. Given the earlier start-up of this platform, it is expected that READ SI can draw lessons learned in terms of operations and institutional set-up. Further, there is a thematic complementarity, particularly around the issue of rice seeds, which will benefit both investments; and on this issue in particular, there will be close collaboration between the projects.
- 492. While some policy analysis may be conducted within the Ministry of Agriculture, the project will also draw on local knowledge and analytical capacities where necessary. Such expertise can be found in institutions such as the Indonesian Center for Agricultural Social Economics and Policy Studies (ICASEPS), research institutions within the Indonesia Agency for Agricultural Research and Development (IAARD), both of which report to MoA; as well as the universities, such as the Institut Pertanian Bogor, (the Agricultural University).

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Component outcomes

Outcome 3:	18. At least 2 sector-wide policy assessments undertaken and discussed
Supportive policy and institutional	at national (and district if applicable) level.
framework for smallholder agriculture	 M&E and KM system established at MoA level that facilitates the identification and scaling up of successful innovations in smallholder agriculture.

- 493. The overall expected outcome for this component is a supportive policy and institutional framework for smallholder agriculture, including:
 - (a) increased capacity to supply, and demand to use, analytical guidance for public investments and formulation of effective agriculture policies;
 - (b) Increased capacities of public institutions (particularly the Ministry of Agriculture) so that they have the knowledge and skills to identify, analyse and implement national policies, as well as to mainstream successful models in their regular programme of activities;
 - (c) systematically strengthened knowledge management and M&E systems to generate evidence-based lessons, including from both positive and negative experiences, and developing mechanism for these to be used to inform public investment decisions; and
 - (d) well documented programme knowledge and data to engage in policy dialogue aiming at addressing identified policy issues and promoting the mainstreaming of successful models into national policies.

Activities and Thematic focus areas (indicative)

- 494. The component is expected to be able to support activities across the entire policy cycle, from the identification of policy issues, to policy analysis, approval, implementation and monitoring. It will have a focus on addressing priority policy analysis and operational effectiveness issues relevant to smallholder agricultural development in Indonesia, and specifically those relevant to the policy and institutional challenges associated with the scaling up of READ.
- 495. Specific priorities will be agreed through each annual work plan and budgeting process and in coordination with the key government agencies involved (MoA and BAPPENAS). The first set of priorities, arising from the discussions held during design, may include:

with Bappenas

(a) assessment of rice seed sector and fertiliser policies and approaches, linking to the IFAD-supported Policy Dialogue Platform on Irrigated Agriculture in BAPPENAS and aiming to informing the 2020-2025 National Medium-Term Development Plan.

with Set-Gen MoA

- (b) strengthening of both strategic knowledge management and policy analysis capacity within MoA, and the culture of drawing on evidence for policy-making decisions, under the leadership of Set-Gen.
- (c) assessment of the strengths, weaknesses and key success factors from the READSI experience of its PPPs in the cocoa sector and how these lessons can be more widely replicated in MoA in support of its strategic objectives.
- (d) with Set-Gen and READSI evaluation of alternative approaches for improving the effectiveness and efficiency of central investment programmes in the agriculture

sector via Indonesia's decentralized implementation modalities, using READSI as a practical pilot for example by:

- (i) Piloting support to District governments to develop improved evidence-based local agriculture development strategies and investments plans, and
- (ii) Facilitating new dialogue between central and provincial investment programmes of MoA and district authorities to achieve greater harmonization of investments within a District to better support local agricultural development plans.

with READSI/AAEHRD

- (e) developing processes and tools for the initial district institutional capacity assessment and the subsequent institutional strengthening processes that are necessary to support the wider roll-out of the READ programme into new districts and that may be of wider relevance to other central investment programmes delivered by District governments.
- (f) Strengthening of strategy and approaches to develop a demand-driven public extension service that responds to farmer demand, including: i) an HR development strategy to establish and sustain a suitably skilled and motivated cadre of extension workers; and ii) an improved framework and systems for the targeting, performance management and resourcing of this cadre of improved extension workers within a decentralized government system.

Appendix 5: Institutional aspects and implementation arrangements

- 496. READ SI will follow the overall implementation arrangements of READ and will inherit the strong management foundations that have underpinned READ's success. At the same time it will also need to adapt some arrangements as it evolves in to a programme management framework (from a standalone project).
- 497. **key principles** on which READ SI implementation arrangements will operate are:
 - (a) Designed to operate within mainstream government systems and processes
 - (b) Expanding strong core management team, including bringing in best managers from READ 1 district to more core roles in new READ SI programme
 - (c) Building strong systems and processes to maximize management efficiency (especially given high work load of AAEHRD in IPDMIP and READ SI)
 - (d) Build responsibility and accountability at all levels in the programme
 - (e) Benchmarking between districts and within districts and staff, enabled by independent monitoring and evaluation
 - (f) Incentives for strong performance, to foster self-motivation, but with mechanisms to address under-performance

I. Institutional arrangements

- 498. **Steering Committee**. READ SI will be overseen by a Steering Committee which will have powers to take key decisions on the overall direction of the programme. It is proposed that the Steering Committee is Chaired by a senior official of the Ministry of Agriculture and Co-chaired by BAPPENAS.
- 499. Members of the Steering Committee should include representatives of:
 - (a) Government Central: Ministry of Villages, Ministry of Home Affairs
 - (b) Government Sub-national: Representatives of READ SI Districts
 - (c) PPP partners: from cocoa sector and banking sector
 - (d) Other key implementing partners and stakeholders
- 500. For effective work and decision making, members will be appointed for not less than one year and total membership of the Steering Committee should not exceed 20 persons
- 501. **Executing Agency** will be the Ministry of Agriculture on behalf of GoI and the Agency of Agricultural Extension and Human Resource Development will be assigned as the National Programme Management Unit on behalf of MoA.
- 502. **Ministry of Finance** will act as the official Representative of the Government of Indonesia as the Borrower/ Recipient. In this role MoF will be responsible for: (i) Fulfilling the government fiduciary oversight and management responsibilities; and (ii) Providing sufficient counterpart contribution in a timely manner to finance the programme activities, including payment of government staff salaries; (iii) Timely processing WAs, approval of procurement actions and other necessary documents according to the agreed operating procedures.
- 503. **NPMO** will be led by a Programme Director supported by three Deputy Programme Directors. The role of two of the Deputy Programme Directors is to provide overall coordination and oversight of all programme activities within a number of provinces and ensure adequate senior presence and support of the programme management out in the READ SI districts. In addition,

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Appendix 5: Institutional aspects and implementation arrangements

the third Deputy PD will oversee financial management, procurement and programme administration issues, including planning, M&E and reporting.

- 504. While the NPMO has overall responsibility for programme delivery, each of the Components has specific implementation arrangements. :
 - (a) Component 1: BAPPEDA and their relevant technical agencies e.g. BAPELLUH, DINAS Pertanian will have prime responsibility for programme delivery within their districts. Staff from the specialist implementing partners on social mobilization, agricultural extension and rural finance assigned to each District will work as an integrated part of the District implementation team and be based in the relevant agency team (similarly at sub-district level). The District teams will be provided with technical backstopping and monitoring by the corresponding provincial agencies, especially BAPPEDA and BAKORLUH, as well as from the NPMO teams. There will be a more systematic process for engagement of Sub-district (Camat) and village heads (Kepala Desa).
 - (b) Component 2: The NPMO will have primary responsibility for delivery of activities under the four sub-components. In the case of cocoa and rural finance, PPP's will be a central mechanism. Under sub-component 2.1, the Directors of collaborating ATCs will be accountable to the NPMO to provide more relevant in-service training to agriculture extension staff.
 - (c) Component 3: Will be operationally led by a unit of MoA with the relevant mandate under the Direction of the Secretary General of MoA. (to be confirmed during Final Design). The NPMO will provide overall support to the component.
- 505. **Specialist implementing partners** for social mobilization and rural finance will be contracted centrally by NPMO and operate as an integrated part of the implementation teams, hosted by the relevant units at national, provincial, district and sub-district level. For this purpose, two specialist service providers will be procured as institutional service contracts by the NPMO rather than hiring individual consultants. This will be similar to the arrangements for the social mobilization TA adopted under READ.
- 506. **Provincial Programme Support Units** (PPSU) will be set-up in each Province. PPSU will primarily focus on programme administration functions, such as financial reporting, M&E and planning. They are considered necessary to provide closer support and backstopping to the District PMOs given the increased geographical coverage of READ SI. The PPSU are a support unit and as such will not lead any activities nor direct activities in districts. PPSU are expected to be hosted by the provincial agency responsible for extension (currently Bakorluh) and will also host the provincial staff of the contracted specialist implementing partners for Social Mobilization and Rural Finance.
- 507. **District Programme Management Office** (DPMO) will be set up in each district hosted by Bapeluh. DPMO will primarily focus on implementation of district level activities, primarily described in Component 1. DPMO will fall under the guidance of Bappeda and be hosted in Bapeluh with support from Dinas Pertanian, Dinas Perkebunan and Dinas Peternakan.
- 508. **Senior Technical Assistance** will be highly focused. There will be a small amount of senior national and international technical assistance, primarily at the NPMO level and weighted towards the start of the programme to help establish the new programme systems and approaches. This senior TA will explicitly focus on advising and providing senior professional support in specific areas of Programme Management to the NPMO and will not be used to substitute for capacity in the programme team.
- 509. **Staffing.** READ SI will operate on the principle of having a small high performing team and avoid large number of staff and consultant. At the same time it is recognized that READ SI, as well as IPDMIP, represent a substantial increase in workload for the NPMO.

Appendix 5: Institutional aspects and implementation arrangements

- 510. Within Districts, staffing will be very similar to that under READ, with the additional of two District Finance Advisors per district.
- 511. At the NPMO, staffing will need to be expanded in specific areas especially:
 - (a) Three Deputy Programme Directors to provide more senior management time to be out supporting districts
 - (b) M&E and KM unit would need to be substantially strengthened, with additional short term inputs to design and establish the improved M&E systems under READ SI (e.g. district benchmarking; tablet-based data collection; household level impact tracking from farm books; identifying, documenting and communicating best practices in the programme etc.)
 - (c) Specialist technical staff (from contracted specialist technical partners) focusing on:
 - (i) social mobilization activity management
 - (ii) rural finance activity management
- 512. In order to cope with the management reach across many districts, there is also likely to need to be some increased staff time input at provincial level, especially:
 - (a) MoA: programme support and monitoring by BOKOLUH on behalf of NPMO. As well as management level support, this may also include having a full-time M&E officer attached to each province to provide backstopping and support to Districts physically closer to the Districts (as an out-posted position from the M&E unit of the NPMO)
 - (b) Social mobilization: management and backstopping of District SM coordinator is by Provincial level SM managers. Typically with one provincial level SM manager will oversee two provinces. These are posts within the SM NGO service provider contracted to the programme.
 - (c) Rural finance: management and backstopping of District Finance Advisors by Provincial Finance Advisors and National Finance Advisor. Typically with one PFA covering two districts. These are posts within the contract for the specialist implementing partner for rural finance.

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

513. The planning, M&E and KM process will build on READ but also adopt key aspect of best practice from other projects in Indonesia and the region, notably from CCDP. These will be further developed during final design and the Programme Implementation Manual, but are briefly described below.

Planning

- 514. Planning processes and schedules within READ SI will be harmonized with the mainstream planning process of GOI both centrally and at District level.
- 515. **Annual AWPB Approval Process:** During the final quarter of each financial year, the READ SI NPMO will prepare the AWPB for the following year. The AWPB will be prepared by consolidating (1) the plans from each District, primarily covering Component 1 (2) plans associated with each of the four sub-components under Component 2 and policy and strategy activities, primarily led by the relevant NPMO teams, and (3) plans for overall management of READ SI.
- 516. The AWPB will be submitted by the Programme Director through Ministry of Finance and approved by the annual meeting of the Steering Committee (SC). Because of the risk of timing difficulties arising, the AWPB will be deemed approved if there is no comment by the members of the Steering Committee or no meeting is held after a lapse of time of two weeks after submission of the AWPB for review by the SC.
- 517. The AWPB will cover both the IFAD loan and grants within a single AWPB though highlighting which activities are specifically supported by the grant.
- 518. Districts are the primary level of intervention for READ SI and so the primary intervention planning will be done at District level. This includes all activities under Component 1. Planning in the District will be led by BAPPEDA (the District planning and investment agency) and harmonized with the local planning processes and will build on inputs and plans from each village and sub-district.

Monitoring and evaluation

- 519. The M&E and Knowledge Management framework of READ SI will draw on the experience of the Coastal Community Development Project (CCDP) to monitor and gain knowledge about programme poverty reduction and livelihoods impact and how these can be scaled-up and replicated into a programmatic approach. The M&E of READ provides few insights into the dynamics of poverty reduction at the household level or the factors that explain the success of different activities. Instead, information is derived mainly from: (i) extrapolation from agricultural yields; (ii) extrapolation from an improvement in the incidence of poverty at the provincial level; and (iii) the evident support for READ, both within the government and amongst the beneficiaries. READ SI will provide an improved M&E and knowledge management design, which in as far as it relates to targeting will include:
 - A weekly/monthly dashboard that shows progress on key outputs and objectives, including gender.
 - Sex-disaggregated database and indicators on all outcomes, outputs and indicators.
 - Household level analysis of poverty impact that enable an understanding of how different interventions (rice, maize, cocoa, off-farm etc.) impact different poverty causes (land-poor, remoteness, infrastructure poor etc.).

- Regular knowledge sharing and exchange meetings and workshops.
- Social media to support knowledge management outcomes.
- 520. For data collection, READ SI will build on the experience in the wider region and introduce tablet-based electronic data collection directly into a centrally maintained MIS system. This is intended to reduce the time burden of M&E data collection and also improve timeliness and reliability of data in order to make the M&E system more robust and valuable as a management tool.
- 521. To support this move to e-M&E, all field staff will be provided with tablets and smartphones to facilitate this and efficient group based routine communication e.g. via WhatsApp.

Learning and knowledge management

- 522. READ SI is the first phase in the scaling-up of the core READ approach and also comes at a time of increased investment by GoI in agriculture creating a strong demand for evidence-based learning and policy development.
- 523. Given the strong reputation of READ, READ SI is therefore expected by MoA, BAPPENAS and others to generate practical knowledge of what works (and what doesn't work) and how to scale-up investments in the successful approaches on a more programmatic basis. Effective and efficient learning, knowledge management and communication are therefore central to READ SI longer term objectives. Accordingly, READ SI will invest in good quality, evidence-based knowledge management in order to contribute to policy development processes.
- 524. A complimentary IFAD grant of USD1 million is anticipated to support specific efforts on knowledge management within READ SI and also to contribute to broader policy and strategy processes in MoA. The grant will also be available to support policy processes in other aspects of MoA beyond immediate relevance to READ SI. (See Component 3)
- 525. Within MoA, part of the grant is expected to support a unit working on knowledge-based policy processes under the direction of a senior MoA leader, possibly the Secretary General (to be confirmed during final design). READ SI will also strengthen institutional capacity related to knowledge management and evidence-based policy processes within MoA. In this context, the programme will support targeted institutional strengthening activities these areas. This unit and grant activities are expected to be closely linked to the work on policy supported in BAPPENAS linked to the IPDMIP project.
- 526. Within READ SI implementation itself, the benchmarking process outlined above will enable the programme to quickly identify examples of good practice in different aspects of the READ approach. These examples of good practice can then be quickly document and rolled-out within the rest of the programme. READ SI is therefore expected to be able to implement a system of continuous improvement. The process of identify and documenting best practice will also be a useful source of field evidence to feed into the wider policy processes in MoA.

Financial Management Arrangements

I. Summary of Risk Assessment

- 527. This Financial Management Assessment (FMA) had been prepared in accordance with IFAD's Guidelines for the Financial Management and Analysis of Projects (the Guidelines), publication Financial Due Diligence: A Methodology Note, and the Guidance Note on Undertaking Financial Management Assessment at Design. This FMA incorporates the Financial Management Internal Control and Risk Management Assessment required by the Guidelines. The purpose of this FMA was to determine the robustness of the accounting, financial controls and internal audit arrangements, and the capability of the EA and IAs to meet all the fiduciary requirements, which are set out in the financing agreement and other Programme documents. Annex 2 to this Appendix presents the consolidated results of the completed FMA Questionnaires from the executing agencies (EA) and implementing agencies (IAs). This report was prepared by reviewing documents and interviewing the staff of the Government agencies (AAEHRD and DGAIF of MoA), and also consultants at WISMP-2 NPMO at DGWR of MPW, and Independent Monitoring and Evaluation (IME) Consultant hired by BAPPENAS. The reasons for the discussions on WISMP-2 project were because: (i) AAEHRD will also be one of the national implementing agencies for the agricultural activities in the new irrigation project (IPDMIP) financed by ADB and IFAD, where flow of funds from the national to regional governments will use on-granting mechanism and procedures, in which AAEHRD has no prior experience before; and (ii) in the previous draft READ SI design report, it was envisaged that on-granting mechanism will be used, similar to IPDMIP. However, during the kick-off meeting on 14 July 2016, AAEHRD proposed that instead of using on-granting, READ SI will use De-concentration (DEKON) and/or Tugas Pembantuan/TP mechanism which they are already familiar with. During this mission, the decision on which fund flow mechanism to be used had not been made yet, and will be discussed further with and agreed by GoI (MoF, MoA, BAPPENAS) and IFAD. For practical purposes, this report includes both DEKON/TP and On-granting mechanisms. After the decision has been made, PIM will be prepared accordingly.
- 528. The significant strengths are that AAEHRD as the Executing Agency and some districts in Central Sulawesi province already have experience with the successful READ project, where de-concentration and TP mechanism was used. The weaknesses are that: (i) AAEHRD and some districts have no prior experience in using on-granting mechanism; (ii) the non-READ districts may not have experience with IFAD financial procedures which may affect the process of preparation of Withdrawal Applications (WAs), hence the disbursements. Under these circumstances, the overall FM risk rating is **Medium (M)**.
- 529. **Conclusion**. The assessments indicate that as a whole, the prevailing government financial, accounting, and auditing rules and systems meet the generally acceptable international accounting and auditing standards. The Government has adequate internal control systems and financial reporting arrangements. The Executing Agency (AAEHRD) and some Implementing Agencies (IAs) have worked in the past with international donors such as ADB, IFAD, and the World Bank, and have implemented the international donors' financed projects well. The overall performance of the Executing Agency and Implementing Agencies in implementing financial management of the previous and ongoing projects is acceptable. Mitigating actions were identified during the discussions together with the above stakeholders as summarized in Table 3.

II. Programme financial profile

- 530. The READ-SI programme was costed in 2016 prices and is expected to be implemented over a period of 5 years from 2018 to 2022. The Programme will be implemented in 24 Districts in 6 provinces in Sulawesi, West Kalimantan and NTT Provinces (total 8 provinces). The Programme will focus on poor districts with 450 villages and 76,500 households as direct beneficiaries.
- 531. The programme consists of four components:
 - (a) Component 1: Village agriculture and livelihoods development with the following subcomponents:
 - (i) Community mobilization
 - (ii) Agriculture and livelihoods
 - (iii) Savings, loans and financial literacy
 - (iv) Nutrition, including early childhood nutrition (i.e. "the first 1000 days")
 - (b) Component 2: Services, inputs and market linkages to improve the performance and service delivery of the following key services
 - (i) Agricultural extension services
 - (ii) Financial services
 - (iii) Seed supply markets and system
 - (iv) Cocoa farmer support services and markets
 - (v) Livestock production and health services (NTT only)
 - (c) Component 3: Policy and strategy development support to build the capacity of public institutions at the national and district level to generate the information, analysis and knowledge required to guide public investment and deliver services in support of inclusive rural growth This component will be primarily funded through an IFAD grant and implemented under the Secretariat General of MoA, but managed as an integrated part of READ SI.
 - (d) Component 4: Programme Management at national, provincial and district levels.
- 532. The total programme costs, including physical and price contingencies, duties and taxes are estimated at USD 87.28 million over a five-year implementation period. Programme investments are organized into three major components: (i) Village agriculture and livelihoods development (55.8% of the costs); (ii) Services inputs and market linkages (18.8% of the costs); and (iii) Policy (1.3% of the costs). NPMO and provincial offices programme management costs represent 6.6% of the total programme cost while district offices costs⁴² are 11.8% of the total cost. An unallocated amount of USD 5 million, or 5.7% of the total programme cost, is also included in the budget in order to grant financial flexibility to the programme.
- 533. Financing: An IFAD loan will cover USD 58.88 million, or 67.5%, of the total programme cost. The Government of Indonesia will contribute USD 15.07 million (17.3%) by financing salaries of all NPMO, provinces, districts and sub-districts staff and by waiving taxes and duties. The programme beneficiaries are expected to contribute USD 5.84 million (6.7% of the programme cost) mostly to co-finance the purchase of basic and advanced agriculture mechanization under sub-component 1.2 and "private sector partners" which are companies investing on cocoa-related activities will finance USD 6.49 million, or 7.4%, of the total programme cost. The proposed financing plan is summarized in Table xx below.

⁴² Costs that are strictly related to the direct implementation of programme activities.

III. Implementation Arrangements

A. Implementing and participating organizations with fiduciary responsibilities

- 534. READ SI will follow the implementation structure of READ and will inherit the strong management foundations that have underpinned READ's success.
- 535. Steering Committee. READ SI will be overseen by a Steering Committee (SC) which will have powers to take key decisions on the overall direction of the programme. It is proposed that the Steering Committee is Chaired by a senior official of the Ministry of Agriculture and Co-chaired by BAPPENAS. Members of the Steering Committee should include representatives of:
 - (a) Government Central: Ministry of Villages, Ministry of Home Affairs
 - (b) Government Sub-national: Representatives of READ SI Districts
 - (c) PPP partners: from cocoa sector and banking sector
 - (d) Other key implementing partners and stakeholders, such as farmers' organizations
- 536. For effective work and decision making, members will be appointed for not less than one year and total membership of the Steering Committee should not exceed 20 persons.
- 537. Executing Agency will be the Ministry of Agriculture on behalf of GoI, and the Agency of Agricultural Extension and Human Resource Development (AAEHRD) will be assigned as the National Programme Management Office (NPMO) on behalf of MoA, continuing from READ, and will be responsible for the overall READ SI programme implementation.
- 538. Ministry of Finance will act as the official Representative of the Government of Indonesia as the Borrower/ Recipient. In this role MoF will be responsible for: (i) Fulfilling the government fiduciary oversight and management responsibilities; and (ii) Providing sufficient counterpart contribution in a timely manner to finance the programme activities, including payment of government staff salaries; (iii) Timely processing WAs, approval of procurement actions and other necessary documents according to the agreed operating procedures
- 539. The NPMO will be led by a Programme Director supported by two Deputy Programme Directors. The role of the Deputy Programme Directors is to provide overall coordination and oversight of all programme activities within a number of provinces and ensure adequate senior presence and support of the programme management out in the READ SI districts. The NPMO will provide overall support to the components. Technical specialists (consultants) will be contracted centrally by NPMO and operate as an integrated part of the implementation teams, hosted by the relevant units at national, provincial, district and sub-district level.
- 540. PPSU (Provincial Programme Support Unit) will be set up in each province with primary focus on programme administration functions, such as financial reporting, M&E and planning. They are considered necessary to provide closer support and backstopping to the District PMOs, and are expected to be hosted by the provincial agency responsible for extension (currently BAKORLUH).
- 541. DPMO (District Programme Management Office) will also be set up in each district, responsible for the programme implementation in their respective districts.
- 542. Each of the Components have specific implementation arrangements as follow:
 - (a) Component 1: BAPPEDA and their relevant technical agencies e.g. BAPELUH, Dinas Pertanian, etc., that will have prime responsibility for programme delivery within their districts.
 - (b) Component 2: The NPMO will have primary responsibility for delivery of activities under the four sub-components.

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Appendix 7: Financial management and disbursement arrangements

- (c) Component 3: Will be operationally led by a unit of MoA with the relevant mandate under the Direction of the Secretary General of MoA. (to be confirmed during Final Design).
- (d) Programme management at NPMO, PPSUs and DPMOs.
- 543. Based on interviews during the mission, MoA, in particular the AAEHRD, it already has enough experience to implement the donor financed projects from the World Bank, UNDP, and IFAD, for examples NAEP, DAFEP, FEATI, P4K, and READ. AAEHRD will also implement Component 1 of a new irrigation project financed by ADB and IFAD (IPDMIP) that will be negotiated this year (2016/2017)

IV. Financial Management Risk Assessment

A. Inherent risks: Country issues, Entity Risks, Programme Design

- 544. In 2012 a team of World Bank and other donor staff with close involvement of counterparts form the Government of Indonesia undertook a repeat Public Expenditure and Financial Accountability (PEFA) assessment on Indonesia to update the previous assessment done in 2007, which utilized the PEFA measurement framework. The report focuses on the major changes in the performance of the Public Financial Management (PFM) system from 2007 to 2011 and the on-going reforms that should impact an assessment in the future. The report indicates that Indonesia has made steady progress to strengthen the quality of PFM system and processes from 2007 to 2011. The average improvements were made in the five of the six main categories of the budget cycle which are: (i) the comprehensiveness and transparency of the budget; (ii) policy-based budgeting; (iii) predictability and control in budget execution; (iv) accounting, recording and reporting; and (v) external audit and scrutiny.
- 545. Improvements on the ratings reflect government's commitment to continue its commitment to the reforms set out in the Government White Paper of 2002. The new assessment underlines progress in the area of budget execution, with the development of a unified budget and a Treasury Single Account (TSA) to strengthen the control over spending and cash management. Improvements also have been made in the coverage of fiscal accounts, accounting practices, payroll, internal controls and fiscal risk management. The ongoing capacity building effort to strengthen internal and external audit such as (i) the implementation of computerized Government Financial Management Information System (SPAN) in 2012, which strengthen financial management capabilities; (ii) the new procurement law and introduction of e-procurement and new disclosure policies are in progress. The accrual accounting system (SAIBA) has also been implemented in 2015.
- 546. The government has made considerable progress in the legal and regulatory framework for public financial management. Since the enactment of the laws on state finance, state treasury and state audit in 2003–2004, most of the regulations underpinning the laws have been issued/promulgated.
- 547. The government initiated a medium-term expenditure framework (MTEF) and performance-based budgeting (PBB) in 2008, with ongoing efforts to implement them at the sectoral levels. A new program structure in the government's planning and budgeting documents aligns the government's programs with organizational structures, and establishes clearer lines of accountability for program performance. The establishment of a Treasury Single Account (TSA) in 2009 has improved cash management and planning. Implementation of an automated financial management information system (SPAN) was started in 2012 which permits direct connection with line ministries and other users of treasury resources to access and process financial information, while allowing the Directorate-General of Treasury to meet its obligations for treasury management.
- 548. Budget classification follows international standards in accordance with the International Monetary Fund government financial statistics. Transparency of the budget has been enhanced

with the key budget documents now available on the web. Audits by the Supreme Audit Board show an improvement in the quality of government financial statements. A move to accrual based accounting from cash-based accounting is ongoing, with the process expected to be completed by 2015. Government Regulation/PP No. 60/2008 clarified the role of internal auditors (BPKP) and required all state institutions to implement the Government Internal Control System (GICS) for effective, efficient, and accountable management of state funds, and reliable reporting.

- 549. Decentralization was launched in 2001. Law no. 32 on Regional Autonomy, among other aspects, outlines expenditure responsibilities by tier of government and regulates procedures for the creation of new regional governments. Law no. 33 on Fiscal Balance outlines the system of regional financing, including mechanisms to transfer funds from central to regional governments. The government is fine-tuning and adding depth to the legal and regulatory framework (with lower-level regulations and instruments), and strengthening the government's human resource and systems capacity at all levels.
- 550. The major country accountability issues affecting the country fiduciary environment and that may pose fiduciary risks for the programme are:
 - (a) Salaries for public officials, even the most senior officials, are low compared to the private sector. Indonesia's corruption risk is heightened because the officials receiving low wages are working within a decentralized system of licensing. More than 10 years ago, Indonesia's political power became notably decentralized through the legislation of the so-called Autonomy Laws. Under these laws, the central government entrusts the responsibility for licensing to the provinces. These laws were intended to reduce instances of senior public officials gaining control of lucrative offices.
 - (b) In December 2015 the Berlin-based Transparency International (TI) released its annual Corruption Perceptions Index for 2015 with Indonesia sliding in the rankings despite increased foreign investment and a bigger global profile. According to TI's website, the index "score countries on a scale from 0 (highly corrupt) to 100 (very clean)". While no country has a perfect score, two-thirds of the countries assessed scored below 50, indicating that there is a serious problem of corruption in those countries. Indonesia scored 36 on the scale, showing an improvement from score of 32 in 2012.
 - (c) The assessments indicate that as a whole, the prevailing government financial, accounting, and auditing rules and systems meet the generally acceptable international accounting and auditing standards. The Government has adequate internal control systems and financial reporting arrangements. The EA and IAs have worked in the past with International Donor such as World Bank, UNDP and IFAD and have implemented well the International funded projects. The overall performance of EA and IAs in implementing financial management of the projects is acceptable.

B. Programme Control Risks

(a) Table 3: Financial Management Risks

Risk type	Risk Assessment	Risk Description	Mitigation Measures
Accounting procedures and compliance with IFAD practices	Medium	Although EA and IA's have quite extensive experience and procedures in place to fully comply with acknowledged adequate government accounting procedures and safeguards and also experience with international donors' financed projects, however, some IAs have no or only limited experience in relation to specific IFAD financial procedures	Early establishment of the NPMO, PPSUs and DPMOs as PIUs (before loan signing), clear allocation of financial/ accounting support from experience senior staff and the support from IFAD in capacity building (training) related to IFAD procedures.
Country-Specific Risks	Negligible or Low	PFM reform program such as the introduction of accrual-based accounting in 2015 may impact in the preparation of financial management report.	Efforts will be made to properly monitor the preparation of the financial management report. Trainings to be made available to the NPMO and all PIUs in close coordination with Ministry of Finance.
Entity-Specific Risks	Medium	Unclear job descriptions or delineated of the programme staff to provide clear accountability. In case on-granting mechanism will be used, some IAs have no prior experience with such mechanism	Will establish a clear organizational structure of the NPMO and PIUs and also the TORs of individual consultants and firms that will assist the programme Capacity building in the area of PFM and IFAD's financial management and reporting requirements, especially for empowering local governments; and clear coordination between EA and IAs
Local governments	Medium	Little experience of local governments in implementing community driven development	Allocate consulting support for capacity building on technical and financial management for community driven activities
Coordination between EA and IAs	Medium	Significant investment activities with multi-stakeholder management	Closer monitoring and more consultation to improve inter-coordination within stakeholders
Reporting and Monitoring	Medium	Incomplete and late submission of monthly and/or quarterly financial progress reports may delay preparation and submission of WAs, and affect the SA cash flow	Recruit a financial management specialist to help NPMO consolidate reports from all IAs Develop accounting and financial management manuals to empower accounting system; strengthening the internal audit function; and putting in place systems to ensure data is safeguarded for related development.
Funds Flow - Internal Audit	Medium	Weak internal control for fund flow from MoF to end users. Pre-mitigation financial management risks are assessed as high, including those related to weak internal controls, limited financial management capacity of EA/IAs, weaknesses in internal audit capacities and delayed reconciliations	Coordinate with BPKP to improve internal control system and work closely with EA and IAs to improve the internal control system, specific for the programme and recruit financial management consultants and provide more guidance to improve programme staff capacity.

Republic of Indonesia

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

Risk type	Risk Assessment	Risk Description	Mitigation Measures
External Audit	Medium	Incomplete and late submission of audited project financial statements	Coordinate with BPK/BPKP how to further improve the quality of Audited Project Financial Statements (APFS) and update the TOR for auditors. Recruit financial consultant(s) to further improve the APFS quality.
Procurement matters	Medium	Lack experience with IFAD procedures, especially the PIUs at local government levels in procurement capacity	Intensive coordination between EA and IAs in procurement process, Provide training in IFAD Financial Management, Disbursement and Procurement Procedures.
Overall Risk	Medium		

Financial Management and Disbursement Arrangements

Financial management organization and staffing.

- 551. Programme Financial Management. In each IA, programme staff will be appointed which consist of PPK (project manager), a treasurer, financial assistants, procurement staff and technical staff, with clear job description for key programme positions. The staff appointment letters will be issued by the respective Head of the Implementing Agency prior to negotiations. If necessary, some specialists/consultants and contract staff will be recruited. Procurement is usually handled by a procurement unit (ULP) in the agency. The programme's financial management arrangement will generally follow the government systems but with consideration of IFAD rules and regulations in relation with disbursement documentation, procurement and audit. Due to the inexperience of some of the programme staff to-be with implementing programmes financed by IFAD, particularly at the district level, particular attention is necessary to ensure special provisions for capacity building/training in finance and procurement at NPMO, PPSUs and DPMOs. To ease the preparation of IFAD financial reports and data gathering, it is also recommended to develop a standard format that is user friendly and able to quickly respond to queries on components, categories of expenditures, procurement process, status of expenditures at central and districts level and contract management.
- 552. **Budgeting.** The programme budgeting procedure will follow the annual government budgeting system and process. The budget of the programme will be a part of the MoA budget and included in the government budget document (DIPA). The budgets for provincial and Kabupatens levels will be included in the central budget (APBN/DIPAPusat) and/or APBD/DPA depending on the flow of funds mechanism to be used (DEKON/TP or ongranting mechanism).
- 553. During the final quarter of each financial year, the NPMO will prepare the AWPB for the following year. The AWPB will be prepared by consolidating: (i) the plans from each District, primarily covering Component 1; (ii) plans associated with each of the four sub-components under Component 2 and for Component 3, primarily prepared by the relevant implementing unit teams; and (iii) plans for overall management of READ SI. The AWPB will be submitted by the Programme Director through Ministry of Finance and approved by the annual meeting of the Steering Committee, which will cover both the IFAD loan and grants within a single AWPB, though highlighting which activities are specifically supported by the grant.

Disbursement Arrangements and Flow of Funds

- 554. **Flow of Funds Procedures**. The flow of fund for the programme will follow the general loan scheme. The Ministry of Agriculture/AAEHRD as the Executing Agency (with the NPMO assuming the key responsibility) will be responsible for the programme financially and will manage programme funds. At regional level, PPSUs and DPMOs will established by AAEHRD decree (*Surat Keputusan*/SK) and will directly responsible to the AAEHRD.
- 555. After Ioan effectiveness, the Government will open two Designated or Special Accounts (SA) nominated in USD, in the name of the Ministry of Finance (MoF) at Bank Indonesia (BI), one for the IFAD Ioan funds and one for the IFAD grant funds. Funds in the special accounts will be used to pay for eligible Programme expenses incurred by the NPMO, PPSUs and DPMOs. The modalities of the special accounts for the IFAD funds will be detailed in the Letter to the Borrower, which would be issued by IFAD. MoF will administer the special accounts. The IFAD Ioan and grant proceeds will be disbursed in accordance with IFAD's Loan Disbursement Handbook (LDH).

- 556. In general, there will be four types of disbursement mechanisms for the programme which consist of (i) direct payments; (ii) special commitments; (iii) reimbursements; and (iv) replenishment of the SAs.
- 557. The flow of funds for the programme would be determined by the implementation strategies adopted by the Implementing Agencies which will consist of a combination of: (i) reimbursement from APBN-funded (national revenue and budget) activities which would then be passed on to the local government through *Dekonsentrasi/Tugas Pembantuan (TP)* mechanism (as illustrated by Figures 1 and 2 in Annex 1); and (ii) reimbursement for activities implemented under the pre-financing agreements where on-granting mechanism is used (illustrated by Figure 3 in Annex 1), which is validated by a systemic verification of the various expenditures against approved plans and budget (illustrated by Figure 4 in Annex 1).
- 558. Considering the types of activities that will be implemented in READ SI programme, it is likely that most, if not all, the disbursement will use replenishment of SA mechanism.

Internal Controls.

- 559. Internal control in general needs to be improved. Based on audit reports of IFAD's projects in Indonesia, although the auditors' opinions are of unqualified opinion, however, they still often observed over payments (mostly at the district level) due to weak internal controls, lack of disciplines, and limited knowledge on financial procedures which resulted that the IAs have to pay back the over payments to the State Treasury Office (KPPN).
- 560. Draft Programme Implementation Manual (PIM) will be prepared prior to negotiations and will be revised or improved as needed during programme implementation.
- 561. Before the submission of the first withdrawal application, the borrower will submit to IFAD sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is USD 100,000 or such other amount as IFAD may designate in an advice to the borrower from time to time. The borrower is to consolidate claims to meet this limit for reimbursement and special account(s) claims. IFAD reserve the right not to accept WAs below the minimum amount.
- 562. The NPMO will be responsible for preparing the annual disbursement projections; timely preparing of withdrawal applications, and timely submission of withdrawal applications to IFAD. PPSUs and DPMOs are responsible for collecting supporting documents for the programme expenditures they have incurred, and the NPMO is responsible to compile these expenditure evidences.
- 563. The NPMO/AAEHRD is assigned to demand all PPSUs and DPMOs to (a) in the annual budget- preparations assign budgetary allocations in the DPA in line with the approved AWPs, and (b) to require all PPSUs and DPMOs to submit their payment evidence in a timely manner for verification and subsequent disbursement (in principle not later than 2 months after payment).
- 564. All PPKs are responsible for monitoring procurements and managing the payments for procured works, goods or services. The payments are made by the treasury (*Kantor Perbendaharaan dan Kas Daerah* KPKD) at the request of PPK and following the approval by the budget holders. The fund will be transferred to budget holders through the regular government budgets.
- 565. **Statement of Expenditure (SOE)** The SOE procedure may be used for reimbursement of eligible expenditure and liquidation of advances to the special account(s). The SOE ceiling is USD 100,000 equivalent per individual payment. SOE records should be maintained and made readily available for review by the joint Government of Indonesia and IFAD review or upon IFAD's request for submission of supporting documents on a sampling basis.

- 566. In conformance with Financial Minister's Regulation (PERMENKEU No. 188/PMK.07/2012), loan proceeds for regional administrations (provinces and districts) will be made available through "On-Granting Agreements" (OGA) or Perjanjian Hibah between the Ministry of Finance and the head of the concerned regional administration. These OGA will cover the funding of the majority of the loan-funded activities at the sub-national level. There would be separate OGAs based on the funding sources, one for the ADB-funded activities and one for the IFAD funded activities. An innovation under the READ SI will be the establishment of a mechanism (and provision of technical support) to process re-imbursements directly at the Provincial level (through the Provincial KPPN office) rather than at the Central-level. It is foreseen that under the READ SI, for each administrative level, a two-staged process for establishing "on-granting" agreements (OGA) will be observed between the Ministry of Finance (MoF) and the respective regional administration. A preliminary OGA will be established at programme start-up based on cost estimates (see Table 1) for Components 1 and 2 activities per province and district, mainly covering IFAD funded activities and some start-up funds for the agricultural component. A second (or amended) OGA will be made after the overall program work plan budget (OWPB) has been submitted by the sub-national implementing at Province and Districts concerned and approved by the SC-MoA.
- 567. The following procedures will be applied for entering into an OGA:
 - (a) After Loan Agreement signing, AAEHRD (NPMO), will request to the Directorate General of Fiscal Balance (DGFB), MoF to issue a MoF decree on loan allocation to be made available for local governments based on evaluation.
 - (b) After issuance of the decree, AAEHRD/NPMO will establish for every participating administrative level (districts and province) an initial estimate for performance targets and related fund allocation to be confirmed by the participating administrative level.
 - (c) After the concerned administrative government has confirmed the performance target and related fund allocation DGRD (MoHA) will request to each participating district and province to prepare a formal request to MOF for the concerned on-granting amount.
 - (d) After issuance of these decrees, DGFB (MoF) will prepare the formal on-granting agreements between MoF and the provincial/district governments, which indicate the total loan amount to be made available for all initial start-up activities, including assessment, and the drafting of the OWBP.
 - (e) Relevant provincial/district agencies will assign the SKPDs to prepare the budget for the first year.
 - (f) DGFB in close coordination with AAEHRD (NPMO) and DGRD will prepare the work and budget plan of on-granting (RKA-HPD) which then will be submitted to DGT to produce a DIPA-HPD.
 - (g) In the first year all participating administrations will prepare a comprehensive OWBP for endorsement by the SC.
 - (h) For any amendment to the OGA, the following procedures will be applied:
 - (i) After endorsement by SCof the OWPB the AAEHRD (NPMO) will request to the Directorate General of Fiscal Balance (DGFB), MoF, to issue a decree of Minister of Finance on loan re-allocation to be made available for local governments based on the values as included in the OWPB.
 - (j) After issuance of these decrees, DGFB will amend the formal on-granting agreements between MoF and the provincial and district governments. Relevant provincial and district agencies will assign their SKPDs to prepare AWPS based on the approved comprehensive OWP for endorsement by SC.

- (k) DGFB in close coordination with AAEHRD (NPMO) and DGRD will prepare the work and budget plan of on-granting (RKA-HPD) which then will be submitted to DGT to produce a DIPA-HPD.
- (I) In parallel, the provincial and district governments will issue their own DPA-SKPD.
- (m) With the amended OGA, the participating administrative units have a guarantee that activities as foreseen in the OWPB and included in the approved AWP for the preagreed percentages can be reimbursed for under the loans after having been verified.
- (n) For the implementation of the programme for each participating district or province an overall work plan and budget (OWPB) will be prepared by the involved regional administrations. These OWPB comprise the following details: (i) the kind of activities;
 (ii) it's impact; (iii) its contribution to the loan performance indicators (if applicable); (iv) the year(s) of implementation; (v) the total costing; and (vi) which part of the costs are charged from the loan and which part to other financing sources,
- (o) After the OWPB for each district and or province has been endorsed by SC, for each participating administrative level (district, province, central) it will be used as basis for their: (1) annual financial planning; and (2) after implementation for reimbursement.
- (p) Once the first OGA is effective, the SKPD will start implementing their activities. The first step to be done is to include the AWP activities in the local DPA program for endorsement by the provincial APBD as the activities first have to be pre-financed by the districts using their own financial resources (dana talangan) The local government will request their local treasurer to use budget available in the local government's general treasurer account.
- (q) For Component 2 activities, alternative/optional financing arrangements other than the OGAs may be applied, i.e. for related activities which will be implemented by the Provincial Agricultural Agency with APBN funds using DEKON procedures.

Accounting Policies and Procedures

568. Financial transactions, covering both AAEHRD (NPMO) and IAs (including OGAs) expenditures, will be recorded in the government accounting system and included in government accountability reports. The programme's staffing will include financial specialist and assistants to manage the accounting requirements of the programme. As well as managing the overall accounting system, the financial officers will also be responsible for ensuring adequate records and verification of field-level expenditures. The AAEHRD (NPMO) will prepare: (i) separate consolidated project financial statements reports suitable for programme monitoring purposes, and (ii) aggregate financial reports and submit them to IFAD on a six monthly basis using an agreed format. In the first year of programme implementation, The AAEHRD (NPMO) shall also prepare consolidated financial statements of the operations, resources and expenditures related to the programme in respect of each Fiscal Year to be delivered to IFAD within two months of the end of such period.

Reporting, Auditing and Public Disclosure

569. Auditing Requirements. The AAEHRD will cause the detailed consolidated programme accounts to be audited in accordance with International Standards on Auditing by an auditor acceptable to IFAD. The audited programme financial statements will be submitted in the English language to IFAD within six (6) months of the end of the fiscal year by the EA. The annual audit report will include a separate audit opinion on the use of the special account, SOE procedures and financial loan covenants. The Government has been made aware of IFAD's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited programme financial statements. IFAD reserves the right to verify the programme's financial statements to confirm that the share of IFAD's financing is used in accordance with IFAD's policies and procedures. IFAD requires that the programme accounts be audited (by

approved independent auditors) in accordance with auditing standards consistent with IFAD Guidelines for Project Audits (for Borrower's use).

- 570. Auditors will express an opinion on the annual consolidated financial statements and determine whether programme funds have been correctly accounted for and have been used in accordance with the financing agreements. They will also determine the adequacy of supporting documents and controls on the use of Statement of Expenditures (SOEs) as a basis for disbursement. The auditors will also furnish a separate Management Letter, which will identify any material weakness in accounting and internal controls at all levels and report on the degree of compliance with financial covenants of the IFAD Financing Agreement, including a review of the procurement of goods, works and consultant services.
- 571. The EA will engage the *Badan Pengawas Keuangan dan Pembangunan* (BPKP) to audit the consolidated programme financial statements annually and the audit of the programme EA's/IA's. The EA will submit to IFAD certified copies of audited annual programme financial statements as well as the auditor's report and the management letter within six (6) months of each financial year-end during implementation. The terms of reference (ToR) of auditors have been used by BPKP in other IFAD's projects, and BPKP will allocate adequate budget to properly audit the programme.
- 572. Each IA at national, provincial and district levels is responsible for preparing programme financial statements at latest one month after the end of the considered fiscal year. These IA's financial statements will then be consolidated by the NPMO at latest two months after the end of fiscal year and sent to IFAD. The financial statements will be audited on an annual basis by the national auditing body (BPKP) and in accordance with agreed terms of reference.
- 573. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor. The Government, the EA and IAs have been made aware of IFAD's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the APFSs. IFAD reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to IFAD, or if the audits are substantially delayed. IFAD reserve the right to verify the programme's financial accounts to confirm that the share of IFAD's financing is used in accordance with IFAD policies and procedures.

574. VI. Implementation Readiness

575. The actions needed to mitigate FM risks are summarized in Table 4 below:

Table 4: FM Actions Summary

KEY RISKS	MITIGATION ACTIVITIES/ACTIONS	RESPONSIBILITY	TIMELINE
Need of separate lines for availability and disbursement of IFAD loan and grant funds	During programme-set up to set up clear mechanism for availability and disbursement of loan and grant funds	Gol and IFAD	Before loan signing
In case on-granting mechanism will be used, involved DPMOs not familiar and/or comfortable with the ongranting mechanism	Proper socialization by DG-BANGDA on on-granting mechanism	DG-BANGDA	Before loan signing
Involved agencies not having the financial capability to pre-finance	Proper assessment of financial capacity of involved agencies during OWPB compilation. If limited financial	DPMOs	First Programme Year

KEY RISKS	MITIGATION ACTIVITIES/ACTIONS	RESPONSIBILITY	TIMELINE
programme related activities	capacity, agencies can request certain costly activities to be funded under APBN		
Implementation in 8 provinces and 24 districts	Establishment of PPSU and DPMOs at local government levels, which include all involved agencies will ensure regular coordination to expeditiously address and resolve programme delivery issues at field level and local Govt. level.	EA and IAs in close coordination with SC, BAPPENAS and IFAD.	Formally, post-Loan Signing
	Establishment of an NPMO and SC at the central government level, which will ensure regular coordination to address and resolve strategic and guidance issues at Central government as well as local government. level.		
	The SC will steer overall programme management at the central government level via semi-annual coordination meeting with the NPMO.		
Country level weaknesses identified by the PEFA report - PFM reform program such as the introduction of accrual-based accounting in 2015 may impact the preparation of financial report.	Strengthening of the EA, NPMO, PPSUs and DPMOs capacity in preparing the financial management report will be provided through NPMO's and MoF specialists, with support from IFAD.	EA, NPMO, PPSUs and DPMOs together with IFAD resident mission.	After the establishment of NPMO, PPSUs and DPMOs
Lack of experience, especially at the provincial and district levels in IFAD financial management procedures.	Strengthening of the NPMO, PPSUs and DPMOs' capacity financial management and reporting will be provided through the NPMO financial specialists, and IFAD resident mission specialist.	NPMO, PPSUs DPMOs, and NPMO's specialists together with resident mission specialist.	After the establishment of NPMO and PIUs
High pre-mitigation financial management (FM) related to weak internal controls, limited FM capacity of EA/IAs, weaknesses in internal audit capabilities and reconciliations.	Coordinate with BPKP to improve internal control system. Work closely with NPMO, PPSUs and DPMOs to improve the programme specific internal control system. NPMO financial specialist and assistants to provide guidance to improve programme staff (PPSU and DPMO) capacity.	NPMO, PPSU and DPMO together with IFAD programme officer	After the establishment of NPMO and PIUs.
In-sufficient attention to collection of required evidence (SPM, SP2D and others)	Close monitoring by the NPMO to contain financial management specialists and to be mobilized timely	NPMO	Year 1
Lack of operational funds for involved DPMOs to	Locate centers of verification at provincial level	NPMO	Before loan signing
go to verification location	In first AWP funds for verification to be made available	DPMO/PPSU	DPMO/PPSU to assign funds in first year

FM Supervision Plan

- 576. READ SI will be jointly supervised by GoI and IFAD. Formal joint supervision missions will be conducted at least once per financial year with additional implementation support missions mobilized as necessary. At least one additional implementation support mission will be mobilized within the first 6 months of programme implementation and at least one additional implementation support mission during the second year.
- 577. During joint supervision missions and implementation support mission, the main topics to be reviewed and discussed will include, among others: (i) comparison of programme progress against AWPB; (ii) cumulative programme expenditures based on the source of funds, per component/sub-component, and per category; (iii) loan and/or grant disbursements; (iv) financial data filing system; (v) check a sample Statement of Expenditures (SOE) to verify their accuracy against IFAD records and adequacy of supporting documents; (vi) asset register; (vii) latest audit report; (viii) procurement; and (ix) compliance with the loan covenants.
- 578. A Mid-Term Review (MTR) mission will be jointly conducted by GoI and IFAD around the end of Year 3 of the programme, or earlier if required. MTR mission is a means to improve the quality and relevance of the programme and their implementation and to identify re-orientation to the programming that may be needed to ensure the achievement of the original objectives. It may also help identify components of the programme that would benefit from a follow up outside the programme or in the following programming. Loan and/or grant fund re-allocation may be necessary to adjust the changes..

Annex 1 to Appendix 7

Annex 1 to Appendix 2: Flow of Funds Chart

Figure 1: Fund flow diagram for APBN-funded activities

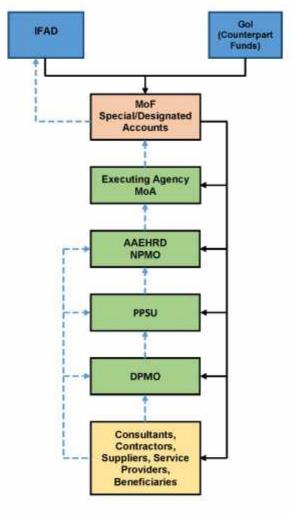
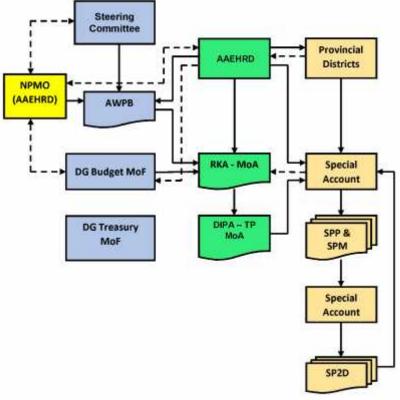
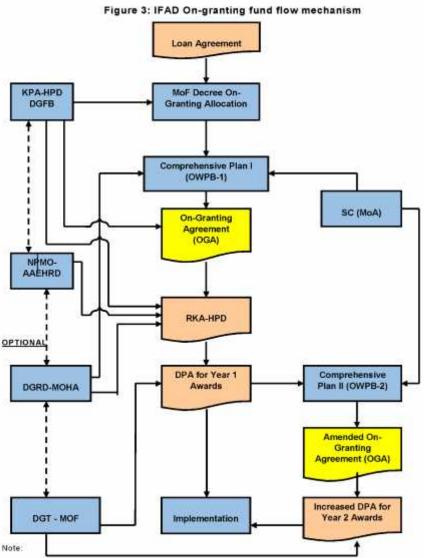


Figure 2: IFAD Fund flow for de-concentration (Dekonsentrasi/Tugas Pembantuan-DEKON)

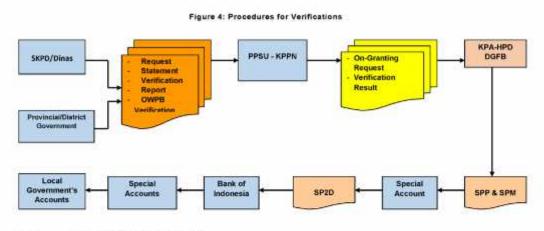




NPMO = National Programme Management Office; AAEHRD = Agency for Agricultural Extension Human Resource Development; AWPB = Annual Work Plan & Budget; RKA-MoA = Rencana Kerja & Anggaran Ministry of Agriculture; DPA-TP = Dokumen Pelaksanaan Anggaran-Tugas Pembantuan (Provincial/District Government Budget Document); SPP-SPM = Surat Permintaan Pembayaran-Surat Perintah Membayar (Request for Payment Letter – Order for Payment Letter); SP2D = Surat Perintah Pencairan Dana (Order for Fund Disbursement Letter)



OWPB-1: Prepared at National Level based on Project Design
OWPB-2: Prepared by PPSU and DPMO based on Assessment/Feasibility
DGFB = Directorate General of Fiscal Balance; DGRD = Directorate General of Regional Development; DGT =
Directorate General of Treasury, DIPA-HPD = Central Government Budget for On-granting; DPA =
Provincial/District Government Budget Document; KPA-HPD = Kuasa Pengguna Anggaran Hibah pada Daerah
(On-granting Budget Authorized User); MoF = Ministry of Finance; NPMO-AAEHRD = National Programme
Management Office, Agency for Agricultural Extension Human Resource Development, MOA; OWPB = Overall
Work Plan & Budget; RKA-HPD = Renoana Kerja Anggaran Hibah pada Daerah (On-granting Budget Document);



DGFB Directorate General of Fiscal Balance
KPA-HPD Kusas Pengguna Anggaran — Hibah pada Daerah (On-granting Budget Authorized User)
KPPN Kartor Pelayanan Perbandaharasan Negara (State Treasury Office)
OWPB Overall Work Plan & Budget
PPSU Provincial Programme Support Unit
SKPD Satvan Kerja Perangkat Daerah (Provincial/District Working Unit)
SPM Surat Perintah Membayar (Instruction Letter to Pay from Treasurer to KPPN)
SP2D Surat Perintah Pencairan Dana (Instruction Letter to Disburse Fund)
SPP Surat Perintah Penbayaran (Instruction Letter to Pay)

Final project design report

Appendix 7: Financial management and disbursement arrangements

Annex 2 to Appendix 7.

FINANCIAL MANAGEMENT ASSESSMENT QUESTIONNAIRE (FMAQ)

Project #READ SI	Date:
Implementing Entity: AAEHRD, Ministry of Agriculture	
Self-assessment completed by: N.A	Date:
Review completed by: Sumaryo Soemardjo	Date : 05 August, 2016

Implementing Entity: Agency for Agricultural Extension and Human Resource Development (AAEHRD),

Ministry of Agriculture.

NOTE:

In the case of a Government Department, the FMS should initially focus on the status of the country PFM systems in order to gauge level of fiduciary risks to which the proposed project may be exposed. Once an understanding of the PFM environment has been ascertained, the FMS should switch focus down to project level and focus on the department(s) or unit(s) that will financially administer the project

	Topic	Response	Remarks
1.	Organisation and staffing		
1.1	Which entity is the LPA? What is the entity's legal status?	AAEHRD, Ministry of Agriculture	
1.2	Will financial management of the project be the responsibility of the LPA or be undertaken within the PIU	Will be the LPA's responsibility	
1.3	Has the entity implemented a donor financed project in the past – if so, please provide details?	World Bank projects: NAEP, DAFEP, FEATI. IFAD projects: P4K, READ	
	Staffing		
1.4	What is the (proposed) organizational structure of the accounting department? Attach an organization chart	Lead by Echelon III with appropriate staff (attachment 1)	
1.5	Identify the (proposed) accounts staff, including job title, responsibility, educational background and professional experience. Attach job description and CVs of key accounting staff	For every project, staff will be recruited (minimum) - Treasurer - SPM official maker - Financial officer/assistant	
1.6	Are written position descriptions that clearly define duties, responsibilities, lines of supervision, and limits of authority for all other officers, managers and staff?	Yes	
1.7	Is the finance and accounts staff adequately qualified and experienced?	Yes	
1.8	Are the project accounts and finance staff trained in IFAD procedures?	Yes	
1.9	Are any appointed finance staff on contract? What is the duration of the contracts? Indicate key position not contracted yet, and the estimated contract date of appointment	No, all government officers. FM specialist may be contracted as needed	
1.10	What is training policy for the finance and accounting staff?	National Accounting Systems (SAI)SAKPA application trainingSIMAK BMN application	

	Topic	Response	Remarks
		training	
1.11	Is there evidence that finance staff are regularly transferred to other Government departments?	Yes, but no specific frequency, depend on the programme need	
	At what frequency are personnel transferred?	and the policy of the agency's head.	
1.12	Is the project finance and accounting function staffed adequately?		
2.	Budgeting		
2.1	Who is responsible for preparation and approval of	Budget preparation mostly by	
	project budgets?	Technical staff and approved by the Budget Holder/KPA (Kuasa Pengguna Anggaran)	
2.2	Are project budgets prepared for all significant	Yes	
2.2	project activities in sufficient detail to provide	163	
	meaningful tool with which to monitor subsequent performance?		
2.3	Are procedures in place to plan project activities,	Yes, they are scheduled for the	
	collect information from the units in charge of	Annual Budget Plan and Budget	
	different components, and prepare the budgets?	Modification (APBNP)	
3.	Fund Flow / Disbursement Arrangements		
3.1	Does the implementing entity have previous	Yes	
	experience of using imprest fund and donor funding		
	SOE procedures?	NI	
	Were there any problems or issues encountered by	No	
	project staff in the operation of the imprest fund or SOE procedures in the past?		
3.2	Does the implementing entity have experience in	Yes	
3.2	the management of disbursements from IFAD or	163	
	other donors?		
	Have there been the major problems in the past in	No	
	receipt of funds by the entity?		
3.3	Does the entity have/need to develop capacity to	Yes	
	manage foreign exchange risks?		
3.4	Are the beneficiaries required to contribute to	Yes	
	project costs?		
	How are payments made for the counterpart funds?	In kind (in form of labour) and	
	If counterpart funds are to be contributed in kind (in form of labour), are proper guidelines formulated to	guidelines will be formulated	
	record and value the labour contribution?		
3.5	Is part of the project implemented by communities	Yes	
	or NGOs?		
	Does the PIU have the necessary reporting and	Yes	
	monitoring features built into its systems to track		
	the use of project proceeds by such agencies?		
3.6	Describe (proposed) project funds flow	Attached	
	arrangements; (attach flow chart and explanation of		
	the flow of funds from IFAD, government and other		
3.7	financiers.	Central Bank (Bank of Indonesia)	
3.8	In which bank will the Imprest Account be opened? Are the (proposed) arrangements to transfer the	Yes, the implementing entity will	
3.0	proceeds of the financing (from the	report to MoF, and will get Code	
	government/Finance Ministry) to the implementing	Number of the Loan and Grant	
	entity satisfactory?	Transpor of the Loan and Grant	
4.	Internal Controls		
4.1	Segregation of duties – are the following functional	Yes	
	responsibilities performed by different units or	(i) by PPK (Commitment Making	

	Topic	Response	Remarks
	persons: (i) authorization to execute a transaction; (ii) recording of the transaction; and (iii) custody of assets involved in the transaction?	Officer) (ii) by Treasure Officer (iii) by Treasure Officer	
4.2	Are the functions of ordering, receiving, accounting for, and paying for goods and services appropriately segregated?	Yes, there are financial budget items (MAK) system	
4.3	Are bank reconciliations prepared by someone other than those who make or approve payments?	Bank reconciliation made by treasure officer, controlled by KPA and PPK	
5.	Accounting Systems, Policies and Procedures		
5.1	Does the entity have an integrated accounting system that allows for the proper recording of project financial transactions, including the allocation of expenditures in accordance with the respective components, disbursement categories, and sources of funds? Will the project use the entity	Yes, GOI has computerized financial system for the project Use SAI application, SAKPA application, SIMAK BMN application (for the Government	
5.2	accounting system? Are controls in place concerning the preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained?	asset) Yes	
5.3	Is the chart of accounts adequate to properly account for and report on project activities and disbursement categories?	Yes	
5.4	Can cost allocations to the various funding sources	Yes	
	be made accurately?	V	
5.5	Are the General Ledger and subsidiary ledgers reconciled and in balance?	Yes	
5.6	Are all accounting and supporting documents retained on a permanent basis in a defined system that allows authorized users easy access?	Yes	
57	What is the basis of accounting (e.g cash or accrual)?	Accrual Basis (since 2015)	
5.8	What accounting standards are followed?	Indonesia Account System issued by Ministry of Finance	
5.9	Does the project have an adequate policies and procedure manual to guide activities and ensure staff accountability?	Yes	Needs to be improved
5.10	Do procedures exist to ensure that only authorized persons can alter or establish a new accounting principle, policy or procedure to be used by the entity?	Yes	
5.11	Is there written policies and procedures manual covering all routine project financial management activities?	Yes	
	Are manuals distributed to appropriate personnel? Payments	Distributed to appropriate staff	
5.12	Are all invoices stamped PAID, dated, reviewed and approved, and clearly marked for account code assignment?	Yes	
	Cash and Bank	V	
5.13	Does the organization maintain an adequate, up-to-date cashbook, recording receipts and payments?	Yes	
5.14	Are bank and cash reconciled on a monthly basis?	Yes	
5.15	Indicate names and positions of authorized signatories of project bank accounts.	Kuasa Pengguna Anggaran/KPA	

	Торіс	Response	Remarks
	Safeguard over Assets		
5.16	Is there a Fixed Asset accounting system, with a Fixed Asset Register, fully implemented – as part of an integrated accounting system Is the system maintained up to date?	Yes, SIMAK BMN application	
5.17	Are there periodic physical reconciliation of fixed assets and stocks? Other	Yes	
5.18	Has the project advised employees, beneficiaries and other recipients to whom to report if they suspect fraud, waste or misuse of project resources or property?	Yes	
5.19	Do policies and procedures clearly define conflict of interest and related party transactions (real and apparent) and provide safeguards to protect the organization from them?	Yes, Anti-Corruption Regulation	
5.20	Do controls exist for the preparation of the project payroll and are changes to the payroll properly authorized	Yes	
6.	Reporting and Monitoring		
6.1	Does the reporting system need to be adapted to report on the project components?	Yes	
6.2	Does the project have established financial management reporting responsibilities that specify what reports are to be prepared, what they are to contain, and the frequency of production?	Yes. SAI application, SAKPA application, SIMAK BMN application	
63	What is the frequency of preparation of financial statements? Are the reports prepared in a timely fashion so as to useful to management for decision making?	Annually Yes, but some time delays	
6.4	Do the financial reports compare actual expenditures with budgeted and programmed allocations?	Yes	
6.5	Are financial reports prepared directly by the automated accounting system or are they prepared by spreadsheets or some other means?	Yes for government requirements, but for IFAD requirements are using spreadsheets	The system do not include codes for loan/grant categories
6.6	(in case of need of consolidated financial statements) is the accounting system sufficiently equipped to ensure proper consolidation of entities' financial data? Information System	Yes	
6.7	Is the financial management system computerized?	Yes	
6.8	Can the system produce the necessary project financial reports?	Yes, but not necessarily for IFAD requirements	The system do not include codes for loan/grant categories
6.9	Is the staff adequately trained to maintain the system?	Yes	
6.10	Are adequate systems in place to "back up" financial records?	Yes	
7.	Internal Audit	Ves The learnest sets Occurs 1 (
7.1	Is there an internal audit department in the LPA?	Yes. The Inspectorate General of MoA	

	Topic	Response	Remarks
7.2	What are the qualifications and experience of	Following MoF Regulation	
	internal audit department staff?		
7.3	To whom does the internal audit report?	Minister of Agriculture	
7.4	Will the internal audit department include the	Not in implementation	
	project in its work program?	organization but involving in control and evaluation of the project	
7.5	Are actions taken on the internal audit findings?	Yes	
8.	External Audit		
8.1	Who is the external auditor of the entity?	Badan Pemeriksa Keuangan/BPK (Indonesian Supreme Audit Agency)	Proposed to involving BPKP to control and monitor the programme
8.2	Are there any delays in audit of the entity? When are the audit reports issued?	No. One month after the annual audit	
8.3	Is the audit of the entity conducted according to the International Standards on Auditing?	According to the National Auditing Standards which are appropriate with international standards	
8.4	Were there any major accountability issues brought out in the audit report of the past three years? Were there any issues noted in prior audit reports related to the operation of project imprest accounts or use of SOE procedures?	No	
8.5	Will the entity auditor audit the project accounts or will another auditor be appointed to audit the project financial statements?	Internal Auditor and BPK	Proposed to involving BPKP to control and monitor the programme
8.6	Has the project prepared acceptable terms of reference for an annual project audit?	Yes	

Appendix 8: Procurement

579. The overarching procurement risk assessment was updated based on a desk review of existing risk assessment and ongoing projects financed by other developments partners, taking into account the 2012 Public Expenditure and Financial Accountability (PEFA) Report as summarised below, the programme is assessed as Medium Risk (Category Medium).

PI-19 Transparency, competition and complaints mechanisms in procurement

	Rating 2011	Performance change
С	С	New regulations and a National Public Procurement Agency (LKPP) have recently been introduced, though it is likely to take time to be able to verify significant improvements in performance.

- 580. Improvements in public procurement have taken place over the past few years. Keppres No. 80/2003 provided a national public procurement regulation that meets most of what is generally regarded as accepted international practice, including basic principles: transparency, open competition, economy and efficiency. This Decree also paved the way for establishing a regulatory body for public procurement, and established the basis for sanctions, complaint-handling and requirements for certification of users.
- 581. Perpres No. 106/2007 was signed in December 2007 establishing an independent agency, the Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah (LKPP) or National Public Procurement Agency. LKKP is responsible for sustainable, integrated, focused and coordinated planning and development of strategies/policies/regulations associated with the procurement of goods/works/services using public funds. LKKP reports directly to the President.
- 582. The LKPP has been working on several fronts to improve the public procurement reform. Some of the accomplishments and activities, in addition to other reform measures, that have been achieved over the last two years, include: i) consolidation of Kepres 80/2003 and its amendments in 2009: ii) issuing of a new presidential regulation Perpres 54/2010, effective as of January 2011; iii) issuing a set of national standard bidding documents; iv) drafting a new procurement law; v) increasing the use of e-tendering; and vi) establishing procurement service units. The reforms cover procurement of goods and services by all government entities (including line ministries, local governments, the Central Bank, State Owned Enterprises, Local Government owned Enterprises, State Owned Legal Entities [BHMN] and other related government institutions). The Regulation (54/2010) is supplemented by various other Regulation such Perpres 70/12, Prepres 84/2012 and Prepres 4/2015); decrees and circulars issued by MDAs.
- 583. The Regulation outlines procedures for submitting and addressing complaints on the procurement process. Complaints generally appear to be resolved in a timely manner, except when taken to a higher level or when legal recourse is sought. All complaints are received by the tender committee (procurement units under new regulation) and are referred to a higher authority within the spending agency. While under the new regulation, a complainant can copy the LKPP, the final decision will still be within the agency. As it currently stands, this process lacks sufficient independence as there are no members drawn from the private sector and civil society. The operation of the complaints system may also be weakened by the absence of public disclosure of data on complaints received and resolved. Complainants may use an arbitration process or seek redress through the judicial system.

Appendix 8: Procurement

Indicator	Score 2007	Score 2011	Performance Change		
PI-19. Competition, value for money and controls in procurement. [M2]	C	C	Change		
(i) Use of open competition for award of contracts that exceed the nationally established monetary threshold for small purchases.	D	В	From January 2011, the new PP(54/2010) is applicable for all public procurement under the national budget. Many SOEs issue their own regulations which follow the presidential decree with some modifications to allow them more flexibility. There is a separate presidential decree that governs PPPs. Implementing agencies such as MDAs and SNG can issue further decrees that would address public procurement; however these have to be consistent with the presidential decree and are considered at a lower legal level. PP54/2010 indicates open competitive procurement as the default method. It clearly defines other methods and the thresholds and conditions for which these methods can be used(see: www.lkpp.go.id).		
(ii)Justification for use of less competitive procurement methods.	В	D	PP54/2010is clear on having open competition as the default procurement method and the need to provide justifications in case of use of other methods. It is expected that compliance rates are high in MDAs with the possibility of these rates dropping in most SNGs. With the absence of data on these sub-criteria, the indicator is ranked D.		
(iii) Public access to complete, reliable and timely procurement information		С	Not all key procurement information is made available to the public through appropriate means. PP54/2010 is clear that it requires the publication of all bidding opportunities and recommendations for contracts awards (and these can be found on many MDA websites). However, there is no requirement for publication of government procurement plans and data on the resolution of procurement complaints.		
(iv) Existence and operation of a procurement complaints mechanism.	С	D	The structure of this criterion enforces a scoring of D as the current complaint handling mechanism does not include an independent body and there is no participation of members from the private sector and civil society.		

Procurement arrangements

584. Procurement of goods, works and consultancy services will be undertaken in accordance with the Borrower's National Procurement Laws and Regulations (Perpres 54/2010, Perpres 70/12, Prepres 84/2012 and Prepres 4/2015) and their amendments consistent with IFAD's Project Procurement Guidelines. LKPP is currently working on a major revision to the National

Procurement Law and Regulations to streamline and simplify some of the processes and procedures outlined in the current law and regulations to facilitate procurement which are still constrained by delays. The use of the e-procurement which includes the e-catalogue systems and online shopping would be applicable in the programme for goods and materials.

- 585. As per IFAD's Procurement Guidelines, IFAD review of and no objection to the Project Procurement Plans shall be compulsory, and any changes and amendments to the procurement plan shall be subject to IFAD's No Objection; the plans submitted by NMPO (consolidated to include the plans from PPSU's and DPMO's) must include as a minimum:
 - (a) A brief description of each procurement activity to be undertaken during the period and name of the implementing agency responsible for the procurement;
 - (b) The estimate value of each procurement activity;
 - (c) The method of procurement to be adopted for each procurement activity and.;
 - (d) The method of review IFAD will undertake for each procurement activity indicating either post review or prior review.
- 586. Procurement of all major service providers (consultancies of firms/organisation) would be undertaken centrally to mitigate risk associated with decentralised procurement in terms of the quality and timeliness of the procurement process.
- 587. All procurement of goods, works and services financed from IFAD funds under the programme shall require the inclusion of a provision requiring suppliers, contractors and consultants to permit IFAD and the GOI to inspect their accounts, records and other documents relating to the procurement and contract performance, and to have them audited.
- 588. The programme under AAEHRD includes a number of actions to strengthen procurement capacity of MOA's Procurement Unit (Unit Layanan Pengadaan or ULP) and mitigate procurement risks. In terms of strengthening its capacity, the programme shall recruit a fulltime Procurement Specialist/Consultant to complement supplement the existing ULP staffing. Additionally resources have also been made available to facilitate the selection of technical experts from a pool of procurement professional from the Indonesian Procurement Professionals Association (Ikatan Ahli Pengadaan Indonesia or IAPI) to institutionalise capacity development activities in response to the efforts of LKPP in enabling and enhancing the capacity of its staff in undertaking and managing public procurement. An external accredited certification course on public procurement offered by UNDP in collaboration and partnership with the Chartered Institute of Purchasing and Supply (CIPS) which assures compliance with high international qualification standards as well as offering participants access to a world-wide community of procurement professionals. The details of courses offered and fees are available on the UNDP website (www.undp.org/content/undp/en/home/operations/procurement/procurem ent_training.html). These short certification courses have been awarded the European Supply Chain Excellence Awards are accredited Programme with specific strategic focus on procurement shifting from a compliance exercise to a value-adding business functions.
- 589. The application of different methods of procurement for goods, works and services (non consultancy) will be in accordance with the methods of procurement for goods, works and services (non-consulting) as established and approved in the Procurement Plan. Unapproved variations and non-compliance would be considered as mis-procurement. The procurement plans for consultancy service (individuals or consulting firm/organisation) shall be undertaken in accordance either one of the provision referenced below.
- 590. Consultancy and Services: Each contract for the selection of consultancy services, shall be selected in accordance with any one of the selection methods as per the IFAD Project Procurement Guidelines and its Project Procurement Handbook as listed below:

- (a) Quality and Cost Based Selection
- (b) Fixed Budget Selection
- (c) Least Cost Selection
- (d) Selection Based on Consultants Qualification
- 591. Selection of individual consultants or service provider: Individual consultants and service provider would be selected on the basis of their qualifications for the assignment of at least three candidates among those who have expressed interest in the assignment or have been approached directly by the MOA or other Implementing partners. Individuals employed by the Programme and the Implementing Agencies/Partners shall meet all relevant qualifications and capacity requirements in carrying out the assignment. This is determined and assessed on the basis of academic background, experience and, as appropriate, knowledge of the local conditions, such as local language, culture, administrative system, and government organization. May also include written test and interviews.
- 592. Individual consultants or consultancy firms may be selected on a sole-source basis with due justification in exceptional cases such as: (a) tasks that are a continuation of previous work that the consultant has carried out and for which the consultant was selected competitively; (b) assignments lasting less than six months; (c) emergency situations resulting from natural disasters; and (d) when the individual consultant is the only consultant qualified for the assignment.

Review of Procurement Decisions by IFAD

- 593. As an additional risk mitigation measure, IFAD will undertake to review the provisions for the procurement of good, works and services to ensure that the procurement process is carried out in conformity with the applicable rules and regulation consistent with IFAD's Procurement Guidelines. Following procurement decisions (as applicable) shall be subject to prior review by IFAD for the award of any contract for goods, works, services (non-consultancy) and consultancy services under programme.
 - (a) Procurement of goods, materials and works
 - (i) Prequalification documents and shortlist (as applicable);
 - (ii) Bid Documents for goods, materials and works;
 - (iii) Evaluation Report and Recommendation for Award; and
 - (iv) Contract and amendments.
 - (b) Procurement of consultancy services and services
 - (i) Prequalification documents and shortlist (as applicable);
 - (ii) Request for Proposal;
 - (iii) Technical Evaluation Report;
 - (iv) Combined (technical and financial) evaluation report
 - (v) Contract and amendments.
 - c. Procurement of individual consultants
 - (i) The Terms of Reference of the Assignment

- (ii) The Evaluation Report and recommendation for selection
- (iii) Contract and amendments

594. Prior or Post Review. Except as IFAD may otherwise agree, the prior or post which applies to various procurement of good, works and consultant recruitments shall be defined as follows:

Procurement Method	Prior or Post	Comments
Procurement of Goods and Services (non-consulting)		
ICB	Prior	All Contracts
NCB	Prior	Except procurement valued below USD 100,000
Shopping	Post	All Contracts
Direct Goods	Prior	Except procurement valued below USD 20,000
Recruitment of Consulting Firms		
Quality and Cost-Based Selection (QCBS); Fixed Budget Selection (FBS); Least Cost Selection (LCS); Selection Based on Consultants Qualification (CQS)	Prior	Except procurement valued below USD 50,000
Sole Source Selection (Single Source Selection)	Prior	All contracts except for exception covered by paragraph 14
Recruitment of Individual Consultants		
Individual Consultants (Single Source Selection)	Prior	Except or as per provisions covered by paragraph 14
Individual Consultants (Competitive Selection Process)	Prior	Except procurement valued below USD 20,000

GOVERNANCE AND ANTI-CORRUPTION (GAC)

595. Anticorruption measures will include (a) undertake necessary measures to create and sustain a corruption-free environment for activities under the programme; (b) institute, maintain and ensure compliance with internal procedures and controls for activities under the programme, following international best practice standards for the purpose of preventing corruption, money laundering activities, and the financing of terrorists, and shall require all relevant ministries and agencies to refrain from engaging in any such activities; (c) comply with requirements of IFAD's Policy on Preventing Fraud and Corruption in Its Activities and Operations (2005, as amended to date); (d) ensure that the Good Governance Framework is implemented in a timely manner. is actively engaged to allow potential programme beneficiaries and other stakeholders to channel and address any complaints they may have on the implementation of the programme.

A. Introduction

596. This annex covers the programme costs and financing plan, while it also describes the assumptions underlying them and sets out the basis and details of the estimated programme costs.

B. Programme costs and financing

Main assumptions

- 597. The programme is financed over a five-year period, and it is assumed to start in 2018. Costs have been estimated on the basis of prices prevailing during programme design in July 2016.
- 598. **Price contingencies.** Price contingencies have been applied on all costs except for unallocated amounts.
- 599. **Inflation:** In January 2016 the Bank of Indonesia (BI) started a monetary policy⁴³ easing cycle by making three consecutive monthly 25-basis-point cuts to its benchmark interest rate, to stand at 6.75%⁴⁴ in March, before leaving the rate on hold at its latest meeting in May. According to the Economist Intelligence Unit, further cuts, "totalling 50 basis points", are expected in 2016-2017. Consequently, consumer prices are expected to rise on annual average of 4.6% between 2016 and 2020⁴⁵.
- 600. For the purpose of this analysis, annual local inflation rates have been set at 5% on the first year and decreased up to 4.5% in the following years. For foreign inflation, an average inflation of 1.8% has been retained.
- 601. **Exchange rate.** The exchange rate used in this analysis has been set at 13000 IDR/USD.
- 602. **Taxes and duties.** Part of the Government co-financing of the programme will be in form of waiving of all taxes and duties on goods and services procured under the programme. The rates and amounts of the taxes and duties in the programme's costs presented below are defined only to determine the Government contribution and to value the total programme cost.
- 603. The items to be imported for the programme attract import and excise duties of varying proportions, and a value-added tax (VAT) of 10% is levied on all imported goods. Currently, the VAT rate in the country is 10% and applies to all investment and operating costs used for the programme (including contractual services, training and studies).

Programme costs

- 604. The total programme costs including physical and price contingencies are estimated at USD 87.28 million over five years implementation period. Programme costs by components are summarized in Table 1, while a complete set of programme summary tables and detailed costs tables are presented in Attachments 1 and 2 of this annex.
- 605. **Programme costs by components.** Programme investments are organized into three major components: (i) Village agriculture and livelihoods development (55.8% of the costs); (ii) Services inputs and market linkages (18.8% of the costs); and (iii) Policy (1.3% of the costs). NPMO and provincial offices programme management costs represent 6.6% of the total programme cost while district offices costs⁴⁶ are 11.8% of the total cost. An unallocated amount of USD 5 million, or 5.7% of the total programme cost, is also included in the budget in

⁴⁴ The Economist Intelligence Unit. Indonesia Country Report. June 2016.

⁴⁵ The Economist Intelligence Unit. Indonesia Country Report. June 2016.

⁴⁶ Costs that are strictly related to the direct implementation of programme activities.

order to grant financial flexibility to the programme. A summary breakdown of the programme costs by components is shown in Table 1 below.

Table 1. Programme costs

ા Indonesia READ Scaling-up Initiative Project Components by Year -- Totals Including Contingencies

	Totals Including Contingencies (US\$ '000)							
	2018	2019	2020	2021	2022	Total		
A. Village agriculture and livelihoods development								
1. Community mobilization	2,365	2,247	2,292	2,292	2,284	11,480		
Agriculture and livelihoods	17,103	5,378	7,745	3,015	34	33,274		
3. Savings, loans, and financial literacy	525	534	1,105	254	-	2,417		
4. Nutrition	126	494	382	382	135	1,519		
Subtotal	20,119	8,653	11,524	5,942	2,453	48,690		
B. Services inputs and market linkages								
Agricultural extension services	1,814	1,356	1,150	703	964	5,987		
2. Financial Institutions	301	611	349	349	349	1,958		
Seed supply and market systems	958	93	77	69	63	1,260		
Cocoa farmer support services and inputs markets	5,390	657	373	373	362	7,156		
Livestock production and health services		14	11	3	3	31		
Subtotal	8,464	2,731	1,960	1,496	1,741	16,391		
C. Policy	275	275	275	275	-	1,100		
D. Districts, provinces and NPMO management								
District project management	3,166	1,758	1,795	1,804	1,814	10,336		
NPMU and PPSU project management	1,395	1,165	1,142	1,001	1,064	5,766		
Subtotal	4,561	2,923	2,936	2,805	2,878	16,102		
E. Unallocated			2,000	2,000	1,000	5,000		
Total PROJECT COSTS	33,418	14,582	18,695	12,519	8,071	87,284		

- 606. **Programme financing**⁴⁷. The total programme costs of USD 87.28 million will be financed by an IFAD loan of USD 58.88 million (67.5% of total costs), by an IFAD grant of USD 1 million (1.1% of total costs), by a private sector contribution of USD 6.49 million (7.4% of total costs) and by the Government of Indonesia, which will finance taxes and duties and salaries of all NPMO, provinces, districts and sub-districts staff for an estimated total amount of USD 15.07 million (17.3% of total cost). The beneficiaries will also contribute USD 5.84 million (6.7% of the total cost), mostly to co-finance the purchase of basic and advanced agriculture mechanization under sub-component 1.2. The proposed financing plan is summarized in Table 4 below.
- 607. The IFAD grant will finance policy activities under component 3.
- 608. The private sector contribution⁴⁸ will co-finance together with the IFAD loan cocoa-related activities under sub-component 1.2 and sub-component 2.4.
- 609. The estimate of taxes and duties was based on the rates in effect prevailing at the time of the design. In conformity with the principle that no taxes or duties will be financed out of the proceeds of the IFAD loan/grant, any future changes in tax legislation will have to apply to the programme.

⁴⁷ Totals may not sum exactly due to rounding.

⁴⁸ Mainly expected from Mondalez and Mars.

Table 2. Programme financing

Indonesia READ Scaling-up Initiative Components by Financiers (US\$ '000)

	The Government		IFAD Loan IFAD Grant		rant	Beneficiaries		Partners		Total		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Village agriculture and livelihoods development												
Community mobilization	1,044	9.1	10,436	90.9	-	-	-	-	-	-	11,480	13.2
Agriculture and livelihoods	3,121	9.4	21,121	63.5	-	-	5,838	17.5	3,195	9.6	33,274	38.1
3. Savings, loans, and financial literacy	220	9.1	2,198	90.9	-	-	-	-	-	-	2,417	2.8
4. Nutrition	178	11.7	1,341	88.3	-	-	-	-	-	-	1,519	1.7
Subtotal	4,562	9.4	35,096	72.1	-	-	5,838	12.0	3,195	6.6	48,690	55.8
B. Services inputs and market linkages												
Agricultural extension services	3,684	61.5	2,303	38.5	-	-	-	-	-	-	5,987	6.9
Financial Institutions	178	9.1	1,780	90.9	-	-	-	-	-	-	1,958	2.2
Seed supply and market systems	404	32.1	856	67.9	-	-	-	-	-	-	1,260	1.4
 Cocoa farmer support services and inputs markets 	560	7.8	3,298	46.1	-	-	-	-	3,298	46.1	7,156	8.2
Livestock production and health services	3	9.1	28	90.9		-				-	31	
Subtotal	4,828	29.5	8,265	50.4	-	-	-	-	3,298	20.1	16,391	18.8
C. Policy	100	9.1	-	-	1,000	90.9	-	-	-	-	1,100	1.3
D. Districts, provinces and NPMO management												
District project management	4,038	39.1	6,298	60.9	-	-	-	-	-	-	10,336	11.8
NPMU and PPSU project management	1,548	26.8	4,218	73.2		-		-		-	5,766	6.6
Subtotal	5,587	34.7	10,516	65.3	-	-	-		-	-	16,102	18.4
E. Unallocated			5,000	100.0		-	-			-	5,000	5.7
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0

610. **Expenditure and disbursement accounts.** A summary of the total costs by expenditure accounts per year is shown in table 3 and a summary of the total costs by disbursement accounts and financier is presented in table 4. Financial management and procurement procedures, including the coordination of flow of funds, are described in Appendices 7 and 8.

Table 3. Expenditure accounts by financier

Indonesia
READ Scaling-up Initiative
Expenditure Accounts by Financiers
(US\$ '000)

	The Gover	rnment	IFADL	oan	IFAD G	rant	Benefici	aries	Partne	ers	Tota	al
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Am ount	%
I. Investment Costs												
A. Consultancies /a	1,333	8.6	14,163	91.3	-	-	-	-	19	0.1	15,514	17.8
B. Equipment and Material	239	9.1	2,191	83.2	-	-	-	-	203	7.7	2,633	3.0
C. Goods and Services	2,587	9.1	16,928	59.5	-	-	5,838	20.5	3,101	10.9	28,455	32.6
D. Vehicles	188	9.1	1,881	90.9	-	-	-	-	-	-	2,069	2.4
E. Workshops and Trainings	1,244	8.5	9,267	63.1	1,000	6.8	-	-	3,169	21.6	14,680	16.8
F. Works	277	9.1	2,769	90.9	-	-	-	-	-	-	3,046	3.5
G. Unallocated	<u>-</u>		5,000	100.0		-		-			5,000	5.7
Total Investment Costs	5,867	8.2	52,199	73.1	1,000	1.4	5,838	8.2	6,493	9.1	71,398	81.8
II. Recurrent Costs												
A. Salaries & Allow ances	8,541	100.0	-	-	-	-	-	-	-	-	8,541	9.8
B. Operating Costs	668	9.1	6,677	90.9				-			7,345	8.4
Total Recurrent Costs	9,209	58.0	6,677	42.0		-		-	-		15,886	18.2
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0

\a Including studies and technical assistance

Table 4. Disbursement accounts by financier

Indonesia
READ Scaling-up Initiative
Disbursement Accounts by Financiers
(US\$ '000)

	The Gove	rnment	IFAD Loan		IFAD Grant		Beneficiaries		Partners		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Consultancies_DA	1,333	8.6	14,163	91.3	-	-	-	-	19	0.1	15,514	17.8
2. Vehicles_DA	188	9.1	1,881	90.9	-	-	-	-	-	-	2,069	2.4
3. Unallocated_DA	-	-	5,000	100.0	-	-	-	-	-	-	5,000	5.7
4. Equipment and Material_DA	239	9.1	2,191	83.2	-	-	-	-	203	7.7	2,633	3.0
5. Goods and Services_DA	2,587	9.1	16,928	59.5	-	-	5,838	20.5	3,101	10.9	28,455	32.6
6. Workshops_DA	1,244	8.5	9,267	63.1	1,000	6.8	-	-	3,169	21.6	14,680	16.8
7. Works_DA	277	9.1	2,769	90.9	-	-	-	-	-	-	3,046	3.5
8. Salaries and Allow ances_DA	8,541	100.0	-	-	-	-	-	-	-	-	8,541	9.8
Operating Costs_DA	668	9.1	6,677	90.9	-	-	-	-	-	-	7,345	8.4
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0

Annex 9.1: Summary cost and financing tables (USD)

Table	Description
1	Components by Financier
2	Expenditure Accounts by Financier
3	Expenditure Accounts by Components - Base Costs
4	Expenditure Accounts by Components - Totals Including Contingencies
5	Components Project Cost Summary
6	Expenditure Accounts Project Cost Summary
7	Project Components by Year Base Costs
8	Project Components by Year Totals Including Contingencies
9	Expenditure Accounts by Years Base Costs
10	Expenditure Accounts by Years Totals Including Contingencies
11	Disbursement Accounts by Financiers
12	Disbursements by Semesters and Government Cash Flow

Indonesia READ Scaling-up Initiative Components by Financiers (US\$ '000)

	The Gove	rnment	IFAD L	.oan	IFAD G	rant	Benefici	aries	Partne	ers	Total	al
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Village agriculture and livelihoods development												
Community mobilization	1,044	9.1	10,436	90.9	-	-	-	-	-	-	11,480	13.2
Agriculture and livelihoods	3,121	9.4	21,121	63.5	-	-	5,838	17.5	3,195	9.6	33,274	38.1
3. Savings, loans, and financial literacy	220	9.1	2,198	90.9	-	-	-	-	-	-	2,417	2.8
4. Nutrition	178	11.7	1,341	88.3	-	-	-	-	-	-	1,519	1.7
Subtotal	4,562	9.4	35,096	72.1		-	5,838	12.0	3,195	6.6	48,690	55.8
B. Services inputs and market linkages												
Agricultural extension services	3,684	61.5	2,303	38.5	-	-	-	-	-	-	5,987	6.9
Financial Institutions	178	9.1	1,780	90.9	-	-	-	-	-	-	1,958	2.2
Seed supply and market systems	404	32.1	856	67.9	-	-	-	-	-	-	1,260	1.4
 Cocoa farmer support services and inputs markets 	560	7.8	3,298	46.1	-	-	-	-	3,298	46.1	7,156	8.2
Livestock production and health services	3	9.1	28	90.9		-					31	
Subtotal	4,828	29.5	8,265	50.4	-	-	-	-	3,298	20.1	16,391	18.8
C. Policy	100	9.1	-	-	1,000	90.9	-	-	-	-	1,100	1.3
D. Districts, provinces and NPMO management												
District project management	4,038	39.1	6,298	60.9	-	-	-	-	-	-	10,336	11.8
NPMU and PPSU project management	1,548	26.8	4,218	73.2	<u> </u>	-					5,766	6.6
Subtotal	5,587	34.7	10,516	65.3	-	-	-	-	-	-	16,102	18.4
E. Unallocated			5,000	100.0		-					5,000	5.7
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0

Indonesia READ Scaling-up Initiative **Expenditure Accounts by Financiers** (US\$ '000)

														Local	
	The Gove	rnment	IFAD L	oan	IFAD G	rant	Benefic	iaries	Partne	ers	Tot	al	For.	(Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
I. Investment Costs															
A. Consultancies /a	1,333	8.6	14,163	91.3	-	-	-	-	19	0.1	15,514	17.8	493	13,689	1,333
B. Equipment and Material	239	9.1	2,191	83.2	-	-	-	-	203	7.7	2,633	3.0	1,178	1,215	239
C. Goods and Services	2,587	9.1	16,928	59.5	-	-	5,838	20.5	3,101	10.9	28,455	32.6	4,963	20,905	2,587
D. Vehicles	188	9.1	1,881	90.9	-	-	-	-	-	-	2,069	2.4	556	1,326	188
E. Workshops and Trainings	1,244	8.5	9,267	63.1	1,000	6.8	-	-	3,169	21.6	14,680	16.8	-	13,436	1,244
F. Works	277	9.1	2,769	90.9	-	-	-	-	-	-	3,046	3.5	1,108	1,662	277
G. Unallocated	-	-	5,000	100.0	-	-	-	-	-	-	5,000	5.7	-	5,000	-
Total Investment Costs	5,867	8.2	52,199	73.1	1,000	1.4	5,838	8.2	6,493	9.1	71,398	81.8	8,298	57,232	5,867
II. Recurrent Costs															
A. Salaries & Allow ances	8,541	100.0	-	-	-	-	-	-	-	-	8,541	9.8	-	8,541	-
B. Operating Costs	668	9.1	6,677	90.9		-	-	-		-	7,345	8.4	3,284	3,394	668
Total Recurrent Costs	9,209	58.0	6,677	42.0		-	-	-	-	-	15,886	18.2	3,284	11,935	668
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0	11,582	69,167	6,535

[\]a Including studies and technical assistance

Indonesia READ Scaling-up Initiative Expenditure Accounts by Components - Base Costs (US\$ '000)

						Services inpu	ts and ma	arket linka	ges					
	Villa	age agricultur		lihoods				Cocoa						
		develo	pment					farmer			Districts,			
			Savings,				Seed	support			and NPMO m			
			loans,				supply	services	Livestock			NPM U and		
		Agriculture	and		Agricultural		and	and	production		District	PPSU		
	Community	and	financial		extension	Financial	market	inputs	and health		project	project		
	mobilization	livelihoods	literacy	Nutrition	services	Institutions	systems	markets	services	Policy	management	nanagement l	Jnallocated	Total
I. Investment Costs														
A. Consultancies /a	9,835	22	-	788	405	1,376	64	40	-	-	-	1,937	-	14,466
B. Equipment and Material	215	-	341	-	1,307	-	-	439	14	-	151	78	-	2,546
C. Goods and Services	-	24,869	114	495	-	169	857	550	13	-	162	-	-	27,230
D. Vehicles	314	-	356	-	-	97	-	-	-	-	1,051	190	-	2,007
E. Workshops and Trainings	366	3,874	1,450	-	713	176	-	5,884	2	1,100	181	273	-	14,019
F. Works	-	3,046	-	-	-	-	-	-	-	-	-	-	-	3,046
G. Unallocated	-	-	-	-	-	-	-	-	-	-	-	-	5,000	5,000
Total Investment Costs	10,730	31,811	2,261	1,283	2,425	1,818	921	6,913	29	1,100	1,545	2,479	5,000	68,314
II. Recurrent Costs														
A. Salaries & Allow ances	-	97	-	120	3,203	-	294	-	-	-	3,162	1,045	-	7,921
B. Operating Costs	-	-	-	-	-	-	-	-	-	-	5,041	1,885	-	6,925
Total Recurrent Costs		97	-	120	3,203	-	294	-		-	8,202	2,929		14,846
Total BASELINE COSTS	10,730	31,908	2,261	1,403	5,628	1,818	1,214	6,913	29	1,100	9,747	5,408	5,000	83,160
Physical Contingencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Price Contingencies														
Inflation														
Local	748	1,269	143	117	344	139	44	240	2	-	487	316	-	3,849
Foreign	2	98	13	-	14	1	1	3	0	-	102	42	-	276
Subtotal Inflation	750	1,366	156	117	358	140	45	243	2	-	589	358		4,125
Devaluation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Price Contingencies	750	1,366	156		358	140	45	243	2		589	358		4,125
Total PROJECT COSTS	11,480	33,274	2,417	1,519	5,987	1,958	1,260	7,156	31	1,100	10,336	5,766	5,000	87,284
Taxes	1,044	3,015	220	49	230	178	86	560	3	100	630	422	-	6,535
Foreign Exchange	185	5,727	286	-	860	58	157	303	9	-	2,778	1,219	-	11,582

[\]a Including studies and technical assistance

Indonesia READ Scaling-up initiative Expenditure Accounts by Components - Totals Including Contingencies (US\$ '000)

						Services inpu	its and ma	rket linka	ges					
	Vill	age agricultur	e and livelih	oods				Cocoa						
		develo	pment					farmer			Districts,	provinces		
			Savings,				Seed	support			and NPMO m	anagement		
			loans,				supply	services	Livestock			NPM U and		
		Agriculture	and		Agricultural		and	and	production		District	PPSU		
	Community	and	financial		extension	Financial	market	inputs	and health		project	project		
	mobilization	livelihoods	literacy	Nutrition	services	Institutions	systems	markets	services	Policy	management	nanagement	Unallocated	Total
I. Investment Costs														
A. Consultancies /a	10,547	23		856	415	1,491	66	43		-	-	2,074	-	15,514
B. Equipment and Material	220	-	365	-	1,353	-	-	446	15	-	154	80	-	2,633
C. Goods and Services	-	25,989	124	534		179	875	573	14	-	166	-	-	28,455
D. Vehicles	320	-	385	-	-	99	-	-	-	-	1,071	194	-	2,069
E. Workshops and Trainings	392	4,112	1,543	-	765	189	-	6,094	2	1,100	191	293	-	14,680
F. Works	-	3,046	-	-	-	-	-	-	-	-	-	-	-	3,046
G. Unallocated						-				-		<u> </u>	5,000	5,000
Total Investment Costs	11,480	33,169	2,417	1,390	2,533	1,958	942	7,156	31	1,100	1,582	2,641	5,000	71,398
II. Recurrent Costs														
A. Salaries & Allow ances	-	105	-	129	3,453	-	318	-	-	-	3,409	1,126	-	8,541
B. Operating Costs					-	-		-		-	5,346	1,999	-	7,345
Total Recurrent Costs		105	-	129	3,453	-	318	-		-	8,755	3,125	-	15,886
Total PROJECT COSTS	11,480	33,274	2,417	1,519	5,987	1,958	1,260	7,156	31	1,100	10,336	5,766	5,000	87,284
Taxes	1,044	3,015	220	49	230	178	86	560	3	100	630	422	-	6,535
Foreign Exchange	185	5,727	286	-	860	58	157	303	9	-	2,778	1,219	-	11,582

[\]a Including studies and technical assistance

Indonesia READ Scaling-up Initiative Components Project Cost Summary

				%	% Total
		(US\$ '000)		Foreign	Base
	Local	Foreign	Total	Exchange	Costs
A. Village agriculture and livelihoods development					
1. Community mobilization	10,546	184	10,730	2	13
2. Agriculture and livelihoods	26,279	5,629	31,908	18	38
3. Savings, loans, and financial literacy	1,989	273	2,261	12	3
4. Nutrition	1,403	-	1,403	-	2
Subtotal	40,216	6,086	46,302	13	56
B. Services inputs and market linkages					
Agricultural extension services	4,782	846	5,628	15	7
2. Financial Institutions	1,761	57	1,818	3	2
3. Seed supply and market systems	1,059	156	1,214	13	1
4. Cocoa farmer support services and inputs markets	6,613	300	6,913	4	8
5. Livestock production and health services	20	9	29	30	-
Subtotal	14,235	1,367	15,602	9	19
C. Policy	1,100	_	1,100	-	1
D. Districts, provinces and NPMO management					
District project management	7,071	2,676	9,747	27	12
2. NPMU and PPSU project management	4,231	1,177	5,408	22	7
Subtotal	11,303	3,853	15,156	25	18
E. Unallocated	5,000		5,000		6
Total BASELINE COSTS	71,854	11,306	83,160	14	100
Physical Contingencies	-	-	-	-	-
Price Contingencies	3,849	276	4,125	7	5
Total PROJECT COSTS	75,702	11,582	87,284	13	105

Indonesia READ Scaling-up Initiative Expenditure Accounts Project Cost Summary

				%	% Total
		(US\$ '000)		Foreign	Base
	Local	Foreign	Total	Exchange	Costs
I. Investment Costs					
A. Consultancies /a	13,981	485	14,466	3	17
B. Equipment and Material	1,389	1,157	2,546	45	3
C. Goods and Services	22,369	4,861	27,230	18	33
D. Vehicles	1,460	547	2,007	27	2
E. Workshops and Trainings	14,019	-	14,019	-	17
F. Works	1,938	1,108	3,046	36	4
G. Unallocated	5,000	<u> </u>	5,000		6
Total Investment Costs	60,156	8,158	68,314	12	82
II. Recurrent Costs					
A. Salaries & Allow ances	7,921	-	7,921	-	10
B. Operating Costs	3,777	3,148	6,925	45	8
Total Recurrent Costs	11,698	3,148	14,846	21	18
Total BASELINE COSTS	71,854	11,306	83,160	14	100
Physical Contingencies	-	=	-	-	-
Price Contingencies	3,849	276	4,125	7	5
Total PROJECT COSTS	75,702	11,582	87,284	13	105

[\]a Including studies and technical assistance

¹ Indonesia READ Scaling-up Initiative Project Components by Year -- Base Costs

		Base Cost (US\$ '000)						
	2018	2019	2020	2021	2022	Total		
A. Village agriculture and livelihoods development								
Community mobilization	2,315	2,106	2,106	2,106	2,098	10,730		
2. Agriculture and livelihoods	16,738	5,132	7,242	2,765	31	31,908		
3. Savings, loans, and financial literacy	512	497	1,019	233	-	2,261		
4. Nutrition	123	461	348	348	123	1,403		
Subtotal	19,688	8,195	10,714	5,452	2,252	46,302		
B. Services inputs and market linkages								
Agricultural extension services	1,779	1,279	1,052	641	878	5,628		
2. Financial Institutions	295	570	318	318	318	1,818		
Seed supply and market systems	937	86	71	63	58	1,214		
Cocoa farmer support services and inputs markets	5,288	615	340	340	330	6,913		
5. Livestock production and health services	<u>-</u>	13	10	3	3	29		
Subtotal	8,298	2,563	1,791	1,364	1,587	15,602		
C. Policy	275	275	275	275	-	1,100		
D. Districts, provinces and NPMO management								
District project management	3,104	1,661	1,661	1,661	1,661	9,747		
NPMU and PPSU project management	1,368	1,097	1,052	918	972	5,408		
Subtotal	4,472	2,758	2,713	2,579	2,633	15,156		
E. Unallocated	<u>-</u>		2,000	2,000	1,000	5,000		
Total BASELINE COSTS	32,734	13,791	17,493	11,670	7,472	83,160		
Physical Contingencies	-	-	-	-	-	-		
Price Contingencies								
Inflation								
Local	646	756	1,123	776	549	3,849		
Foreign	38	35	79	73	51	276		
Subtotal Inflation	684	791	1,202	848	599	4,125		
Devaluation	-	-	-	-	-	-		
Subtotal Price Contingencies	684	791	1,202	848	599	4,125		
Total PROJECT COSTS	33,418	14,582	18,695	12,519	8,071	87,284		
Taxes	2,803	1,137	1,337	775	484	6,535		
Foreign Exchange	5,112	2,031	2,491	1,263	684	11,582		

↑ Indonesia READ Scaling-up Initiative Project Components by Year -- Totals Including Contingencies

	7	Totals Inclu	ding Conti	ngencies	(US\$ '000)	
	2018	2019	2020	2021	2022	Total
A. Village agriculture and livelihoods development						
1. Community mobilization	2,365	2,247	2,292	2,292	2,284	11,480
2. Agriculture and livelihoods	17,103	5,378	7,745	3,015	34	33,274
3. Savings, loans, and financial literacy	525	534	1,105	254	-	2,417
4. Nutrition	126	494	382	382	135	1,519
Subtotal	20,119	8,653	11,524	5,942	2,453	48,690
B. Services inputs and market linkages						
Agricultural extension services	1,814	1,356	1,150	703	964	5,987
2. Financial Institutions	301	611	349	349	349	1,958
Seed supply and market systems	958	93	77	69	63	1,260
Cocoa farmer support services and inputs markets	5,390	657	373	373	362	7,156
Livestock production and health services		14	11	3	3	31
Subtotal	8,464	2,731	1,960	1,496	1,741	16,391
C. Policy	275	275	275	275	-	1,100
D. Districts, provinces and NPMO management						
District project management	3,166	1,758	1,795	1,804	1,814	10,336
NPMU and PPSU project management	1,395	1,165	1,142	1,001	1,064	5,766
Subtotal	4,561	2,923	2,936	2,805	2,878	16,102
E. Unallocated			2,000	2,000	1,000	5,000
Total PROJECT COSTS	33,418	14,582	18,695	12,519	8,071	87,284

Indonesia READ Scaling-up Initiative Expenditure Accounts by Years -- Base Costs (US\$ '000)

			Base	Cost		1	oreign E	Exchange
	2018	2019	2020	2021	2022	Total	%	Amount
I. Investment Costs								
A. Consultancies /a	2,669	3,198	3,032	2,870	2,697	14,466	3.4	485
B. Equipment and Material	1,485	559	489	10	3	2,546	45.5	1,157
C. Goods and Services	16,755	2,427	5,048	2,888	112	27,230	17.9	4,861
D. Vehicles	1,652	-	178	178	-	2,007	27.3	547
E. Workshops and Trainings	7,239	3,100	2,255	744	681	14,019	-	-
F. Works	-	1,523	1,523	-	-	3,046	36.4	1,108
G. Unallocated		_	2,000	2,000	1,000	5,000		
Total Investment Costs	29,800	10,807	14,525	8,690	4,492	68,314	11.9	8,158
II. Recurrent Costs								
A. Salaries & Allow ances	1,549	1,599	1,583	1,595	1,595	7,921	-	-
B. Operating Costs	1,385	1,385	1,385	1,385	1,385	6,925	45.5	3,148
Total Recurrent Costs	2,934	2,984	2,968	2,980	2,980	14,846	21.2	3,148
Total BASELINE COSTS	32,734	13,791	17,493	11,670	7,472	83,160	13.6	11,306
Physical Contingencies	-	-	-	-	-	-	-	-
Price Contingencies								
Inflation								
Local	646	756	1,123	776	549	3,849	-	-
Foreign	38	35	79	73	51	276	100.0	276
Subtotal Inflation	684	791	1,202	848	599	4,125	6.7	276
Devaluation	-	-	-	-	-	-	-	-
Subtotal Price Contingencies	684	791	1,202	848	599	4,125	6.7	276
Total PROJECT COSTS	33,418	14,582	18,695	12,519	8,071	87,284	13.3	11,582
Taxes	2,803	1,137	1,337	775	484	6,535	-	-
Foreign Exchange	5,112	2,031	2,491	1,263	684	11,582	-	-

[\]a Including studies and technical assistance

Indonesia READ Scaling-up Initiative Expenditure Accounts by Years -- Totals Including Contingencies (US\$ '000)

Totals Including Contingencies 2018 2020 2021 2022 2019 Total I. Investment Costs A. Consultancies /a 2,726 3,412 3,305 3,131 2,941 15,514 B. Equipment and Material 1,509 586 523 11 3 2,633 5,485 C. Goods and Services 17,116 2,583 3,149 122 28,455 D. Vehicles 1,684 192 193 2,069 14,680 E. Workshops and Trainings 7,388 3,308 2,448 789 747 F. Works 1,523 1,523 3,046 G. Unallocated 2,000 2,000 1,000 5,000 **Total Investment Costs** 30,423 11,412 15,476 9,274 4,813 71,398 **II. Recurrent Costs** 1,717 1,750 A. Salaries & Allow ances 1,588 1,737 1,750 8,541 1,408 B. Operating Costs 1,453 1,482 1,495 1,508 7,345 **Total Recurrent Costs** 2,995 3,169 3,219 3,245 3,258 15,886 **Total PROJECT COSTS** 33,418 14,582 18,695 12,519 8,071 87,284

Indonesia
READ Scaling-up Initiative
Disbursement Accounts by Financiers
(US\$ '000)

	The Gove	rnment	IFAD L	.oan	IFAD G	rant	Benefici	aries	Partne	ers	Tota	al
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Consultancies_DA	1,333	8.6	14,163	91.3	-	-	-	-	19	0.1	15,514	17.8
2. Vehicles_DA	188	9.1	1,881	90.9	-	-	-	-	-	-	2,069	2.4
3. Unallocated_DA	-	-	5,000	100.0	-	-	-	-	-	-	5,000	5.7
4. Equipment and Material_DA	239	9.1	2,191	83.2	-	-	-	-	203	7.7	2,633	3.0
Goods and Services_DA	2,587	9.1	16,928	59.5	-	-	5,838	20.5	3,101	10.9	28,455	32.6
6. Workshops_DA	1,244	8.5	9,267	63.1	1,000	6.8	-	-	3,169	21.6	14,680	16.8
7. Works_DA	277	9.1	2,769	90.9	-	-	-	-	-	-	3,046	3.5
8. Salaries and Allow ances_DA	8,541	100.0	-	-	-	-	-	-	-	-	8,541	9.8
9. Operating Costs_DA	668	9.1	6,677	90.9		-		-		-	7,345	8.4
Total PROJECT COSTS	15,076	17.3	58,877	67.5	1,000	1.1	5,838	6.7	6,493	7.4	87,284	100.0

[\]a Including studies and technical assistance

Indonesia READ Scaling-up Initiative Disbursements by Semesters and Government Cash Flow (US\$ '000)

	IFAD Loan	Fi IFAD Grant	nancing Availab Beneficiaries	le Partners		Costs to be Financed Project	The Gov	ernment Cumulative
	Amount	Amount	Amount	Amount	Total	Costs	Cash Flow	Cash Flow
5	11,670	125	-	2,719	14,514	16,709	-2,195	-2,195
2	11,670	125	-	2,719	14,514	16,709	-2,195	-4,391
3	4,964	125	560	215	5,864	7,291	-1,427	-5,817
4	4,964	125	560	215	5,864	7,291	-1,427	-7,244
5	5,855	125	1,685	146	7,810	9,347	-1,537	-8,781
6	5,855	125	1,685	146	7,810	9,347	-1,537	-10,318
7	4,113	125	674	85	4,997	6,259	-1,262	-11,581
8	4,113	125	674	85	4,997	6,259	-1,262	-12,843
5 9	2,837	-	-	82	2,919	4,036	-1,117	-13,960
10	2,837	-	-	82	2,919	4,036	-1,117	-15,076
Total	58,877	1,000	5,838	6,493	72,208	87,284	-15,076	-15,076

Annex 9.2: Detailed Programme base costs

Table	Description
1.1	Community mobilization
1.2	Agriculture and livelihoods (due to its length, this table is split in 3 tables)
1.3	Savings, loans, and financial literacy
1.4	Nutrition
2.1	Agricultural extension services
2.2	Financial institutions
2.3	Seed supply and market systems
2.4	Cocoa farmer support services and inputs markets
2.5	Livestock production and health services
3	Policy
4.1	District programme management
4.2	National and provincial management (due to its length, this table is split in 2
	tables)

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Appendix 9: Programme costs and financing

Indonesia

READ Scaling-up Initiative

Table 1.1. Community mobilization

Detailed Costs				_						_	_											
(US\$)				Quan							ase Co								ncies (
	Unit	2018	2019	2020	2021	2022	Total	Unit Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Impl. Agency
I. Investment Costs																						
A. Community mobilization teams																						
1. Community mobilization teams hired through the NGO																						
Village facilitators /a	person/month	4,050	5,400	5,400	-	-	14,850	215	872	1,163	1,163	-	-	3,198	984	1,374	1,404	-	-	3,761	LOAN (100%)	NSP
Sub-district supervisors /b	person/month	1,728	1,728	1,728	1,728	1,728	8,640	231	399	399	399	399	399	1,994	450	471	481	481	481	2,364	LOAN (100%)	NSP
District supervisors /c	person/month	288	288	288	288	288	1,440		78	78	78	78	78	388	87	92	94	94	94	460	LOAN (100%)	NSP
Provincial supervisors /d	person/month	48	48	48	48	48	240	385	18	18	18	18	18	92	21	22	22	22	22	109	LOAN (100%)	NSP
Subtotal									1,367	1,658	1,658	495	495	5,672	1,541	1,958	2,001	597	597	6,695	, ,	
2. Community mobilization teams hired through districts																						
Village facilitators /e	person/month	-	-	-	5,400	5,400	10,800	215	-	-	-	1,163	1,163	2,326	-	-	-	1,404	1,404	2,808	LOAN (100%)	DISTRICTS
3. Community mobilization teams hired through NPMO																						
National social mobilization specialist /f	person/month	12	12	12	12	12	60	1,538	18	18	18	18	18	92	21	22	22	22	22	109	LOAN (100%)	DISTRICTS
Subtotal									1,386	1,676	1,676	1,676	1,676	8,091	1,562	1,980	2,023	2,023	2,023	9,612		
B. Community mobilization trainings																						
1. New villages																						
Basic training /g	package	15	-	-	-	-	15		35	-	-	-	-	35	39	-	-	-	-	39	LOAN (100%)	NSP
Re-fresher training /h	package	-	15	15	15	15	60	1,154	-	17	17	17	17	69	-	20	21	21	21	83	LOAN (100%)	NSP
Subtotal									35	17	17	17	17	104	39	20	21	21	21	122		
2. Old villages																						
Basic training /i	package	9	-	-	-	-	9		21	-	-	-	-	21	23	-	-	-	-	23	LOAN (100%)	NSP
Re-fresher training /j	package	-	9	9	9	9	36	1,154		10	10	10	10	42		12	13	13	13	50	LOAN (100%)	NSP
Subtotal									21	10	10	10	10	62	23	12	13	13	13	73		
Know ledge sharing meetings /k	package	288	288	288	288	288	1,440	115	33	33	33	33	33	166	37	39	40	40	40	197	LOAN (100%)	NSP
Subtotal									89	61	61	61	61	332	100	72	74	74	74	392		
C. Community mobilization equipment																						
Tablet /I	unit	618	62	62	62	-	804	65	40	4	4	4	-	53	45	5	5	5	-	59	LOAN (100%)	DISTRICTS
Smart phone /m	unit	618	62	62	62	-	804	46	29	3	3	3	-	37	32	3	3	3	-	42	LOAN (100%)	DISTRICTS
Laptop /n	unit	177	-	-	-	-	177		106	-	-	-	-	106	119	-	-	-	-	119	LOAN (100%)	DISTRICTS
Motorcycle /o	unit	168	-	-	-	-	168	1,700	286	-		-	-	286	320					320	LOAN (100%)	DISTRICTS
Subtotal									461	7	7	7	-	481	516	8	8	8	-	540		
D. NGO management contract																						
Contract	per year	1	1	1	1	1	5	170,000	170	170	170	170	170	850	187	187	187	187	187	935	LOAN (100%)	NSP
Total									2,105	1,914	1,914	1,914	1,907	9,755	2,365	2,247	2,292	2,292	2,284	11,480		

[\] a On average one facilitator per village. Unit cost inclusive of all allow ances, including fuel, phone 3G credit etc. Facilitators will live and work in the village and will use their own motorcycles.

[\]b On average one per sub-district. Unit cost inclusive of all allow ances, including fuel etc. for the motorcycles. Supervisors will use their own motorcycles.

[\]c Unit costs will include all allow ances, including fuel etc for their motorcylce. Supervisors will use their own or the NGO's motorcycle in line with current practice.

[\]d One Prov supervisor covers 2 provinces. Unit costs includes all allow ances including the operating costs of the vehicle provided by the NGO.

[\]e In year 4 and 5, VFs are no longer under the NGO yet under the districts.

[\]f Part of NPMO team in AAEHRD

[\]g One course per district on village facilitation. It includes travel allow ances.

[\]h One course per district on village facilitation. It includes travel allow ances.

 $[\]label{lem:course} \mbox{ i One course per district on village facilitation. It includes travel allow ances.}$

[\]int One course per district on village facilitation. It includes travel allow ances.

[\]k Monthly meetings of districts at sub-district level

I 1 per VF, per sub-district/district supervisors. Year 2, 3, 4 take into account cost of replacement of broken tablets.

[\]m 1 per VF, per sub-district/district supervisors. Year 2, 3, 4 take into account cost of replacement of broken tablets.

In One per sub-district, district, provincial and national supervisors.

[\]o 1 per sub-distrct/distrct supervisors.

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)
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Appendix 9: Programme costs and financing

Indonesia READ Scaling-up Initiative Table 1.2. Agriculture and livelihoods De (US

Table 1.2. Agriculture and livelinoods																					
Detailed Costs									_	_											
(US\$)			V	Quant			Unit				st ('000)						ontingen				
·	Unit	2018	2019	2020	2021 202	2 Total	Cost	2018	2019	2020	2021 2	022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Impl. Agency
I. Investment Costs																					
A. Rice and non-rice production - new villages																					
1. Crop production & post-harvest trainings																					
Farmers field schools /a	FFS	720	360	-	-	- 1,080		222	111	-	-	-	332	250	131	-	-	-	381	LOAN (100%)	DISTRICTS
Demonstrations /b	per group	720	720	360	-	- 1,800	120	86	86	43	-	-	216	97	102	52	-	-	252	LOAN (100%)	DISTRICTS
Farmer field day	day/group	1,440	720	360	-	- 2,520	92	133	66	33	-	-	233	150	78	40	-	-	268	LOAN (100%)	DISTRICTS
Subtotal								441	264	76		-	781	497	311	92			901		
2. Machinery O&M training /c																					
Basic mechanization training /d	course	-	30	-	-	- 30	769	-	23	-	-	-	23	-	27	-	-	-	27	LOAN (100%)	DISTRICTS
Service business operators training for advanced mechanization	per participant	-	-	-	24	- 24	492	_	-	-	12	-	12	-	-	-	14	-	14	LOAN (100%)	DISTRICTS
Subtotal									23		12		35		27		14	_	42	,	
3. Inputs support																					
Start-up packages (HHs) /f	HHs	18,000	_	_	-	- 18,000	231	4,154	_	_	_	-	4,154	4,667	_	-	_	_	4,667	LOAN (100%)	DISTRICTS
4. Basic mechanization support		,				,		.,					.,	.,					.,		
Thresher /g	per group	_	_	720	-	- 720	1,538	_	_	1.108	_	-	1,108	_	_	1,324	_	_	1,324	LOAN (30%), BENEFICIARIES (70%)	DISTRICTS
Hand tractor + equipment /h	set/group	-	-	1.440	-	- 1.440	2,308	_	-	3,323	-	-	3,323	-	-	3,971	-	-	3,971	LOAN (30%), BENEFICIARIES (70%)	DISTRICTS
Subtotal				,		, -	,			4,431		_	4,431			5.295			5,295	, , , , , , , , , , , , , , , , , , , ,	
5. Advanced mechanization support /i										.,			.,			-,			-,		
Harvester /j	unit/village	_	_	_	120	- 120	7,692	_	_	_	923	_	923	_	_	_	1,107	_	1,107	LOAN (50%), BENEFICIARIES (50%)	DISTRICTS
Transplanter /k	unit/village	_	_	_	120		5.231	_	_	_	628	_	628	_	_	_	753	-	753	LOAN (50%), BENEFICIARIES (50%)	DISTRICTS
Drver /I	unit/village	_	_	_	120		7.692	_	_	_	923	_	923	_	_	_	1.107	_	1,107	LOAN (50%), BENEFICIARIES (50%)	DISTRICTS
Subtotal	urile village				120	120	7,002				2,474		2,474				2,966	_	2,966	EGATT (50%), BETTE TOPTIES (50%)	DioTRIOTO
6. Post-harvest equipment for HHs											2,777		2,414				2,300		2,500		
Storage drums /m	per HH	18.000	_	_	_	- 18,000	F 25	450	_	_	_	_	450	506	_	_	_	_	506	LOAN (100%)	DISTRICTS
Moisture meters /n	per group	720				- 720							72	81					81	LOAN (100%)	DISTRICTS
Scales /o	per group	720		-	-	- 720			-	-		-	43	49	-	-		-	49	LOAN (100%)	DISTRICTS
Subtotal	per group	120		_	-	- 720	00	565	<u> </u>		 -	 -	565	635			 -	_	635	EOAN (100%)	DISTRICTS
Subtotal								5.160	297	4,507	2.496	- -	12.439	5.800	339	5 207	2,981	_	14.506		
B. Rice and non-rice production - old villages								3,100	201	4,307	2,400	-	12,433	3,000	333	3,307	2,301	_	14,500		
1. Machinery O&M training /p																					
	course	9				- 9	769	7					7	8					8	LOAN (100%)	DISTRICTS
Basic mechanization training /q		9	-	-	-	- 60			-	-	-	-	30	8	35	-	-	-	-		
Service business operators training for advanced mechanization	per participant	-	60	-	-	- 60	492		30			<u> </u>	36						35	LOAN (100%)	DISTRICTS
Subtotal								,	30	-	-	-	36	8	35	-	-	-	43		
2. Basic mechanization support			400			400	4 500													LOAN (ARRY) PENERION DIEG (TOOK)	DIOTRIOTO
Thresher /s	per group	-	180	-	-		1,538	-	277	-	-	-	277	-	324	-	-	-	324	LOAN (30%), BENEFICIARIES (70%)	DISTRICTS
Hand tractor + equipment /t	set/group	-	360	-	-	- 360	2,308		831	<u> </u>	<u>-</u>		831		972			<u> </u>	972	LOAN (30%), BENEFICIARIES (70%)	DISTRICTS
Subtotal								-	1,108	-	-	-	1,108	-	1,296	-	-	-	1,296		
3. Advanced mechanization support /u	24 20																		0.40	LOAN (FOO() DENEETON DIEG (FOO()	DIOTRIOTO
Harvester /v	unit/village	-	30	-	-		6,923	-	208	-	-	-	208	-	243	-	-	-	243	LOAN (50%), BENEFICIARIES (50%)	DISTRICTS
Transplanter /w	unit/village	-	30	-	-		4,708	-	141	-	-	-	141	-	165	-	-	-	165	LOAN (50%), BENEFICIARIES (50%)	DISTRICTS
Dryer /x	unit/village	-	30	-	-	- 30	6,923		208		<u>-</u>		208		243		·		243	LOAN (50%), BENEFICIARIES (50%)	DISTRICTS
Subtotal									557		<u>-</u>	<u> </u>	557	<u>-</u> -	651		·		651		
Subtotal								7	1,694	-	-	-	1,701	8	1,982	-	-	-	1,990		
C. Cocoa- new villages - IFAD financed /y																					
Crop production & post harvest trainings																					
Farmers field schools /z	FFS	432	432	432	-	- 1,296	385	166	166	166	-	-	498	187	196	201	-	-	584	LOAN (100%)	DISTRICTS
2. Inputs and mechanization support																					
Start-up package /aa	package	10,800	-	-	-	- 10,800			-	-	-	-	4,154	4,667	-		-	-	4,667	LOAN (100%)	DISTRICTS
Post-harvest equipment	set/group	-	432	-	-	- 432	38		17				17		19				19	LOAN (100%)	DISTRICTS
Subtotal								4,154	17				4,170	4,667	19				4,687		
Subtotal								4,320	183	166	-	-	4,669	4,855	216	201	-	-	5,271		
D. Cocoa- new villages - Private sector financed /bb																					
1. Crop production & post harvest trainings																					
Farmers field schools /cc	FFS	288	288	288	-	- 864	385	111	111	111	-	-	332	125	131	134	-	-	389	PARTNERS (100%)	DISTRICTS
2. Inputs and mechanization support																					
Start-up package /dd	package	7,200	-	-	-	- 7,200			-	-	-	-		3,112	-	-	-	-	0,	PARTNERS (100%)	DISTRICTS
Post-harvest equipment	set/group	-	288	-	-	- 288	38		11		<u> </u>		11	-	13		<u> </u>		13	PARTNERS (100%)	DISTRICTS
Subtotal								2,769	11		<u> </u>		2,780	3,112	13				3,125		
Subtotal								2,880	122	111	-	-	3,113	3,237	144	134	-	-	3,514		

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Appendix 9: Programme costs and financing

Indonesia READ Scaling-up Initiative
Table 1.2. Agriculture and livelihoods

Detailed Costs																								
(US\$)				Quant	ities			Unit			Base Co	st ('000))		To	otals In	cludi	na Coi	ntinge	ncies	('000)			
(354)	Unit	2018	2019	2020		2022	Total		2018		2020			Total		201					Total	_ 	Fin. Rule	Impl. Agency
E Other estate crops - new villages																						_		
1. Crop production & post-harvest trainings																								
Farmers field schools /ee	FFS	360	180	-	-	-	540		83	42	-	-	-	125	5 94		49	-		-	143	3	LOAN (100%)	DISTRICTS
Marketing	w orkshop	-	360	180		-	540	92			17	-		50) -		39	20	-	-	59	9	LOAN (100%)	DISTRICTS
Subtotal									83					174	94		88	20	-	-	202		(,	
2. Inputs and mechanization support																								
Copra Drying facilities + equipment /ff	per group	360	-	-		-	360	1,538	554		-	-	-	554	622	!	-	-	-	-	622	2	LOAN (100%)	DISTRICTS
Subtotal									637	75	17			728	716		88	20		-	824	4		
F. Integrated homestead garden group - new villages																								
1. Crop production & post-harvest trainings																								
Farmers field schools /gg	FFS	-	720	360		-	1,080	385	-	277	138	-	-	415	5 -	. 3	327	167	-	-	494	4	LOAN (100%)	DISTRICTS
Farmers field day	day/group	-	1,440	720	-	-	2.160	F 46	-	66	33	-	-	100) -		78	40		-	119	9	LOAN (100%)	DISTRICTS
Inputs package /hh	package	18,000	-	-		-	18,000	77	1,385	-	-	-	-	1,385	1,556	i	-	-	-	-	1,556	6	LOAN (100%)	DISTRICTS
Subtotal									1,385		172		-				106	207		-	2,169			
G. Integrated homestead garden group - old villages																								
1. Crop production & post-harvest trainings																								
Farmers field schools /ii	FFS	180	360	-	-	-			69	138	-	-		208	3 78	1	164	-	-	-	242	2	LOAN (100%)	DISTRICTS
Farmers field day	day/group	360	180	-	-	-		4 6	17	8	-	-		25	5 19	1	10	-	-	-	29	9	LOAN (100%)	DISTRICTS
Inputs package /jj	package	4,500	-	-	-	-	4,500	77	346	-		-	-	346	389	ı	-	-		-	389	9	LOAN (100%)	DISTRICTS
Subtotal	· -								432	147	-	-	-	579	486	1	173	-	-	-	659	9		
H. Livestock activities /kk																								
1. Livestock production																								
Purchase of goats /II	head	-	570	-		-	570			39	-	-		39	-		46	-	-	-	46	6	LOAN (100%)	DISTRICTS
Livestock start-up package /mm	package/group	-	19	-		-	19	2,380	-	45	-	-		45	5 -		53	-	-	-	53	3	LOAN (100%)	DISTRICTS
Subtotal									-	85	-	-	-	85	-		99	-	-	-	99	9		
I. Non-farm based livelihoods activities - new villages																								
Evaluation of READ I non-farm activities	study	1	-	-	-	-		5,000		-	-	-	-	. 5	5 6	i	-	-	-	-	6	6	LOAN (100%)	DISTRICTS
Market opportunity scam/nn	study	15	-	-	-	-	15	1,000	15	-	-	-	-	15	5 17		-	-	-	-	17	7	LOAN (100%)	DISTRICTS
Non-livelihood group training /oo	training	-	180	-	-	-	180	385		69				69	-		82		-	-	82	2	LOAN (100%)	DISTRICTS
Subtotal									20	69	-	-	-	89	23		82	-	-	-	104	4		
J. Agriculture infrastructure																								
Small-scale infrastructure /pp	per village	-	360	360	-	-	720	3,846	-	1,385	1,385	-	-	2,769	-	1,5	523 1	,523	-	-	3,046	6	LOAN (100%)	DISTRICTS
K. Farmer review day																								
Rice and non rice crops /qq	w orkshop	1,440	720	720		-	2,880	92	133	66	66	-	-	266	150	1	78	80	-	-	309	9	LOAN (100%)	DISTRICTS
Cocoa /rr	w orkshop	1,440	1,440	1,440		-	4,320					-	-	399	150			160	-	-	467	7	LOAN (100%)	DISTRICTS
Other estate crops /ss	w orkshop	360	360	180	-	-	900	92			17	-	-	83	37		39	20	-	-	97	7	LOAN (100%)	DISTRICTS
Integrated homestade garden /tt	w orkshop	1,440	720	-		-	2,160	46	66	33	-			100	75		39	<u> </u>		-	114	4_	LOAN (100%)	DISTRICTS
Subtotal									366					847				261		-	987	7_		
Total Investment Costs									15,206	4,654	6,573	2,486	-	28,919	17,091	5,3	365 7	,732	2,981	-	33,169	9		
II. Recurrent Costs																								
A. NPMO agriculture livelihoods dedicated staff																								
Mechanization officer	person/month	54	54	54	144	144	450	215				31	31				12	13	34	34	105		GOVT	DISTRICTS
Total Recurrent Costs									12			31	31				12	13	34	34	105	_		
Total									15,218	4,666	6,585	2,517	31	29,016	17,103	5,3	378 7	,745	3,015	34	33,274	4		

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

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Appendix 9: Programme costs and financing

Indonesia
READ Scaling-up Initiative
Table 1.2. Agriculture and livelihoods
Detailed Costs
(US\$)

			Quan	tities			Unit		В	ase Co	st ('000))
Unit	2018	2019	2020	2021	2022	Total	Cost	2018	2019	2020	2021	2022

\a FFS per each group in each village/district

b Seed multiplications demostrations

\c 1 w eek course x 7.

\d Course per district for thresher + tractor+ mobile rice mill

\e Training on advanced mechanization, 7 days training in Makasaar.

of Given as a grant. BL for HHs from new villages.

\(\text{g Basic production equipment per group (each group is expected to have 25 members). READ SI provides 30% grant (70% is expected to be beneficiaries' contribution)

\h 2 sets per group (each group is expected to have 25 members). READ SI provides 30% grant (70% is expected to be beneficiaries' contribution)

vi Each new village will get one machinery to be chosen between harvesters, transplanters or dryers. The total quantity of advanced machinery is 360.

y Machinery per group (each group is expected to have 25 members). READ SI provides 50% grant, as bankers are not expected to finance early adopters on advanced equipment k Machinery per group (each group is expected to have 25 members). READ SI provides 50% grant, as bankers are not expected to finance early adopters on advanced equipment

\text{\text{Machinery per group (each group is expected to have 25 members). READ SI provides 50% grant, as bankers are not expected to finance early adopters on advanced equipment \m One per HH (new villages)

\n One per group (new villages)

to One per group (new villages)

\p 1 w eek course x 7.

\q Course per district for thresher + tractor+ mobile rice mill.

vr Training on advanced mechanization, 7 days training in Makasaar. Total 6 districts

\s Basic production equipment per group (each group is expected to have 25 members). READ SI provides 30% grant (70% is expected to be beneficiaries' contribution)

t 2 sets per group (each group is expected to have 25 members). READ SI provides 30% grant (70% is expected to be beneficiaries' contribution)

u Each new village will get one machinery to be chosen between harvesters, transplanters or dryers. The total quantity of advanced machinery is 90 in old villages.

w Machinery per group (each group is expected to have 25 members). READ SI provides 50% grant, as bankers are not expected to finance early adopters on advanced equipment

w Machinery per group (each group is expected to have 25 members). READ SI provides 50% grant, as bankers are not expected to finance early adopters on advanced equipment x Machinery per group (each group is expected to have 25 members). READ SI provides 50% grant, as bankers are not expected to finance early adopters on advanced equipment

vy Out of 15 new districts, 9 are financed by IFAD and 6 by the private

vz FFS per each group in each village/district (out of the 9 new districts financed by IFAD)

vaa It includes seedlings or side graft, handtools. Package per HH given as a grant-.

\bb Out of 15 new districts, 6 are financed by the private sector

vcc FFS per each group in each village/district (out of the 9 new districts financed by IFAD)

\ee FFS per village.

\ff Expected one estate crops group per village.

\gg Per group/village

hh Package per HH.

\ii Per group/village

\ii Package per HH

kk Activities to be carried out in 2 districts in NTT

\ll 30 heads per group (19 groups in total).

vmm It includes fodder seeds, fertilizer, vaccination. Given as a grant.

\nn At sub-district and district level.

voo Estimated quantity as technical and business courses are not expected in rural villages.

\pp Implemented for 2 times at IDR 50 million per village to comply with participatory infrastructure regulation.

\qq 1 day review per group/village.

\rr 1 day review per group/village.

\ss 1 day review per group/village.

\tt 1 day review per group/village.

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

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Appendix 9: Programme costs and financing

Indonesia

READ Scaling-up Initiative

Table 1.3. Savings, loans, and financial literacy

(US\$)				Quan	tities			Unit		Ва	ase Co	st ('00	00)		Total	s Inclu	uding C	onti	ingenc	ies ((000)		
	Unit	2018	2019	2020	2021	2022	Total	Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	202	21 20	22 .	Total	Fin. Rule	Impl. Agency
I. Investment Costs																							
A. Basic SCG training (board members)																							
Basic training /a	per MFls/ SCGs	4,032	-	-	-	-	4,032	115	465	-	-	-	-	465	525	-			-	-	525	LOAN (100%)	NSP
B. Advanced training course for SCG/MFI managers																							
Advanced training /b	per MFls/ SCGs	-	806	-	-	-	806	531	-	428	-	-	-	428	-	505	; -		-	-	505	LOAN (100%)	NSP
C. Incentives for MFIs as OJK-registered entities /c																							
In-class training /d	per MFls/ SCGs	-	-	202	-	-	202	2,000	-	-	404	-	-	404	-	-	488		-	-	488	LOAN (100%)	NSP
Motorcycle /e	item	-	-	101	101	-	202	1,600	-	-	162	162	-	323	-	-	192	1	93	-	385	LOAN (100%)	DISTRICTS
Computer /f	item	-	-	101	101	-	202	500			51	51		101			- 60		61		121	LOAN (100%)	DISTRICTS
Subtotal									-	-	616	212	-	828	-	-	740	2	254	-	994		
D. Financial literacy training (FLT)																							
TOT financial literacy for VFs /g	training	-	90	-	-	-	90	238	-	21	-	-	-	21	-	25	; -		-	-	25	LOAN (100%)	NSP
Financial literacy training material for HHs /h	set/hh	-	-	100,800	-	-	100,800	3	-	-	310	-	-	310	-	-	365		-	-	365	LOAN (100%)	NSP
Tablets /i	item	-	45	-	-	-	45	65		3				3		3	-				3	LOAN (100%)	DISTRICTS
Subtotal										24	310	-	-	335		29	365		-		394		
Total									465	452	926	212	-	2,056	525	534	1,105	2	254	- 7	2,417		

[\]a Training per MFls/ SCGs.

[\]b Advanced trainings assumed to be delivered to 20% of all MFIs that participated to the basic training.

[\]c Package for top performers.

[\]d Most probably at provincial level.

[\]e Given as incentive to top performers

[\]f Given as incentive to top performers

[\]g Assumes 450 VFs. Each training has 15 people. Total number of trainings is 3.

[\]h Assumes 4032 MFls/ SCGs with 25 members each.

[\]i To be given to the best financial business facilitators and used for M&E purposes.

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READ Scaling-up Initiative

Table 1.4. Nutrition

(US\$)				Quan	tities			Unit		Ba	ase Co	st ('00	0)		Totals	Includ	ding C	onting	encies	('000')		
	Unit	2018	2019	2020	2021	2022	Total	Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Impl. Agency
I. Investment Costs																						
A. Technical aw areness /a	per village	-	450	-	-	-	450	250	-	113	-	-	-	113	-	121	-	-	-	121	LOAN (100%)	DISTRICTS
B. Homestead garden /b	per village	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	LOAN (100%)	DISTRICTS
C. Women's group /c	per village	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	LOAN (100%)	DISTRICTS
D. Social marketing activities	per village	-	450	450	450	-	1,350	500	-	225	225	225	-	675	-	242	247	247	-	735	LOAN (100%)	DISTRICTS
E. Allow ances for staff to participate to nutrition activities	per village	450	450	450	450	450	2,250	200	90	90	90	90	90	450	101	106	109	109	109	534	LOAN (100%)	DISTRICTS
Total Investment Costs									90	428	315	315	90	1,238	101	469	356	356	109	1,390		
II. Recurrent Costs																						
A. NPMO nutrition dedicated staff																						
Senior nutrition officer	person/month	12	12	12	12	12	60	2,000	24	24	24	24	24	120	25	26	26	26	26	129	GOVT	NPMO
Total Recurrent Costs									24	24	24	24	24	120	25	26	26	26	26	129		
Total									114	452	339	339	114	1,358	126	494	382	382	135	1,519		

[\]a Amount per village

[\]b Covered under sub-component 1.2

[\]c Covered under sub-component 1.2. Based on homestade garden groups.

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READ Scaling-up Initiative

Table 2.1. Agricultural extension services

I. Investment Costs A. Extension officer (PPL) skills trainings 1. Extension officer skills refresher (general) /a course 108 - 108 - 108 324 2,000 216 - 216 - 216 - 216 48 244 - 261 - 261 765 LOAN (100%) NPI 2. PPL high level cocoa agronomy and business training /b training						Quanti	illes						ase 600	st ('000	"		I Otal	s Includ	unig o	onting	CHICICS	(000)		lm pl.
A. Extension officer (PPL) skills trainings 1. Extension officer skills refresher (general) /a course 108 - 108 - 108 324 2,000 216 - 216 - 216 648 244 - 261 - 261 765 LOAN (100%) NPI 2. PPL high level cocoa agronomy and business training /b training		Unit	2018	201	19 2	020	2021	2022	Total	Unit Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agency
A. Extension officer (PPL) skills trainings 1. Extension officer skills refresher (general) /a course 108 - 108 - 108 324 2,000 216 - 216 - 216 648 244 - 261 - 261 765 LOAN (100%) NPI 2. PPL high level cocoa agronomy and business training /b training	I. Investment Costs																							
1. Extension officer skills refresher (general) /a course 108 - 108 - 108 324 2,000 216 - 216 - 216 648 244 - 261 - 261 765 LOAN (100%) NPI 2. PPL high level cocoa agronomy and business training /b training																								
2. PPL high level cocoa agronomy and business training /b training LOAN (100%) NPI Subtotal 216 - 216 - 216 - 216 - 244 - 261 - 261 765	` ,	COURSE	108			108		108	324	2 000	216		216	_	216	648	244		261		261	765	LOAN (100%)	NPMO
Subtotal 216 - 216 - 216 648 244 - 261 - 261 765			-		_	-		-	- 02-	2,000	2.10	_	-10	_	-10	-	2-1-1	_	201		-	-		NPMO
	0 0 ,	ti dii iii ig									216		216		216	648	244		261		261	765	20/11(100/0)	
B. Review and revision of ATC extension training	B. Review and revision of ATC extension training																							
1. Training curriculum review	· · · · · · · · · · · · · · · · · · ·																							
· ·		person/month	6	;	2	1		_	9	21.538	129	43	22	_		194	143	49	25	_	_	217	LOAN (100%)	NPMO
					3	2		_		,				-	_						_		. (,	NPMO
Subtotal 168 55 29 252 187 62 34 283	Subtotal										-		29										, , , , ,	
2. Teaching skills																								
·	•	person/month	. 3		1	-		_	4	21.538	65	22	-	-	_	86	72	24		_	_	96	LOAN (100%)	NPMO
	National technical assistance	•			2	1	_	_	8				4	_	_	31		9	5	_	_		, ,	NPMO
Subtotal 84 29 4 117 93 33 5 132	Subtotal										-	29	4					33	5		_		, , , , ,	
Subtotal 252 84 33 368 280 96 39 415	Subtotal										252		33											
C. Farmer extension material review, improvement and production	C. Farmer extension material review, improvement and productio	n																						
1. Extension material																								
Rice and non-rice annual crops set/member 18,000 18,000 9 162 162 181 181 LOAN (100%) NP	Rice and non-rice annual crops	set/member	18.000)	-	-		_	18.000	9	162	-	-	-	_	162	181	_		_	_	181	LOAN (100%)	NPMO
	•	set/member	-		-	-		_		9	162	-	-	-	_	162	181	_		_	_	181	, ,	NPMO
		set/member	9,000)	-	-	-	-		9	81	-	-	-	-		91	-		-	_	91		NPMO
Homestade garden set/member 18,000 18,000 9 162 162 181 181 LOAN (100%) NPI	Homestade garden	set/member	18.000)	-	-	-	_	18.000	9	162	-	-	-	-	162	181	-	-	-	-	181	LOAN (100%)	NPMO
Subtotal 567 567 634 634	Subtotal										567		-			567	634	-	-			634	, ,	
D. Facilities upgrading	D. Facilities upgrading																							
1. Sub-district facilities upgrade																								
	Sub-district extension office upgrade (facilities) /c	office	-	- 14	44	-	-	-			-	223	-	-	-	223	-	257	-	-	-	257	LOAN (100%)	NPMO
Provision of equipment /d office - 144 144 1,031 - 148 148 - 171 171 LOAN (100%) NPI	Provision of equipment /d	office	-	- 14	44	-	-	-	144	1,031	-	148	-	-	-	148	-	171	-	-	-	171	LOAN (100%)	NPMO
Subtotal - 371 371 - 428 428	Subtotal											371	-		-	371		428	-			428		
2. ATC facilities upgrade	2. ATC facilities upgrade																							
Training facilities (ATC) /e lumpsum - 0.5 0.5 1 ⁷ 250,000 - 125 125 250 - 144 147 291 LOAN (100%) NP	Training facilities (ATC) /e	lumpsum	-	. 0	0.5	0.5	-	-	1 1	250,000	-	125	125	-	-	250	-	144	147	-	-	291	LOAN (100%)	NPMO
Subtotal - 496 125 621 - 572 147 719	Subtotal	·										496	125	-	-	621	-	572	147	-		719		
Total Investment Costs 1,035 580 374 - 216 2,205 1,158 668 447 - 261 2,533	Total Investment Costs										1,035	580	374		216	2,205	1,158	668	447	-	261	2,533		
II. Recurrent Costs	II. Recurrent Costs																							
A. NPMO extension services dedicated staff	A. NPMO extension services dedicated staff																							
1. Senior province extension advisor /f person/month 96 96 96 96 96 480 [©] 212 20 20 20 20 102 21 22 22 22 110 GOVT NP	Senior province extension advisor /f	person/month	96	; ;	96	96	96	96	480	212	20	20	20	20	20	102	21	22	22	22	22	110	GOVT	NPMO
2. Extension officers (PPLs) /g person/month 2,160 2,160 2,160 2,160 2,160 10,800 154 332 332 332 332 332 332 365 365 365 365 365 3791 GOVT NP	2. Extension officers (PPLs) /g	person/month	2,160	2,16	60 2,	,160	2,160	2,160	10,800	154	332	332	332	332	332	1,662	341	357	365	365	365	1,791	GOVT	NPMO
		person/month	1,440	1,44	40 1,	,440	1,440	1,440	7,200	200	288	288	288	288	288	1,440	295	309	316	316	316	1,552	GOVT	NPMO
Total Recurrent Costs 641 641 641 641 641 3,203 657 688 703 703 703 3,453	Total Recurrent Costs	•									-								703	703				
Total 1,675 1,221 1,015 641 857 5,408 1,814 1,356 1,150 703 964 5,987	Total										1,675	1,221	1,015	641	857	5,408	1,814	1,356	1,150	703	964	5,987		

[\]a District course (2 w eeks). Total no. of PPLs is 2160. 20 people per class.

[\]b See component 2.4

[\]c per sub-district.

[\]d per sub-district.

[\]e Used for physical facility, staff training. At discretion of ATC.

[\]f 1 per province, from Bekorluh.

[\]g 1 for two new villages

[\]h One per sub-district office.

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READ Scaling-up Initiative
Table 2.2. Financial institutions

Detailed Costs																							Other Accounts		
(US\$)			(Quantiti	es			Unit			Base Co	st ('000)			1	Totals Inc	luding Co	ntingencie	s ('000)	_					lmpl.
	Unit	2018	2019 2	020	2021	2022	Total	Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Disb. Acct.	Fin. Rule	Proc. Acct.	Proc. Method	Agency
I. Investment Costs																									
A. Support to participant banks																									
1. Trainings for bank officers																									
Training package /a	participant		32			-	32	5,000		160	-		-	160	-	189		-	-	189	W&T_DA	LOAN (100%)	W&T_PA	QCBS_PM (100%)	NSP
2. Incentives to participating banks																									
Motorcycle /b	item		48			-	48	1,600		77	-		-	77	-	90		-	-	90	G&S_DA	LOAN (100%)	G&S_PA	LCB_PM (100%)	NPMO
Contribution to travel allow ances /c	per month		192	576	576	576	1,920	20		4	12	12	12	38	-	4	14	14	14	46	G&S_DA	LOAN (100%)	G&S_PA	LCB_PM (100%)	NSP
Subtotal									-	81	12	12	12	115	-	94	14	14	14	136					
3. Financial advisors																									
National financial advisors /d	person/month	9	12	12	12	12	57	769	7	9	9	9	9	44	8	11	11	11	11	52	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
Provincial financial advisors /e	person/month	24	48	48	48	48	216	577	14	28	28	28	28	125	16	33	33	33	33	149	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
District financial advisors /f	person/month	330	660	660	660	660	2,970	321	106	212	212	212	212	952	119	250	255	255	255	1,135	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
Subtotal									127	248	248	248	248	1,120	143	293	300	300	300	1,336					
Subtotal									127	489	260	260	260	1,396	143	577	314	314	314	1,661					
B. Travel expenditures for NFA, PFAs and DFAs																									
NFAs to provinces	trip/year	2	4	4	4	4	18		2	3	3	3	3	14	2	4	4	4	4	17	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
NFA to districts	trip/year	3	6	6	6	6	27	769	2	5	5	5	5	21	3	5	6	6	6	25	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
PFAs to capital	trip/year	4	8	8	8	8	36	385	2	3	3	3	3	14	2	4	4	4	4	17	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
PFAs to districts	trip/year	8	16	16	16	16	72	77	1	1	1	1	1	6	1	1	1	1	1	7	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
DFA to provincial capital, visit PFA	trip/year	110	220	220	220	220	990	77	8	17	17	17	17	76	10	20	20	20	20	91	CONSULTANCIES_DA	LOAN (100%)	CONSULTANCIES_PA	CON_SRVCS_PM (100%)	NSP
Subtotal									14	29	29	29	29	130	16	34	35	35	35	155					
C. Financial advisors equipment																									
Laptop /g	item	60				-	60	600	36	-	-		-	36	40	-		-	-	40	G&S_DA	LOAN (100%)	G&S_PA	LCB_PM (100%)	NPMO
Smart-phone /h	item	60					60		3	-	-		-	3	3	-	-	-	-	3	G&S_DA	LOAN (100%)	G&S_PA	LCB_PM (100%)	NPMO
Motorcycle /i	item	55				-	55	1,600	88	-	-		-	88	99	-		-	-	99	VEHICLES_DA	LOAN (100%)	VEHICLES_PA	LCB_PM (100%)	NPMO
Subtotal									127		-	-		127	142	-	-		-	142					
Total									268	518	289	289	289	1,653	301	611	349	349	349	1,958					

[\]a lt includes cost of accommodation, local and international travel, training fee etc.

[\]b Given as an incentive. Quantity per bank/branch.

[\]c Each bank branch receives travel allow ances per month (e.g. for fuel etc). Second year considers 4 months

[\]d First year is 9 month contract, from second yera on is 12 months contract.

[\]e Assume 4 provincial advisors. First year 6 month contract. From second year on is 12 months contract.

[\]f Total of 55 DFAs. Assume 2 DFAs per district plus an extra DFA for 7 districts. \g For all financial advisors.

[\]h For all financial advisors.

[\]i For all DFAs.

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Table 2.3. Seed supply and market systems

(US\$)				Quant	ities			Unit		Bas	se Cos	st ('00	0)		Totals I	Includi	ing Co	nting	encies	('000)		lm pl.
	Unit	2018	2019	2020	2021	2022	Total	Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agency
I. Investment Costs																						
A. New villages																						
1. Certification process																						
Seed certification (BPSB) /a	package	5	-	-	-	-	5	5,000	25	-	-	-	-	25	28	-	-	-	-	28	LOAN (100%)	NPMO
2. Sustainable new genetic supply /b																						
Improved seeds - initial distribution (for all village farmers) /c	kg	270,000	-	-	-	-	270,000	2	623		-	-		623	700		-			700	LOAN (100%)	NPMO
Subtotal									648	-	-	-		648	728	-	-	-		728		
B. Old villages																						
1. Rice - variety performance trials																						
Trials /d	trial	9	9	9	9	-	36	500	5	5	5	5	-	18	5	5	5	5	-	21	LOAN (100%)	NPMO
2. Certification process																						
Seed certification (BPSB) /e	package	3	-	-	-	-	3	5,000	15	-	-	-	-	15	17	-	-	-	-	17	LOAN (100%)	NPMO
3. Sustainable new genetic supply /f																						
Improved seeds - initial distribution (for all village farmers) /g	kg	67,500	-	-	-	-	67,500	2	156		-	-		156	175		-			175	LOAN (100%)	NPMO
Subtotal									175	5	5	5		189	197	5	5	5		213		
Total Investment Costs									823	5	5	5	-	837	925	5	5	5	-	942		
II. Recurrent Costs																						
A. NPMO seeds supply sub-component dedicated staff																						
BPTP seed manager	person/month	96	96	48	24	24	288	327	31	31	16	8	8	94	32	34	17	9	9	100	GOVT	NPMO
2. BPTP business manager	person/month	-	96	96	96	96	384	327	-	31	31	31	31	126	-	34	34	34	34	137	GOVT	NPMO
3. BPSB seed certification officer	person/month	-	96	96	96	96	384	192		18	18	18	18	74		20	20	20	20	81	GOVT	NPMO
Total Recurrent Costs									31	81	66	58	58	294	32	87	72	63	63	318		
Total									855	86	70	62	58	1,131	958	93	77	69	63	1,260		

[\]a Yearly contract BPTP - province

[\]b Private and public.

[\]c 750 kg of seeds per village (360 villages). Yearly contract BPPT - province.

[\]d Trial per district.

[\]e Yearly contract BPTP - province

[\]f Private and public.

[\]g 750 kg of seeds per village (90 villages). Yearly contract BPPT - province.

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Table 2.4. Cocoa farmer support services and inputs markets

Detailed Costs																						
(US\$)				Quan	tities					Ba	se Co	st ('000))		Totals	Includ	ing Co	ntinge	encies	('000)		lm pl.
	Unit	2018	2019	2020	2021	2022	Total	Unit Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agenc
I. Investment Costs																						
A. Mars cocoa academy training																						
1. PPLs																						
Agronomy training /a	course	108	-	-	-	-	108	15,000	1,620	-	-	-	-	1,620	1,827	-	-	-	-	1,827	LOAN (50%), PARTNERS (50%)	NPMC
Business training /b	course	108	-	-	-	-	108	15,000	1,620	-	-	-	-	1,620	1,827	-	-	-	-	1,827	LOAN (50%), PARTNERS (50%)	NPMC
Subtotal									3,240		-		-	3,240	3,653	-	-	-	-	3,653		
2. Lead farmers																						
Agronomy training	course	-	10	10	10	10	40	15,000	-	150	150	150	150	600	-	177	181	181	181	720	LOAN (50%), PARTNERS (50%)	NPMC
Business training	course	-	10	10	10	10	40	15,000	-	150	150	150	150	600	-	177	181	181	181	720	LOAN (50%), PARTNERS (50%)	NPMC
Subtotal										300	300	300	300	1,200		354	362	362	362	1,441	, , ,	
Subtotal									3,240	300	300	300	300	4,440	3,653	354	362	362	362	5,094		
B. Provision of cocoa crop inputs and farm facilities																						
Cocoa development center	lumpsum	5	-		-	-	5	50,000	250	-	-	-	-	250	279	-	-	_	-	279	LOAN (50%), PARTNERS (50%)	NPMC
2. Village cocoa center	lumpsum	100	-	-	-	-	100	1,492		-	-	-	-	149	167	-	-	-	-	167	LOAN (50%), PARTNERS (50%)	NPMC
Cocoa orchard financing pilot	lumpsum	0.5	0.5		-	-	1 7	500,000	250	250	-	-	-	500	281	293	-	_	-	573		
Subtotal								,	649	250				899	727	293				1,020	, , , , , , , , , , , , , , , , , , , ,	
C. Mondalez																						
1. Partnership /c	lumpsum	1	-	-	-	-	1 7	1,000,000	1.000	-	_	-	-	1,000	1.000	-	-	-	-	1,000	LOAN (50%), PARTNERS (50%)	NPMC
D. Performance trials (old villages)	•																			•	, ,	
Variety performance trials /d	trial	9	9	9	9	-	36	500	5	5	5	5	-	18	5	5	5	5	-	21	LOAN (50%), PARTNERS (50%)	NPMC
2. Inter-cropping trials /e	trial	9	9	9	9	-	36	500	5	5	5	5	-	18	5	5	5	5	-	21	LOAN (50%), PARTNERS (50%)	
Subtotal									9	9	9	9		36	10	11	11	11		43	, , , , , , , , , , , , , , , , , , , ,	
Total									4.898	559	309	309	300	6,375	5 390	657	373	373	362	7.156		

[\]a 180 PPLs, 20 PPLs per course, 4 w eeks. Includes travel accommodation training fees atc

[\]b 180 PPLs, 20 PPLs per course, 3 w eeks. Includes travel accommodation training fees atc

[\]c Expenditure category to be confirmed.

[\]d Trial per district.

[\]e Trial per district.

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Table 2.5. Livestock production and health services

Detailed Costs

(US\$)				Quant	ities		Un	it		Bas	e Cos	t ('000))		Totals	Includ	ling C	onting	encies	('000)		lm pl.
	Unit	2018	2019	2020	2021	2022	Total Co	st	2018	2019 2	020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agency
I. Investment Costs																						
A. Livestock trainings																						
Livestock technician training /a	training	-	1	1	-	-	2 7	69	-	1	1	-	-	2	-	1	1	-	-	2	LOAN (100%)	NPMO
Technician training set-up expenses /b	per technician	-	3	3	-	-	6 2,0	25	-	6	6	-	-	12	-	7	7	-	-	14	LOAN (100%)	NPMO
Technician mobility and communication allow ances /c	technician/month	-	36	36	36	36	144	69	-	2	2	2	2	10	-	3	3	3	3	12	LOAN (100%)	NPMO
Information campaign	per technician	-	6	-	-	-	6 ~ 4	62	-	3	-	-	-	3	-	3	-	-	-	3	LOAN (100%)	NPMO
Total Investment Costs									-	12	9	2	2	26	_	14	11	3	3	31		
II. Recurrent Costs																						
Total									-	12	9	2	2	26	-	14	11	3	3	31		

[\]a 6 people training at sub-district level.

Indonesia READ Scaling-up Initiative Table 3. Policy **Detailed Costs**

(US\$)				Quar	tities						Base Co	st ('00	0)		Totals	Includ	ling Co	ontinge	encies	('000)		Impl.
	Unit	2018	2019	2020	2021	2022	Total	Unit Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agency
I. Investment Costs A. Policy activities /a	lumpsum	1	1	1	1	_	4	250,000	250	250	250	250	_	1,000	275	275	275	275	-	1,100	IFAD_GRANT (100%)	NPMO
Total	·								250	250	250	250		1,000	275	275	275	275		1,100	_ , ,	

[\]a Expenditure category to be confirmed

[\]b One for three villages (total 6) it includes cost of equipment like refrigerator, w eighting scales, disinfectant etc.

[\]c Total of 6 technicians.

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Table 4.1. District programme management

Detailed Costs																						
(US\$)				Quant	ities					В	ase Cos	st ('000)			Tota	als Inclu	ding Co	ntinger	ncies ('0	00)		
	Unit	2018	2019	2020	2021	2022	Total	Unit Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Impl. Agency
I. Investment Costs	,																					
A. District offices costs																						
Office furniture (new districts) /a	district	15	_	_	_	_	15	3,000	45	_		_	_	45	50	_	_	_	_	50	LOAN (100%)	DISTRICTS
Motorcycle /b	item	168	_	_	_		168	1,700	286	_	_	_	_	286	320	_	_	_	_	320	LOAN (100%)	DISTRICTS
Car /c	item	24	_	_	_		24	17,692	425	_	_	_	_	425	476	_	_	_	_	476	LOAN (100%)	DISTRICTS
Desktop/laptop /d	item	192	_	_	_		192	769	148	_	_	_	_	148	166	_	_	_	_	166	LOAN (100%)	DISTRICTS
Printer	item	72	_	_	_		72	462	33	_	_	_	_	33	37	_	_	_	_	37	LOAN (100%)	DISTRICTS
Communication (telephone etc.)	item	192	_	_	_		192	231	44	_	_	_	_	44	50	_	_	_	_	50	LOAN (100%)	DISTRICTS
Office establishment (for remote sub-districts) /e	lumpsum	1	-	-	-		1	15,000	15	-	-	-	-	15	17	-	-	-	-	17	LOAN (100%)	DISTRICTS
Motorcycle for sub-district coordinators /f	item	144	-	-	-		144	1,700	245	-	-	-	-	245	275	-	-	-	-	275	LOAN (100%)	DISTRICTS
Subtotal									1,240				-	1,240	1.391	_	_	_		1.391	, , , , ,	
B. District and sub-district workshops																						
Start-up w orkshop - districts	w orkshop	24	-	-	-	-	24	769	18	-	-	-	-	18	21	-	-	-	-	21	LOAN (100%)	DISTRICTS
Start-up w orkshop - sub-districts	w orkshop	144	-	-	-	-	144	500	72	-	-	-	-	72	81	-	-	-	-	81	LOAN (100%)	DISTRICTS
Stakeholder annual meetings	w orkshop	-	24	24	24	24	96	769	-	18	18	18	18	74	-	22	22	22	22	89	LOAN (100%)	DISTRICTS
Subtotal	•								90	18	18	18	18	164	102	22	22	22	22	191		
Total Investment Costs									1,331	18	18	18	18	1,405	1,493	22	22	22	22	1,582		
II. Recurrent Costs																						
A. District PMOs /g																						
District programme manager	person/month	288	288	288	288	288	1,440	375	108	108	108	108	108	540	111	116	118	118	118	582	GOVT	DISTRICTS
Deputy district programme manager	person/month	288	288	288	288	288	1,440	336	97	97	97	97	97	484	99	104	106	106	106	522	GOVT	DISTRICTS
M&E officer	person/month	288	288	288	288	288	1,440	192	55	55	55	55	55	277	57	59	61	61	61	299	GOVT	DISTRICTS
AWPB planning officer	person/month	288	288	288	288	288	1,440	192	55	55	55	55	55	277	57	59	61	61	61	299	GOVT	DISTRICTS
Treasurer	person/month	288	288	288	288	288	1,440	192	55	55	55	55	55	277	57	59	61	61	61	299	GOVT	DISTRICTS
Finance officer	person/month	288	288	288	288	288	1,440	192	55	55	55	55	55	277	57	59	61	61	61	299	GOVT	DISTRICTS
Procurement officer	person/month	288	288	288	288	288	1,440	192	55	55	55	55	55	277	57	59	61	61	61	299	GOVT	DISTRICTS
Communication officer	person/month	288	288	288	288	288	1,440	192	55	55	55	55	55	277	57	59	61	61	61	299	GOVT	DISTRICTS
Computer operator	person/month	288	288	288	288	288	1,440		51	51	51	51	51	255	52	55	56	56	56	275	GOVT	DISTRICTS
Driver	person/month	288	288	288	288	288	1,440	154	44	44	44	44	44	222	45	48	49	49	49	239	GOVT	DISTRICTS
Subtotal									632	632	632	632	632	3,162	648	679	694	694	694	3,409		
B. Operating costs for district and sub-district								_														
Communications	per year	288	288	288	288	288	1,440	77	22	22	22	22	22	111	25	26	26	26	27	129	LOAN (100%)	DISTRICTS
Travel allow ances /h	per year	24	24	24	24	24	120	30,769	738	738	738	738	738	3,692	826	852	869	877	884	4,308	LOAN (100%)	DISTRICTS
Office consumable districts	per year	24	24	24	24	24	120	1,385	33	33	33	33	33	166	37	38	39	39	40	194	LOAN (100%)	DISTRICTS
Office consumable sub-district	per year	144	144	144	144	144	720	308	44	44	44	44	44	222	50	51	52	53	53	258	LOAN (100%)	DISTRICTS
Vehicles operation and maintenance	per year	24	24	24	24	24	120	1,923	46	46	46	46	46	231	52	53	54	55	55	269	LOAN (100%)	DISTRICTS
Motorcycle operation and maintenance - districts	per moto	168	168	168	168	168	840	103	17	17	17	17	17	87	19	20	20	21	21	101	LOAN (100%)	DISTRICTS
Motorcycle operation and maintenance sub-districts	per moto	144	144	144	144	144	720	103	15	15	15	15	15	74	17	17	17	18	18	87	LOAN (100%)	DISTRICTS
Subtotal									916	916	916	916	916	4,582	1,024	1,057	1,079	1,088	1,098	5,346		
Total Recurrent Costs									1,549	1,549	1,549	1,549	1,549	7,744	1,673	1,736	1,772	1,782	1,792	8,755		
Total									2,880	1,567	1,567	1,567	1,567	9,149	3,166	1,758	1,795	1,804	1,814	10,336		

[\]a Lumpsum for new districts.

[\]b For each staff in the district office mng units.

[\]c For each district office mng unit.

[\]d For each staff in the district office mng units.

[\]e Lumpsum to be spent for remote sub-districts that need more resurces due to their inconvenient location.

[\]f One per sub-district coordinator.

[\]g All government staff, 1 of each post per district

[\]h lt includes cost of fuel and cost of going from the districts to to the villages. It includes extra travel cost for going to remote sub-districts.

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Table 4.2. National and provincial management

US\$)				Quan							se Cos			,					ncies ('C			lm pl
	Unit	2018	2019	2020	2021	2022	Total I	Unit Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agend
I. Investment Costs																						
A. International consultants /a																						
Senior management & M&E advisor /b	person/month	6	4	2	-	-	12	21,538	129	86	43	-	-	258	143	98	50	-		291	LOAN (100%)	NPMC
B. National consultants	•																				, ,	
Financial management specialist	person/month	2	2	2	2	2	10	2,692	5	5	5	5	5	27	6	6	6	6	6	32	LOAN (100%)	NPMC
Procurement specialist	person/month	2	2	2	2	2	10	2,692	5	5	5	5	5	27	6	6	6	6	6	32	LOAN (100%)	NPMC
Communications & know ledge management specialist	person/month	6	6	6	6	6	30	2,154	13	13	13	13	13	65	15	15	16	16	16	77	LOAN (100%)	NPMC
M&E specialist	person/month	9	12	12	6	6	45	2,154	19	26	26	13	13	97	22	31	31	16	16	115	LOAN (100%)	NPMC
IT/Database specialist	person/month	9	12	12	6	6	45	2,154	19	26	26	13	13	97	22	31	31	16	16	115	LOAN (100%)	NPMC
Subtotal									62	75	75	50	50	312	70	89	91	60	60	370	. , ,	
C. Trainings - national level																						
Capacity building for districts with low starting management capacity /c	per participant	30	30	_	-	_	60	492	15	15	-	-	-	30	17	17	_	-		34	LOAN (100%)	NPMC
M&E/project management/finance/procurement re-fresher training /d	per participant	96	96	38	23	_	253	492	47	47	19	11	-	125	53	56	23	14		145	LOAN (100%)	NPMC
Know ledge sharing meetings /e	per participant	-	48	48	48	48	192	492	-	24	24	24	24	95	-	28	29	29	29	113	LOAN (100%)	NPMC
Subtotal	1 - 1 1								62	86	42	35	24	249	70	101	51	42	29		, , , , , , , , , , , , , , , , , , , ,	
D. NPM O office costs																						
Office furniture	lumpsum	1	_	_	_	_	1	4.000	4	_	_	_	_	4	4	_	_	_		. 4	LOAN (100%)	NPMC
Communication /f	lumpsum	1	_	_	_	_	1	1,538	2	_	_	_	_	2	2	_	_	_		. 2	LOAN (100%)	NPMC
Computer desktop/laptop	item	17	_	_	_	_	17	769	13	_	_	_	_	13	15	_	_	_		. 15	LOAN (100%)	NPMC
Motorcycle	item	8	_	_	_	_	8	1,700	14	_	_	_	_	14	15	_	_	_		. 15	LOAN (100%)	NPMC
Car	item	1	_	_	_	_	1	17,692	18	_	_	_	_	18	20	_	_	_		20	LOAN (100%)	NPMC
Subtotal		-					-	,	50					50	56		- -			- 56		
E. Evaluation & communication activities																						
Case studies	per district	_	24	24	24	24	96	1.700	_	41	41	41	41	163	_	48	49	49	49	196	LOAN (100%)	NPMC
Annual outcome surveys	survey	_	1	1	1	1	4	23,077	_	23	23	23	23	92	_	27	28	28	28		LOAN (100%)	NPMC
External results audit	audit	_	_	1	_	1	2	20,000	_	_	20	_	20	40	_	_	24	_	24		LOAN (100%)	NPMC
Completion assessment	assessment	_	_	_	_	1	1	15,385	_	_	_	_	15	15	_	_	_	_	19		LOAN (100%)	NPMC
MIS software	package	1	_	_	-	_	1	40,000	40	_	_	_	-	40	45	_	_	_			LOAN (100%)	NPMC
RIMS surveys	survey	1	_	1	_	1	3	25,000	25	_	25	_	25	75	28	_	30	_	30		LOAN (100%)	NPMC
Evaluation communication activities	survey	-	1	1	1	1	4	25,000		25	25	25	25	100		30	30	30	30		LOAN (100%)	NPMC
Subtotal								,,	65	89	134	89	149	526	73	105	162	107	180			
F. Provincial & district consultants support																						
1. Provincial consultants																						
Provincial M&E specialists /g	person/month	96	96	96	96	96	480	1.077	103	103	103	103	103	517	117	122	125	125	125	613	LOAN (100%)	NPMC
2. Provincial consultants travel								,-													(,	
Provincial consultants to Jakarta /h	trip	16	16	16	16	16	80	400	6	6	6	6	6	32	7	8	8	8	8	38	LOAN (100%)	NPMC
Provincial consultants to districts /i	trip	192	96	96	96	96	576	200	38	19	19	19	19	115	43	23	23	23	23		LOAN (100%)	NPMC
Subtotal									45	26	26	26	26	147	51	30	31	31	31			
Subtotal								•	148	129	129	129	129	664	167	152	156	156	156			
G. Provincial offices cost										0	0	0	0			.02	.00	.00				
Office furniture	lumpsum	8	_	_	_	_	8 -	2,000	16	_	_	_	_	16	18	_	_	_		. 18	LOAN (100%)	NPMC
Communication	lumpsum	8	_	_	_	_	8 -	1,500	12	_	_	_		12	13	_	_	_			LOAN (100%)	NPMC
Computer desktop/laptop	item	32	_	_	_	_	32 🔽	769	25	_	_	_	_	25	28	_	_	_		28	LOAN (100%)	NPMC
Car	item	8	_	_	_	_	8 7	17,692	142	_	_	_	_	142	159	_	_	_		159	LOAN (100%)	NPMC
	ROTT	0				-	J	11,002	194					194	218	 -	 -			218	20/111 (100/0)	14110
Subtotal																						

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

Final project design report

Appendix 9: Programme costs and financing

Indonesia
READ Scaling-up Initiative
Table 4.2. National and provincial management
Detailed Costs
(US\$)

Detailed Costs																				_		
(US\$)				Quanti							se Cos								rcies ('00	0)		lm pl.
	Unit	2018	2019	2020	2021	2022	Total U	Init Cost	2018	2019	2020	2021	2022	Total	2018	2019	2020	2021	2022	Total	Fin. Rule	Agency
II. Recurrent Costs																						
A. Programme management office																						
1. National PMO																						
Programme director	person/month	12	12	12	12	12	60	750	9	9	9	9	9	45	9	10	10	10	10	48	GOVT	NPMO
Deputy directors - field	person/month	12	12	12	12	12	60 🔽	615	7	7	7	7	7	37	8	8	8	8	8	40	GOVT	NPMO
Deputy directors - technical	person/month	12	12	12	12	12	60	615	7	7	7	7	7	37	8	8	8	8	8	40	GOVT	NPMO
Deputy director - administration	person/month	12	12	12	12	12	60	615	7	7	7	7	7	37	8	8	8	8	8	40	GOVT	NPMO
Tresurer	person/month	12	12	12	12	12	60	437	5	5	5	5	5	26	5	6	6	6	6	28	GOVT	NPMO
Finance officer	person/month	24	24	24	24	24	120	437	10	10	10	10	10	52	11	11	12	12	12	57	GOVT	NPMO
Senior extension officer	person/month	12	12	12	12	12	60	437	5	5	5	5	5	26	5	6	6	6	6	28	GOVT	NPMO
Procurement officer	person/month	12	12	12	12	12	60	282	3	3	3	3	3	17	3	4	4	4	4	18	GOVT	NPMO
Know ledge management officer	person/month	12	12	12	12	12	60	282	3	3	3	3	3	17	3	4	4	4	4	18	GOVT	NPMO
Communications officer	person/month	12	12	12	12	12	60	282	3	3	3	3	3	17	3	4	4	4	4	18	GOVT	NPMO
M&E Officers /j	person/month	36	36	36	36	36	180	282	10	10	10	10	10	51	10	11	11	11	11	55	GOVT	NPMO
AWPB/Planning officers /k	person/month	24	24	24	24	24	120	282	7	7	7	7	7	34	7	7	7	7	7	37	GOVT	NPMO
Rural Finance Officer /I	person/month	12	12	12	12	12	60	282	3	3	3	3	3	17	3	4	4	4	4	18	GOVT	NPMO
Subtotal									83	83	83	83	83	413	85	89	91	91	91	445		
2. National PMO operating costs							_															
Travel allow ances	per year	1	1	1	1	1	5	100,000	100	100	100	100	100	500	112	115	118	119	120	583	LOAN (100%)	NPMO
Communication /m	per year	1	1	1	1	1	5 💆		1	1	1	1	1	7	2	2	2	2	2	8	LOAN (100%)	NPMO
Motorcycle operations and maintenance	per moto	8	8	8	8	8	40	103	1	1	1	1	1	4	1	1	1	1	1	5	LOAN (100%)	NPMO
Vehicle operations and maintenance	per year	1	1	1	1	1	5		2	2	2	2	2	10	2	2	2	2	2	11	LOAN (100%)	NPMO
Office consumable	per year	1	1	1	1	1	5	1,846	2	2	2	2	2	9	2	2	2	2	2	11	LOAN (100%)	NPMO
Subtotal									106	106	106	106	106	530	118	122	125	126	127	618		
3. Provincial programme support units /n							_															
PPSU coordinator /o	person/month	96	96	96	96	96	480	562	54	54	54	54	54	270	55	58	59	59	59	291	GOVT	NPMO
M&E officer /p	person/month	96	96	96	96	96	480	269	26	26	26	26	26	129	26	28	28	28	28	139	GOVT	NPMO
AWPB/planning officer /q	person/month	96	96	96	96	96	480	269	26	26	26	26	26	129	26	28	28	28	28	139	GOVT	NPMO
Finance assistant /r	person/month	96	96	96	96	96	480	215	21	21	21	21	21	103	21	22	23	23	23	111	GOVT	NPMO
Subtotal									126	126	126	126	126	632	129	136	139	139	139	681		
4. PPSU support operating costs																						
Travel allow ances	per year	8	8	8	8	8	40	23,077	185	185	185	185	185	923	206	213	217	219		1,077	LOAN (100%)	NPMO
Communication /s	per year	8	8	8	8	8	40	769	6	6	6	6	6	31	7	7	7	7	7	36	LOAN (100%)	NPMO
Vehicle operations and maintenance	per year	8	8	8	8	8	40	1,923	15	15	15	15	15	77	17	18	18	18	18	90	LOAN (100%)	NPMO
Car hiring	per year	8	8	8	8	8	40	2,585	21	21	21	21	21	103	23	24	24	25	25	121	LOAN (100%)	NPMO
Office consumable	per year	8	8	8	8	8	40	1,231	10	10	10	10	10	49	11	11	12	12	12	57	LOAN (100%)	NPMO
Subtotal									237	237	237	237		1,183	265	273	279	281		1,381		
Total Recurrent Costs									552	552	552	552		2,758	597	620	633	636		3,125		
Total									1,263	1,017	975	854	903	5,011	1,395	1,165	1,142	1,001	1,064	5,766		

[\]a Fee rates include per diem and international travel.

[\]b Short term for design/set-up of programme systems (e.g. benchmarking, MIS)

[\]c 3 days training. All costs per participant included.

[\]d For new districts. Average 4 people per districts partecipating.

[\]e With district managers. Assume 2 meetings per year.

[\]f Lumpsum to purchase any communication device, as per NPMO need.

[\]g One per province.

[\]h Assume two times per year per consultant (total 8 consultants).

[\]i Assume two trips per month in year one and one trip per month in year two to five.

[\]j 1 per 8 districts.

[\]k 1 per 12 districts.

[\] Seconded from Dept Ag Finance in DG PSP.

[\]m Includes any other bills.

[\]n Attached to agency responsible for extension.

[\]o 1 per province.

[\]p 1 per province. \q 1 per province.

[\]r 1 per province.

[\]s Includes any other bills.

Appendix 10: Economic and Financial Analysis

- 611. A financial and economic analysis was undertaken to assess the financial impacts of the programme on farmers and on the society as a whole. Building on the success of READ, READ SI programme objective is to individually and collectively empower rural households with the skills, confidence and resources to sustainably improve their farm and non-farm incomes and livelihoods.
- 612. Benefits are expected to derive from (i) community mobilization, (ii) village agriculture and livelihoods development, (iii) improved services, inputs and market linkages, including enhanced financial services, and (iv) improved nutrition. In order to represent the programme financial benefits, six representative financial models were developed. These models were also used as building blocks for the economic analysis.
- 613. The Programme will be implemented in around 24 districts within eight provinces, of which six are located in the Sulawesi Island, one in NTT, and one in West Kalimantan.
- 614. **Number of beneficiaries.** The programme target groups are: (i) the poor and near poor who have the potential to generate economic returns from agriculture with programme support; and (ii) landless and land-poor, including women-headed households, who will be included in activities directed at homestead gardening, improved nutrition and financial literacy. The programme is expected to benefit about 382,500 direct beneficiaries or 76,500 households, assuming an average household size of five members. About 50% of the total programme beneficiaries are expected to be women. A summary of the total number of beneficiaries by activity, and their expected phasing in, is shown in the table 2 under the economic analysis section.

FINANCIAL ANALYSIS

- 615. The primary objective of the financial analysis is to determine the financial viability and incentives of the target group for engaging in the programme activities, by examining the impact of programme interventions on family labour, cash flow and net incomes. Based on field research and IFAD previous programme READ, from which READ SI will scale up, a number of indicative economic activities were identified during the programme design process. Five illustrative crop models and one livestock model were prepared to demonstrate the financial viability of the investments: (i) cocoa crop model, (ii) cocoa partly rehabilitated crop model, (iii) paddy paddy crop model, (iv) chilli crop model, (v) copra crop model, (vi) goats livestock model. These models form the building blocks for the economic analysis. A cash-flow analysis is finally carried out to present the "with" and "without" programme analysis. Summary results from the financial models are presented in **Error! Reference source not found.**1, at the end of this section.
- 616. **Key assumptions.** The following information gathered during the final design missions has been used to set up the analyses: interviews with farmers, mission estimates, documents and surveys from IFAD READ programme. In particular, information on labour and input requirements for various operations, capital costs, prevailing wages, yields, farm gate and market prices of commodities, input and farm-to-market transport costs were collected. Conservative assumptions were made both for inputs and outputs in order to take account of possible risks.
- 617. **Exchange rate**. The exchange rate used in the analysis is fixed at 1 USD = 13000 IDR.
- 618. **Prices**. The financial prices for programme inputs and products were collected in the field by the design team. All the information on labour requirements for various production models, prevailing wage rates, yields, input use, farm gate and market prices of the products, input

prices were collected. Prices used represent estimates of the average seasonal prices and the analysis is carried out using constant prices.

- 619. **Labour.** Family labour has been valued both in financial and economic analysis. It has been assumed that farm labour is mainly provided by the households. Hired labour (unskilled) and family labour are priced at IDR 75,000 per day, which is the prevailing market rate.
- 620. **Opportunity cost of capital.** A discount rate of 12% has been used in this analysis to assess the viability and robustness of the investments in order to consider the profitability of the foreseen investments with market alternatives. The selected value is calculated by taking into account actual market interest rate on loans49.
- 621. **Crop models**. All five crop models and the livestock model are presented over a period of 10 years. Positive profitability indicators, before and after financing, are shown to be positive confirming that improved agro-business skills, market linkages, access to inputs and financial services, would lead to an increase in net income and to positive NPV, IRR and B/C ratio, as well as to improved nutrition. A summary of the financial models is presented in table 1 below. Each model is also more thoroughly presented hereinafter.

Table 1. Summary of crop and livestock models

IDR '000	*Income WOP	*Income WP	WP Investment first year	NPV @ 12%	IRR	Return to family labour	B/C ratio
Crop							
Cacao - 1 ha	7,050	10,494	8,613	5,927	47%	312	1.57
Cacao - rehab - 1 ha	7,050	18,645	15,975	6,149	17%	495	1.50
Paddy Paddy - 0.5 ha	7,061	10,643	4,901	12,441	52%	370	1.55
Chili - 0.1 ha	1,423	6,424	1,290	19,274	-	338	3.22
Copra -1 ha	4,630	8,550	2,265	5,409	28%	201	1.54
Livestock							
Goats	1,740	5,241	1,960	4,443	32%	138	1.75

^{*} Net of family labour

- 622. **Cacao crop model.** This model presents a situation without programme (WOP) intervention and a situation with programme (WP) intervention, on a land size of 1ha. Cacao is an important cash crop grown mainly in lowlands but also in parts of uplands. Currently most of cacao trees suffer from the pod borer disease. Farmers have limited knowledge about pest control, farm level post-harvest processing and crop care practices. In addition, many farmers use cheap fertilizers, which should instead be used for other crops, and apply them in wrong quantities. Mainly for these reasons, the WOP shows very low yields on average 320 kg per ha/year. The WP scenario presents much higher yields⁵⁰ due to improved management/agronomic skills achieved through specific trainings and use of cocoa high quality inputs packages⁵¹. The financing analysis shows that the farmer has access to a programme grant, which on the first year will provide the farmer with an input starter package⁵².
- 623. Cacao crop model with rehabilitation of 30% of the plants. This model presents the same WOP scenario of the cacao crop model, but it includes an extra investment in the WP. Indeed, yields are expected to get up to 970 kg, as 30% of the plants are supposed to be re-habilitated and therefore to give higher yields from the fourth year on. The financing analysis is carried out in order to show that the farmer will finance the first year of negative income after labour through an input starter package grant and facilitated access to a loan⁵³.

⁴⁹ Economic Intelligence Unity, Country Report Indonesia, June 2016.

⁵⁰ WP cocoa maximum yields (700kg per ha/year) are aligned to the cocoa results reported in the READ Project Completion Report (PCR).

⁵¹ All cocoa READ SI activities will be carried out through the PPP.

 $^{^{\}rm 52}$ The cocoa starter package per households is USD 385. Financed by the PPP.

⁵³ Grace period of 3 years, 9% interest rate and repayment period of 5 years.

Appendix 10: Economic and Financial Analysis

- 624. **Paddy crop model.** This model presents a situation without programme (WOP) intervention and a situation with programme (WP) intervention, on a land size of 0.5 ha. In the WP scenario, households attend farmer field schools and mechanization trainings to enhance their skills and are given access to a starter inputs package including genetically improved seeds. Moreover, they receive small equipment⁵⁴, such as storage drums for seeds, scales and moisture metres, and access to mechanization⁵⁵. The financing analysis shows that the household will be able to finance the negative income after labour through access to programme grants and beneficiaries own contribution to mechanization⁵⁶.
- 625. **Chili crop model.** Chili has been taken as a representative crop for homestead garden⁵⁷. This model presents a situation WOP and a situation WP. In order not to obtain overoptimistic results, the WOP is assumed to be foregone income while, in the WP, households and especially women are supported to cultivate with vegetables at least 0.1 ha of land, which is usually unused land next by the house. Most of the yields are used for self-consumption, as homestead garden principally aims at improving households' nutrition, and a small part of it is sold to the market generating a small source of income. The model shows positive income before and after family labour, already from the first year. A net benefits liquidity⁵⁸ analysis is also presented to show the net revenue from sales after that non real disbursements, like family labour and costs covered by the grant⁵⁹, are deducted.
- 626. **Copra crop model.** This model presents a situation without programme (WOP) intervention and a situation with programme (WP) intervention, on a land size of 1ha. In the WOP, farmers have limited knowledge about pest control, farm level post-harvest processing and crop care practices such as side-grafting; this results in low yields on average 1500 kg per ha/year. The WP illustrates an improved productivity and profitability of copra production through investments in replacement of old trees (tall variety), post-harvest drying facility and equipment for value addition and improved farm agronomic skills. The liquidity analysis is performed in order to show the farmer liquidity, net of family labour and copra drying facility costs 61.
- 627. **Goat livestock model.** The READ approach is to provide 10 members of a 20 member livestock group with three 2 years breeding females each. These 10 members will have the use of and responsibility for their animals for 3 kidding cycles (typically around 18-20 months). After 3 kiddings, the member will keep all progeny as their own and "pass the gift" of breeding stock onto the next 10 members. The WOP shows that households owns between two and three goats as a starting stock. However, the mortality rate gets up to 10% because farmers do not provide adequate housing, vaccinations and integration of food to the animals. Most of the goats are kept for self-consumption. Each female goat gives birth to at least 1 kid. Goats are mostly used for self-consumption and occasionally sold. In the WP, it is shown that the household initial stock has 3 additional female goats provided by the programme. The 3 goats are then deducted in year 2, as they are passed on to the next household. With additional investments in housing, vaccination and food, the mortality rate decreases to 5%, and the household is able to make an income out of this activity and to also keep a good number of goats for self-consumption. The liquidity analysis shows that, in the first year, the negative

⁵⁴ Equipment provided through a grant: drums are given to each household while scales and moisture metres are given to groups (assumed number of members per group is 25).

⁵⁵ Hand tractors, threshers. These machineries are purchased by the groups. The unit cost included in the model is the cost each household has to contribute to the group in order to buy the machinery.

⁵⁶ The Programme grant covers the starter inputs package, small equipment and 30% of the basic mechanization total cost (70% will be the group contribution).

⁵⁷ Other crops may be chosen by the programme beneficiaries.

⁵⁸ *Farm liquidity= Net Revenues from sales (net from self consumption) excluding production costs which are not real disbursements (i.e. family labour, seed reutilization, and any subsidies and grants to productive inputs).

⁵⁹ The homestead garden grant is IDR 1000,000 (or approximately USD 77).

⁶⁰ Investment per group of 25 members. In the model, the amount per drying facility is the cost per beneficiary which is entirely covered by the grant.

⁶¹ Covered by a grant and therefore are not real disbursements.

income after labour becomes positive when the programme grant, in the form of a starter package, is factored in ⁶².

ECONOMIC ANALYSIS

- 628. The objectives of the economic analysis are: i) to examine the overall programme viability; ii) to assess the programme's impact and overall economic rate of return; and iii) to perform sensitivity analyses to assess the benefits from a broad welfare perspective.
- 629. **Key assumptions**. The physical inputs and productions established in the financial analysis provided the basis to determine the viability of the programme investment in terms of opportunity costs and quantifiable benefits to the economy as a whole. The estimate of the likely economic returns from programme interventions are based on the following assumptions:
 - a. programme life has been assumed at 20 years;
 - programme inputs and outputs traded are valued at their respective market prices, and goods are expected to move freely within the programme area in response to market demand;
 - c. considering the average deposit rate in Indonesia, the discount rate used for the economic analysis has been set at 10%⁶³.
- 630. **Programme economic costs and benefits**. The economic analyses include the investment and incremental recurrent costs of the programme components. The programme 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.
- 631. **Benefits Estimation**. The incremental benefits stream comprises the economic net values of all farm models developed in the financial analysis. These benefits are then aggregated by the number of households that are estimated to take part to each activity.

⁶² The grant is about IDR 30.9 million per group. Each groups has 20 members and therefore the amount per member should be approximately IDR 1.5 million.

⁶³ Average deposit rate between 2014 and 2016. Economist Intelligence Unit, Indonesia Country Report, June 2016.

Appendix 10: Economic and Financial Analysis

Table 2. Crop and enterprise model phasing in activity (used in the final economic aggregation)

Household's phasing	in by activity					
	PY1	PY2	PY3	PY4	PY5	Total HHs
Phasing in crops %	30%	40%	30%	0%	0%	100%
Cocoa	5,738	5,738	7,650			19,125
Cocoa - rehab	1,013	1,350	1,013			3,375
Paddy Paddy	6,750	9,000	6,750			22,500
Chili	6,750	9,000	6,750			22,500
Copra	2,558	3,410	2,558			8,525
Phasing in crops %	30%	40%	30%	0%	0%	100%
Goats	143	190	143			475
Total	22,950	28,688	24,863	0	0	76,500

- 632. **Economic Pricing**. Economic pricing has been based on the following assumptions:
 - a. The opportunity cost of labour is set at 70,350 MDL/day, or 93.8% of financial cost of labour, which is justified given rural unemployment rate at 6.2%⁶⁴;
 - b. The shadow exchange rate (SER) has been calculated at 1 USD =13,633 IDR;
 - c. The Shadow Exchange Ratio Factor (SERF), used to obtain economic costs, has been calculated at 1.05;
- 633. Economic Rate of Return. The overall economic internal rate of return (EIRR) of the programme is estimated at 19% for the base case. The net present value (NPV) of the net benefit stream, discounted at 10%, is USD 50.7 million. A summary of the economic analysis is presented in table 3.

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⁶⁴ Economist Intelligence Unit, Indonesia Country Report, June 2016. World Bank Unemployment rate: http://data.worldbank.org/indicator/SL.UEM.TOTL.ZS

Table 3. Summary of economic analysis

LICCOOO	Total	Total costs	Incremental
US\$000	Benefits	Total costs	Cash Flow
Year 1	-3,969	25,085	-29,055
Year 2	-3,980	10,824	-14,804
Year 3	-153	16,061	-16,214
Year 4	9,926	11,753	-1,827
Year 5	15,203	7,348	7,855
Year 6	18,960	800	18,160
Year 7	20,224	800	19,424
Year 8	21,185	800	20,385
Year 9	21,977	800	21,177
Year 10	22,208	800	21,408
Year 11	22,293	800	21,493
Year 12	22,300	800	21,500
Year 13	22,300	800	21,500
Year 14	22,300	800	21,500
Year 15	22,300	800	21,500
Year 16	22,300	800	21,500
Year 17	22,300	800	21,500
Year 18	22,300	800	21,500
Year 19	22,300	800	21,500
Year 20	22,300	800	21,500
NPV@10%			50,694
ERR			19%

634. **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 4. The sensitivity analysis investigates the effect of fluctuations in programme costs, programme benefits, and delays in implementation on the NPV and ERR. It shows the economic impacts that a decrease in programme benefits – up to -40% – will have on the programme viability. Similarly, it shows how the economic viability of the programme will be affected by an increase of up to 40% in programme costs; and by a one to three-year delay in programme implementation. The analysis confirms that the economic viability of the programme remains attractive as a positive NPV and ERR above 10% are preserved in each case analysed.

Table 4. Sensitivity analysis

	Assumptions	Related Risk	ERR	NPV \$ Million
Programme base case			19%	50,693,502
	-20%		15%	28,517,580
Decrease in programme benefits	-30%	Market/price fluctuations (changes in market demands). Unexpected climatic changes. Low crop	14%	17,429,619
	-40%	yields. Delays in Trainings. Problems with the partnerships.	11%	6,341,658
	20%		16%	38,656,280
Increase in programme Costs	30%	Market/price fluctuations (changes in market demands). Procurement	15%	32,637,670
	40%	risks.Problems with the partnerships.	12%	14,581,837
Delays in programme	1 year	Delays in having the Project approved by	16%	31,276,557
implementation	3 years	all parties. Any other unforeseable event.	12%	11,680,109

Annex: Crop and livestock models:

-													
YIELDS AND INPUTS			WITHOUT PROJECT 1 ha					With pro					
ITEMS Main production	UNIT	PRICE (IDR	1	1	2	3	4	5	6	7	8	9	10
Cocoa	kg		320	400	500	600	700	700	700	700	700	700	700
Dry beans (90%)	kg	30,000	320	360	450	540	630	630	630	630	630	630	630
Fermented beans (10%)	kg	34,500	О	40	50	60	70	70	70	70	70	70	70
Investment inputs													
Fertilizer not specific for cocoa	50kg	100,000	16	0	О	О	О	О	O	O	О	О	O
Cocoa package fertilizer	50 kg	400,000	0	14	16	18	18	18	18	18	18	18	18
Organic fertilizer	kg	800	600	250	250	250	250	250	250	250	250	250	250
Herbicide Fungicide	litre litre	65,000 30,000	0	5 0	5 0	5 0	5 0	10 3	10 3	10 3	10 3	10 3	10 3
Pesticide	litre	50,000	ő	5	5	10	15	20	20	20	20	20	20
Tools	set	300,000	1	2	0	0	0	0	1	0	0	0	0
Operating inputs	501	000,000	'	~	Ü	Ü	Ü	Ü		Ü	Ü	Ü	Ü
Land tax	per year	10,000	1	1	1	1	1	1	1	1	1	1	1
Transportation	kg	500	320	400	500	600	700	700	700	700	700	700	700
Labour													
Fertilizing	pers. day	S/F	4	5.5	8	15	15	15	15	15	15	15	15
Herbicide	pers. day	S/F	0	2	2	4	4	4	4	4	4	4	4
Pesticide	pers. day	S/F	O	4	4	6	6	6	6	6	6	6	6
Pruning	pers. day	S/F	6	2	4	6	6	6	6	6	6	6	6
Harvesting	pers. day	S/F	5	5	8	10	11	11	11	11	11	11	11
Drying	pers. day	S/F	3	3	5	7	8	8	8	8	8	8	8
Sub-total labour days			18	22	31	48	50	50	50	50	50	50	50
Hired labour (S)	pers. day	75,000 75,000	0 18	0	0 31	17 31	18 33	18 33	18 33	18 33	18 33	18 33	18 33
Family labour (F)	pers. day	75,000	18	22	31	31	33	33	33	33	33	33	33
FINANCIAL BUDGET			WITHOUT PROJECT					Gross Mai					
ITEMS			1	1	2	3	4	5	6	7	8	9	10
Main production revenue Cocoa			0	О	0	0	0	0	O	O	0	o	o
Dry beans (90%)			9,600,000	10,800,000	13,500,000				18,900,000			18,900,000	
Fermented beans (10%)			9,600,000	1,380,000	1,725,000	2,070,000	2,415,000	2,415,000	2,415,000	2,415,000	2,415,000	2,415,000	2,415,000
Total revenue			9.600.000	12.180.000	15,225,000					21,315,000			
rotal rotorido			5,555,555	12,100,000	10,220,000	10,270,000	21,010,000	21,010,000	21,010,000	21,010,000	21,010,000	21,010,000	21,010,000
Investment input costs													
Fertilizer													
Fertilizer not specific for cocoa			1,600,000										
Cocoa package fertilizer			О	5,600,000	6,400,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
Organic fertilizer			480,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Herbicide			0	325,000	325,000	325,000	325,000	650,000 90.000	650,000 90,000	650,000 90.000	650,000 90.000	650,000 90.000	650,000 90,000
Fungicide Pesticide			0	250,000	250,000	500,000	750,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Tools			300.000	600,000	250,000	0	750,000	0	300,000	0	0	0	0
Sub-total investment costs			2,380,000	6,975,000	7,175,000	8,225,000	8,475,000	9,140,000	9,440,000	9,140,000	9,140,000	9,140,000	9,140,000
Operating input costs													
Land tax			10,000	10,000	10,000	10,000	10.000	10,000	10,000	10.000	10,000	10,000	10.000
Transportation			160,000	200,000	250,000	300,000	350,000	350,000	350,000	350,000	350,000	350,000	350.000
Sub-total operating costs			170,000	210,000	260,000	310,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000
· -			·										
Labour costs													
Skilled (paid) labour costs			0	О	О	1,260,000	1,321,250	1,321,250	1,321,250	1,321,250	1,321,250	1,321,250	1,321,250
Family labour costs			1,350,000	1,637,500	2,295,000	2,340,000	2,453,750	2,453,750	2,453,750	2,453,750	2,453,750	2,453,750	2,453,750
Sub-total labour costs Total production costs without family labour			1,350,000 2,550,000	1,637,500 7 185 000	2,295,000 7,435,000	3,600,000 9,795,000	3,775,000	3,775,000	3,775,000	3,775,000	3,775,000	3,775,000	3,775,000
Total production costs with family labour			3,900,000	8,822,500	9,730,000	12,135,000	12,610,000	13,275,000			13.275.000	13.275.000	13.275.000
Income (after labour costs)			5,700,000	3,357,500	5,495,000	6,135,000	8,705,000	8,040,000	7.740.000	8,040,000	8.040.000	8,040,000	8,040,000
Incremental net income			0,100,000	-2,342,500	-205,000	435,000	3,005,000	2,340,000	2,040,000	2,340,000	2,340,000	2,340,000	2,340,000
Income before labour costs			7,050,000	4,995,000	7,790,000	8,475,000	11,158,750	10,493,750	10,193,750	10,493,750	10,493,750	10,493,750	10,493,750
Return to family labour*	311,577	1											
*consider full development year family labour requirem													
Discount rate													
NPV @ 0.12	5,926,549												
IRR													
	105,255,972												
NPVo		1											
B/C ratio		1											
Switching values Benefits Switching values Costs		l											
Switching values Costs	. 3176												
FINANCING ANALYSIS			WITHOUT PROJECT					WITH PI	ROJECT				
				1	2	3	4	5	6	7	8	9	10
Net family income			7,050,000	4,995,000	7,790,000	8,475,000	11,158,750	10,493,750	10,193,750	10,493,750	10,493,750	10,493,750	10,493,750
Incremental family income	1		1	-2,055,000	740,000	1,425,000	4,108,750	3,443,750	3,143,750	3,443,750	3,443,750	3,443,750	3,443,750
0			ĺ										
Own savings Grant - PPP			ĺ	5 005 000									
Net income after financing			7,050,000		7,790,000	8.475.000	11.158.750	10.493,750	10.193.750	10.493,750	10.493,750	10,493,750	10.493,750

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

Final project design report

Appendix 10: Economic and Financial Analysis

YIELDS AND INPUTS	•		WITHOUT PROJECT 1 ha					Mith re-	ject 1 ha				
ITEMS	UNIT	PRICE (IDR	WITHOUT PROJECT Tha	1	2	3	4	5	6	7	8	9	10
Main production	UNIT	PRICE (IDR	,	19		<u> </u>	4					9	10
Cocoa non-rehab	1		320	266	315	455	490	490	490	490	490	490	490
Cocoa rehab	kg kg		0	0	0	114	150	400	480	480	480	480	480
Dry beans (90%)	kg kg	30.000	320	239	284	512	576	801	873	873	873	873	873
Fermented beans (10%)		34,500	0	239	32	57	64	89	97	97	97	97	97
	kg	34,500	1	21	32	57	64	69	97	97	97	97	97
Investment inputs		20,000		200									
Seedling (30% rehabilitation)	number	30,000	0	300									
Fertilizers	501	400 000	40										
Fertilizer not specific for cocoa	50kg	100,000	16	0	0	0	0	0	0	0	0	0	0
Cocoa package fertilizer	50 kg	400,000	0	14	16	18	18	18	18	18	18	18	18
Organic fertilizer	kg	800	600	250	250	250	250	250	250	250	250	250	250
Herbicide	litre	65,000	0	5	5	5	5	10	10	10	10	10	10
Fungicide	litre	30,000	0	0	0	0	0	3	3	3	3	3	3
Pesticide	litre	50,000	0	5	5	10	15	20	20	20	20	20	20
Tools	set	300,000	1	2	0	0	0	0	1	0	0	0	0
Operating inputs													
Land tax	per year	10,000	1	1	1	1	1	1	1	1	1	1	1
Transportation	kg	500	320	266	315	455	490	490	490	490	490	490	490
	-												
Labour													
Lining and holing	pers. day	S/F	0	6									
Planting	pers. day	S/F	0	12									
Fertilizing	pers. day	S/F	4	5.5	8	15	15	15	15	15	15	15	15
Herbicide	pers. day	S/F	0	2	2	4	4	4	4	4	4	4	4
Pesticide	pers. day	S/F	0	4	4	6	6	6	6	6	6	6	6
Pruning	pers. day	S/F	6	2	4	6	6	6	6	6	6	6	6
Harvesting	pers. day	S/F	5	5	6	12	14	14	15	15	15	15	15
Drying	pers. day	S/F	3	3	4	6	8	9	11	11	11	11	11
Sub-total labour days	polo. day	- O//	18	40	28	49	53	54	57	57	57	57	57
Hired labour (S)	pers. day	75,000	0	0	0	17	19	19	20	20	20	20	20
Family labour (F)	pers. day	75,000	18	40	28	32	35	35	37	37	37	37	37
raininy labour (r)	pers. day	73,000	1	40	20	32	55	33	37	37	37	3,	37
FINANCIAL BUDGET			WITHOUT PROJECT					Gross Mai	rains 1 ha				
FINANCIAL BUDGET			WITHOUT PROJECT	1	2	3	4	Gross Mai		7	Ω	9	10
ITEMS			WITHOUT PROJECT 1	1	2	3	4	Gross Mai	rgins 1 ha 6	7	8	9	10
ITEMS Main production revenue			1					5	6	-			
ITEMS Main production revenue Dry beans (90%)			9,600,000	7,182,000	8,505,000	15,363,000	17,280,000	5 24,030,000	6 26,190,000	26, 190,000	26, 190,000	26,190,000	26, 190, 000
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%)			9,600,000 0	7,182,000 917,700	8,505,000 1,086,750	15,363,000 1,963,050	17,280,000 2,208,000	5 24,030,000 3,070,500	6 26,190,000 3,346,500	26, 190,000 3,346,500	26, 190,000 3,346,500	26,190,000 3,346,500	26, 190, 000 3, 346, 500
ITEMS Main production revenue Dry beans (90%)			9,600,000	7,182,000	8,505,000	15,363,000	17,280,000 2,208,000	5 24,030,000 3,070,500	6 26,190,000	26, 190,000 3,346,500	26, 190,000 3,346,500	26,190,000 3,346,500	26, 190, 000 3, 346, 500
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue			9,600,000 0	7,182,000 917,700	8,505,000 1,086,750	15,363,000 1,963,050	17,280,000 2,208,000	5 24,030,000 3,070,500	6 26,190,000 3,346,500	26, 190,000 3,346,500	26, 190,000 3,346,500	26,190,000 3,346,500	26, 190, 000 3, 346, 500
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs			9,600,000 0	7,182,000 917,700 8,099,700	8,505,000 1,086,750 9,591,750	15,363,000 1,963,050 17,326,050	17,280,000 2,208,000 19,488,000	5 24,030,000 3,070,500 27,100,500	6 26,190,000 3,346,500 29,536,500	26,190,000 3,346,500 29,536,500	26, 190, 000 3, 346, 500 29, 536, 500	26,190,000 3,346,500 29,536,500	26, 190, 000 3, 346, 500 29, 536, 500
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation)			9,600,000 0 9,600,000	7,182,000 917,700	8,505,000 1,086,750	15,363,000 1,963,050	17,280,000 2,208,000	5 24,030,000 3,070,500	6 26,190,000 3,346,500	26, 190,000 3,346,500	26, 190,000 3,346,500	26,190,000 3,346,500	26, 190, 000 3, 346, 500
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers			9,600,000 0 9,600,000	7,182,000 917,700 8,099,700 9,000,000	8,505,000 1,086,750 9,591,750	15,363,000 1,963,050 17,326,050	17,280,000 2,208,000 19,488,000	5 24,030,000 3,070,500 27,100,500	6 26,190,000 3,346,500 29,536,500	26,190,000 3,346,500 29,536,500	26,190,000 3,346,500 29,536,500	26,190,000 3,346,500 29,536,500	26, 190,000 3,346,500 29,536,500
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa			9,600,000 0 9,600,000	7,182,000 917,700 8,099,700 9,000,000	8,505,000 1,086,750 9,591,750 0	15,363,000 1,963,050 17,326,050 0	17,280,000 2,208,000 19,488,000 0	5 24,030,000 3,070,500 27,100,500 0	6 26,190,000 3,346,500 29,536,500 0	26,190,000 3,346,500 29,536,500 0	26,190,000 3,346,500 29,536,500 0	26,190,000 3,346,500 29,536,500 0	26,190,000 3,346,500 29,536,500 0
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer			1 9,600,000 9,600,000 0 1,600,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000	17,280,000 2,208,000 19,488,000 0 0 7,200,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer			1 9,600,000 0 9,600,000 1,600,000 0 480,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000
ITEMS Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide			1 9,600,000 9,600,000 1,600,000 0 480,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000 650,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide			1 9,600,000 9,600,000 0 1,600,000 0 480,000 0	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000 650,000 90,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide			1 9,600,000 9,600,000 1,600,000 0 480,000 0 0	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 750,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools			1 9,600,000 9,600,000 0 1,600,000 0 480,000 0 0 300,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 750,000	5 24,030,000 3,070,500 27,100,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 300,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide			1 9,600,000 9,600,000 1,600,000 0 480,000 0 0	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 750,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools			1 9,600,000 9,600,000 0 1,600,000 0 480,000 0 0 300,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 750,000	5 24,030,000 3,070,500 27,100,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 300,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs			1 9,600,000 9,600,000 0 1,600,000 0 480,000 0 0 300,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 750,000	5 24,030,000 3,070,500 27,100,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 300,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs			1 9,600,000 9,600,000 0 1,600,000 0 480,000 0 0 0 300,000 2,360,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 0 25,000 0 7,175,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 0 8,475,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 1,000,000 1,000,000 9,440,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 9,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 9,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 9,140,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax			1 9,600,000 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 325,000 0 250,000 600,000 15,975,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000	17,280,000 2,208,000 19,488,000 0 0,200,000 200,000 325,000 0 8,475,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 300,000 9,440,000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 200, 000 650, 000 90, 000 1,000, 000 0 9, 140, 000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 650, 000 90, 000 1,000, 000 0 9, 140,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 160,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000 15,975,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000 0 7,175,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 0 8,475,000	5 24,030,000 3,070,500 0 7,200,000 200,000 50,000 90,000 1,000,000 9,140,000	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 90,000 1,000,000 300,000 9,440,000	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 9,140,000	26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax			1 9,600,000 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 325,000 0 250,000 600,000 15,975,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000	17,280,000 2,208,000 19,488,000 0 0,200,000 200,000 325,000 0 8,475,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 300,000 9,440,000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 200, 000 650, 000 90, 000 1,000, 000 0 9, 140, 000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 650, 000 90, 000 1,000, 000 0 9, 140,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 160,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000 15,975,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000 0 7,175,000	15,363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 0 8,475,000	5 24,030,000 3,070,500 0 7,200,000 200,000 50,000 90,000 1,000,000 9,140,000	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 90,000 1,000,000 300,000 9,440,000	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 9,140,000	26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 0 300,000 2,380,000 10,000 170,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 325,000 0 250,000 600,000 15,975,000 10,000 133,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 250,000 0 7,175,000	15, 363, 000 1,963, 050 17,326, 050 0 0,200,000 200,000 325,000 0 500,000 0 8,225,000 10,000 227,500	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 0 8,475,000	5 24,030,000 3,070,500 27,100,500 0 0 7,200,000 200,000 90,000 1,000,000 0 9,140,000 10,000 245,000 255,000	6 26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 1,000,000 9,440,000 10,000 245,000 255,000	26, 190, 000 3, 346, 500 29, 536, 500 0 0, 7,200,000 200,000 650,000 1,000,000 0,000 1,000,000 0,000 1,000,000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7,200,000 650,000 90,000 1,000,000 0 9,140,000	26, 190,000 3,346,500 29,536,500 0 0,7,200,000 200,000 650,000 1,000,000 0 9,140,000 10,000 245,000 255,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Labour costs Skilled (paid) labour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 10,000 170,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 600,000 15,975,000 10,000 133,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 325,000 0 7,175,000 10,000 157,500	15, 363, 000 1,963,050 17, 326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000 10,000 227,500	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 8,475,000 10,000 245,000 1,400,000	5 24,030,000 3,070,500 0,77,00,500 0 7,200,000 200,000 650,000 90,000 1,000,000 0 91,40,000 245,000 255,000	6 26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 90,000 1,000,000 300,000 9,440,000 10,000 245,000 255,000 1,496,250	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 255,000	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000 0 9,140,000 245,000 255,000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 650, 000 90, 000 1, 000, 000 0 9, 140, 000 245, 000 255, 000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Skilled (paid) labour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 0 300,000 2,380,000 10,000 150,000 170,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 325,000 0 250,000 15,975,000 10,000 133,000 143,000 0 2,987,500	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000 10,000 157,500 0 2,070,000	15, 363, 000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 2,225,000 10,000 227,500 237,500	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 8,475,000 10,000 245,000 245,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 10,000 245,000 255,000	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 1,000,000 9,440,000 10,000 245,000 255,000 1,496,250 2,778,750	26, 190, 000 3, 346, 500 29, 536, 500 0 0, 7,200, 000 200, 000 650, 000 1,000, 000 0,000 1,000, 000 245, 000 1,496, 250 2,778, 750	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 650, 000 90, 000 1,000,000 0 9, 140,000 245,000 245,000 1,496,250 2,778,750	26, 190, 000 3, 346, 500 29, 536, 500 0 7, 200,000 200,000 650,000 90,000 1,000,000 0 9, 140,000 245,000 245,000 1,496,250 2,778,750	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 1,000,000 0 9,140,000 10,000 245,000 255,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Fungicide Fungicide Fungicide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Family labour costs Sub-total abour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 170,000 1,350,000 1,350,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 600,000 15,975,000 10,000 133,000 143,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000 157,500 167,500	15,363,000 1,963,050 17,326,050 0 0 7,200,000 325,000 0 500,000 0 8,225,000 10,000 227,500 237,500	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 8,475,000 10,000 245,000 245,000 1,400,000 2,600,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 1,417,500 2,632,500 4,050,000	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 1,000,000 300,000 9,440,000 245,000 1,496,250 2,778,750	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,780	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000 0 9,140,000 245,000 255,000	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 650, 000 90, 000 1, 000, 000 0 9, 140, 000 245, 000 255, 000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Skilled (paid) labour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 0 300,000 2,380,000 10,000 150,000 170,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 325,000 0 250,000 15,975,000 10,000 133,000 143,000 0 2,987,500	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000 10,000 157,500 0 2,070,000	15, 363, 000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 500,000 2,225,000 10,000 227,500 237,500	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 8,475,000 10,000 245,000 245,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 10,000 245,000 255,000	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 1,000,000 300,000 9,440,000 245,000 1,496,250 2,778,750	26, 190, 000 3, 346, 500 29, 536, 500 0 0, 7,200, 000 200, 000 650, 000 1,000, 000 0,000 1,000, 000 245, 000 1,496, 250 2,778, 750	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7, 200, 000 650, 000 90, 000 1,000,000 0 9, 140,000 245,000 245,000 1,496,250 2,778,750	26, 190, 000 3, 346, 500 29, 536, 500 0 7, 200,000 200,000 650,000 90,000 1,000,000 0 9, 140,000 245,000 245,000 1,496,250 2,778,750	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Fungicide Fungicide Fungicide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Family labour costs Sub-total abour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 170,000 1,350,000 1,350,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 600,000 15,975,000 10,000 133,000 143,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000 157,500 167,500	15,363,000 1,963,050 17,326,050 0 0 7,200,000 325,000 0 500,000 0 8,225,000 10,000 227,500 237,500	17,280,000 2,208,000 19,488,000 0 0 7,200,000 200,000 325,000 0 8,475,000 10,000 245,000 245,000 1,400,000 2,600,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 1,417,500 2,632,500 4,050,000	6 26,190,000 3,346,500 0 0 7,200,000 200,000 90,000 1,000,000 1,000,000 245,000 255,000 1,496,250 2,778,750 4,275,000 11,191,250	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,780	26, 190, 000 3, 346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000 0 9,140,000 245,000 255,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Family labour costs Sub-total labour costs			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 1	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 0 250,000 600,000 15,975,000 11,000 133,000 143,000 0 2,987,500 16,118,000	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000 10,000 157,500 0 2,070,000 2,070,000 2,070,000	15, 363, 000 1,963,050 17, 326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000 10,000 227,500 237,500 1,286,250 2,388,750 3,675,000 9,748,750	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 750,000 245,000 245,000 1,400,000 4,000,000 4,000,000 4,000,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 90,000 1,000,000 0 91,40,000 245,000 255,000 1,417,500 2,632,500 4,050,000 10,612,500	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 1,000,000 1,000,000 9,440,000 245,000 245,000 1,496,250 2,778,750 4,275,000 11,912,500 11,912,500 11,912,500	26, 190, 000 3,346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000	26,190,000 3,346,500 29,536,500 0 7,200,000 200,000 90,000 1,000,000 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000	26,190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Family labour costs Sub-total revenue costs Total production costs with family labour Total production costs with family labour			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 10,000 170,000 0 0 1,350,000 1,350,000 2,550,000 3,900,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 600,000 10,975,000 143,000 143,000 0 2,987,500 6,118,000 19,105,500	8,505,000 1,086,750 9,591,750 0 0,400,000 200,000 0,7,175,000 157,500 0 2,070,000 2,070,000 7,342,500 9,412,500 1179,250	15, 363, 000 1,963,050 17, 326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000 10,000 227,500 237,500 1,286,250 2,388,750 1,286,250 2,388,750 9,748,750 12,137,500 5,188,550	17,280,000 2,208,000 19,488,000 0 7,200,000 200,000 325,000 0 8,475,000 10,000 245,000 255,000 1,400,000 1,400,000 10,130,000 12,730,000 6,758,000	5 24,030,000 3,070,500 0 7,200,000 200,000 90,000 1,000,000 0 91,40,000 11,000 245,000 255,000 1,417,500 2,632,500 4,050,000 10,812,500 13,655,500	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 1,000,000 1,000,000 9,440,000 245,000 245,000 1,496,250 2,778,750 4,275,000 11,912,500 11,912,500 11,912,500	26, 190, 000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 245,000 1,496,250 2,778,750 2,778,750 1,496,250 2,778,750 1,496,250 2,778,750 1,566,500	26, 190, 000 3,346,500 29,536,500 0 0,200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 1,490,000 2,778,750 4,275,000 10,891,250 10,891,250	26, 190,000 3,346,500 29,536,500 0 0,7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000 10,891,250	26, 190,000 3,346,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 245,000 245,000 1,496,250 2,778,750 4,275,000 10,891,250 15,866,500
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Sub-total labour costs Sub-total labour costs Sub-total labour costs Signature (10 to 10			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 10,000 170,000 0 0 1,350,000 1,350,000 2,550,000 3,900,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 600,000 15,975,000 10,000 133,000 143,000 0 2,987,500 2,987,500 16,118,000 19,105,500	8,505,000 1,086,750 9,591,750 0 0 6,400,000 200,000 325,000 0 7,175,000 157,500 167,500 0 2,070,000 2,070,000 2,070,000 9,412,500	15.363,000 1,963,050 17,326,050 0 0 7,200,000 200,000 325,000 0 8,225,000 10,000 227,500 237,500 1,286,250 2,388,750 3,675,000 9,748,750	17,280,000 2,208,000 19,488,000 0 0 0,000 200,000 325,000 0 8,475,000 10,000 245,000 245,000 1,400,000 2,600,000 4,000,000 10,130,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 1,417,500 2,632,500 4,050,000 13,445,000 13,445,000	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 245,000 245,000 245,000 245,000 1,496,250 2,778,750 4,275,000 11,191,250 13,970,000	26, 190, 000 3,346,500 29,536,500 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 245,000 1,496,250 2,778,750 2,778,750 1,496,250 2,778,750 1,496,250 2,778,750 1,566,500	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 90,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000 10,891,250 13,670,000	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000 10,891,250 15,866,500	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 200,000 650,000 9,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000 10,891,250 13,670,000 15,866,500
Main production revenue Dry beans (90%) Fermented beans (10%) Total revenue Investment input costs Seedling (30% rehabilitation) Fertilizers Fertilizers Fertilizer not specific for cocoa Cocoa package fertilizer Organic fertilizer Herbicide Fungicide Pesticide Tools Sub-total investment costs Operating input costs Land tax Transportation Sub-total operating costs Labour costs Skilled (paid) labour costs Family labour costs Sub-total revenue costs Total production costs with family labour Total production costs with family labour			1 9,600,000 0 9,600,000 1,600,000 0 480,000 0 0 300,000 2,380,000 10,000 10,000 170,000 0 0 1,350,000 1,350,000 2,550,000 3,900,000	7,182,000 917,700 8,099,700 9,000,000 0 5,600,000 200,000 325,000 600,000 10,975,000 143,000 143,000 0 2,987,500 6,118,000 19,105,500	8,505,000 1,086,750 9,591,750 0 0,400,000 200,000 0,7,175,000 157,500 0 2,070,000 2,070,000 7,342,500 9,412,500 1179,250	15, 363, 000 1,963,050 17, 326,050 0 0 7,200,000 200,000 325,000 0 500,000 0 8,225,000 10,000 227,500 237,500 1,286,250 2,388,750 1,286,250 2,388,750 9,748,750 12,137,500 5,188,550	17,280,000 2,208,000 19,488,000 0 0 7,200,000 325,000 0 8,475,000 10,000 245,000 245,000 1,400,000 2,600,000 10,130,000 12,730,000 1,058,000 1,058,000	5 24,030,000 3,070,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 0 91,40,000 11,000 245,000 245,000 1,417,500 2,632,500 1,417,500	6 26,190,000 3,346,500 0 0 7,200,000 200,000 650,000 90,000 1,000,000 245,000 245,000 245,000 245,000 1,496,250 2,778,750 4,275,000 11,191,250 13,970,000	26, 190, 000 3, 346, 500 29, 536, 500 0 7,200,000 200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 245,000 245,000 1,496,250 2,778,750 4,275,000 10,691,250 13,670,000 10,166,500	26, 190, 000 3, 346, 500 29, 536, 500 0 0 7,200,000 200,000 90,000 1,000,000 0 9, 140,000 245,000 255,000 1,496,250 2,778,750 4,275,000 10,891,250 73,570,000 10,166,500	26, 190,000 3,346,500 29,536,500 0 0 7,200,000 650,000 90,000 1,000,000 0 9,140,000 245,000 255,000 1,496,250 2,778,750 4,275,000 10,891,250 13,670,000 15,866,500 10,166,500	26, 190,000 3,346,500 0 0 7,200,000 650,000 9,000 1,000,000 650,000 9,140,000 245,000 245,000 245,000 1,496,250 2,778,750 1,496,250 1,496,250 1,78,750 10,691,250 13,670,000 15,866,500 10,166,500

Total production ...
Income (after labour cos...
Income before labour costs

Return to family labour* 495,148
*consider full development year family labour requirements
Discount rate 12%
NPV @ 0.12 6,148,547
IRR 17%
NPVb 115,388,568
NPVc 77,033,749
B/C ratio 1.50
Switching values Benefits 33%
Switching values Costs 50%

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI) Final project design report
Appendix 10: Economic and Financial Analysis

YIELDS AND INPUTS			WITHOUT PROJECT										
ITEMS	UNIT	PRICE Rp		1	2	3	4	WITH PRO	6	7	8	9	10
Main production_Land Size 0.5 ha													
Paddy (Wet Season)	kg	4.600	1,650	1,650	1,900	2,000	2,400	2,400	2,400	2,400	2,400	2,400	2,400
*Paddy (Dry Season)	kg	4,600	900	0	1,300	1,700	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Self-consumption rice	kg	4,600	400	400	500	550	550	550	550	550	550	550	550
Investment inputs													
Lower Quality Seeds	ka	12.000	100	0	0	0	0	0	0	0	0	0	0
Better Quality Seeds	kg	30.000	0	50	100	100	100	100	100	100	100	100	100
Fertilizer:	_	,											
Urea (market price)	kg	1,800	80	50	100	100	100	100	100	100	100	100	100
Phonska_NPK	kg	2,300	0	25	75	75	75	75	75	75	75	75	75
SP36 (ECONOMIC HAS TO BE 900K)	kg	2,000	50	25	75	75	75	75	75	75	75	75	75
Pesticides													
Insecticides	1	90,000	1	0.5	1	1	1	1	1	1	1	1	1
Herbicides	1	65,000	1	0.5	1	1	1	1	1	1	1	1	1
Mechanization													
Drum seeders	unit	325.000	0	4	0	0	0	0	0	0	0	0	0
Scales (cost per group)	unit	31,200	Ö		o o	0	o	0.3	ő	ő	0	0	ő
Moisture meters (cost per group member)	unit	52,000	Ö	4	0	o o	o	0.3	o	0	0	0	ő
Hand Tractor (cost per group member)	unit	1,200,000	Ö		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Thresher (cost per group member)	unit	800.000	Ö	'	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Flat Bed Driers (cost 5% value of rice)	unit	350	o	2,050	3,700	4,250	4,950	4,950	4,950	4,950	4,950	4,950	4,950
Q													
Operating inputs													
		2.5% of											
WUA Fees	fee/year	yield	О	1	1	1	1	1	1	1	1	1	1
		value											
Land Tax	fee/year	10,000	1	1	1	1	1	1	1	1	1	1	1
Bags containing 60 kg rice	no.	22,000	43	28	53	62	73	73	73	73	73	73	73
Labour													
Land preparation	pers. day	75,000	16	7	10	10	10	10	10	10	10	10	10
Planting	pers. day	75,000	15	7	13	13	13	13	13	13	13	13	13
Weeding	pers. day	75,000	15	6	8	8	8	8	8	8	8	8	8
Fertilizer application	pers. day	75,000	3	1.5	4	4	4	4	4	4	4	4	4
Harvesting and threshing	pers. day	75,000	16	8	10	10	10	10	10	10	10	10	10
Transportation	pers. day	75,000	3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Drying	pers. day	75,000	3	1.5	1	1	1	1	1	1	1	1	1
Sub-total labour days		+	71	34	48	48	48	48	48	48	48	48	48
Hired Labour	pers. day	1	28	14	19	19	19	19	19	19	19	19	19
Family labour	pers. day	1	43	20	29	29	29	29	29	29	29	29	29

FINANCIAL BUDGET	WITHOUT PROJECT												
ITEMS	1	1	2	3	4	5	6	7	8	9	10		
Main production_Land Size 0.5 ha													
Paddy (Wet Season)	7,590,000	7,590,000	8,740,000	9,200,000	11,040,000	11,040,000	11,040,000	11,040,000	11,040,000	11,040,000	11,040,000		
*Paddy (Dry Season)	4,140,000	0	5,980,000	7,820,000	9,200,000	9,200,000	9,200,000	9,200,000	9,200,000	9,200,000	9,200,000		
Self-consumption rice	1,840,000	1,840,000	2,300,000	2,530,000	2,530,000	2,530,000	2,530,000	2,530,000	2,530,000	2,530,000	2,530,000		
Total sales	9,890,000	5,750,000	12,420,000	14,490,000	17,710,000	17,710,000	17,710,000	17,710,000	17,710,000	17,710,000	17,710,000		
Total revenue	11,730,000	7,590,000	14,720,000	17,020,000	20,240,000	20,240,000	20,240,000	20,240,000	20,240,000	20,240,000	20,240,000		
Investment input costs													
Lower Quality Seeds	1,200,000	О	О	О	0	О	О	О	0	О	0		
Better Quality Seeds	0	1,500,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000		
Fertilizer:													
Urea (market price)	144,000	90,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000		
Phonska_NPK	О	57,500	172,500	172,500	172,500	172,500	172,500	172,500	172,500	172,500	172,500		
SP36 (ECONOMIC HAS TO BE 900K)	100,000	50,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000		
Pesticides													
Insecticides	90,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000		
Herbicides	65,000	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500	32,500		
Mechanization													
Drum seeders	0	325,000	0	0	0	О	0	0	0	О	0		
Scales (cost per group)	0	31,200	0	0	0	9,360	0	0	0	О	0		
Moisture meters (cost per group member)	0	52,000	О	О	0	15,600	0	o	О	О	О		
Hand Tractor (cost per group member)	0	1,200,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000	480,000		
Thresher (cost per group member)	0	800,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000		
Flat Bed Driers (cost 5% value of rice)	0	717,500	1,295,000	1,487,500	1,732,500	1,732,500	1,732,500	1,732,500	1,732,500	1,732,500	1,732,500		
Sub-total investment costs	1,599,000	4,900,700	5,595,000	5,787,500	6,032,500	6,057,460	6,032,500	6,032,500	6,032,500	6,032,500	6,032,500		
Operating input costs													
WUA Fees	0	189,750	368,000	425,500	506,000	506,000	506,000	506,000	506,000	506,000	506,000		
Land Tax	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000		
Bags containing 60 kg rice	935,000	605,000	1,173,333	1,356,667	1,613,333	1,613,333	1,613,333	1,613,333	1,613,333	1,613,333	1,613,333		
Sub-total operating costs	940,000	799,750	1,546,333	1,787,167	2, 124, 333	2,124,333	2, 124, 333	2, 124, 333	2, 124, 333	2,124,333	2, 124, 333		
Labour costs													
Hired labour costs	2,130,000	1,020,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000		
Family labour costs	3,195,000	1,530,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000		
Sub-total labour costs	5,325,000	2,550,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000		
Total production costs with family labour	7,864,000	8,250,450	10,741,333	11,174,667	11,756,833	11,781,793	11,756,833	11,756,833	11,756,833	11,756,833	11,756,833		
Total production costs without family labour	4,669,000	6,720,450	8,581,333	9,014,667	9,596,833	9,621,793	9,596,833	9,596,833	9,596,833	9,596,833	9,596,833		
Income (after labour costs)	3,866,000	-660,450	3,978,667	5,845,333	8,483,167	8,458,207	8,483,167	8,483,167	8,483,167	8,483,167	8,483,167		
Incremental net income		-4,526,450	112,667	1,979,333	4,617,167	4,592,207	4,617,167	4,617,167	4,617,167	4,617,167	4,617,167		
Income (before labour costs)	7.061.000	869.550	6.138.667	8.005.333	10.643.167	10.618.207	10.643.167	10.643.167	10.643.167	10.643.167	10.643.167		

Return to family labour*	369,554.40
*consider full development year family labour requ	irements
Discount rate	12%
NPV @ 0.12	12,441,398
IRR	52%
NPVb	96,373,429
NPVc	62,088,269
B/C ratio	1.55
Switching values Benefits	-36%
Switching values Costs	55%

Republic of Indonesia

Rural Empowerment and Agricultural Development Programme Scaling-up Initiative (READ SI)

Final project design report

Appendix 10: Economic and Financial Analysis

YIELDS AND INPUTS					Gross	margins 0.1	ha of vege	table (repre	sentative c	rop vegetat	le chosen i	is chili)	
ITEMS	UNIT	PRICE IDR	ypical Yea	1	2	3	4	5	6	7	8	9	10
Main production_Land Size .1 ha													
Chili (Proxy Crop)	kg	40,000		150	180	180	180	180	180	180	180	180	180
Foregone income	pers.day	75,000	19										
Self-consumption	70%	40,000		105	126	126	126	126	126	126	126	126	126
Investment inputs													
Seeds	g	15,000		10	10	10	10	10	10	10	10	10	10
Fertilizer:		4 000		4.5		4-				4.5	4.5	4-	
Urea Phonska_NPK	kg	1,800 2,300		15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15
Compound	kg			0	15	15	15	15 1	15 1	15	15	15	15
Pesticides	Package	300,000		0	1	1	1	7	7	7	1	1	1
Insecticides		90,000		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Herbicides	1 :	50,000		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Mechanization/Equipment		30,000		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Tools/Equipment/maintanance	lumpsum	750,000		1									
Micro-irrigation system	no.	3,000,000		0.1									
more inigation dystem		0,000,000		0.1									
Operating inputs													
	4/	3% of yield											
WUA Fees	fee/year		l	1	1	1	1	1	1	1	1	1	1
Land tax	fee/year	2,500	1	1	1	1	1	1	1	1	1	1	1
Plastic Bags_15 kg of chili each	no.	1,500	l	12	12	12	12	12	12	12	12	12	12
_abour		1	l	1									
Land preparation/hoeing	pers. day	75,000	l	4	4	4	4	4	4	4	4	4	4
Planting	pers. day	75,000	l	4	4	4	4	4	4	4	4	4	4
Weeding	pers. day	75,000	l	4	4	4	4	4	4	4	4	4	4
Fertilizer application	pers. day	75,000		1	1	1	1	1	1	1	1	1	1
Harvesting and threshing	pers. day	75,000		5	5	6	6	6	6	6	6	6	6
Sub-total labour days			0	18	18	19	19	19	19	19	19	19	19
Hired Labour	pers. day		0	0	О	О	О	О	О	О	О	О	О
Family labour	pers. day		0	18	18	19	19	19	19	19	19	19	19
FINANCIAL BUDGET		Т	ypical Yea						ROJECT				
TEMS				1	2	3	4	5	6	7	8	9	10
Main production_Land Size .1 ha													
Chili (Proxy Crop)													
			0	6,000,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	
Foregone income			1,425,000	O	О	0	О	О	О	O	О	0	7,200,0 0
Foregone income Self-consumption			1,425,000 0	0 4,200,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,0
Foregone income Self-consumption Total sales			1,425,000 0 1,425,000	0 4,200,000 1,800,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,0 2,160,0
Foregone income	-		1,425,000 0	0 4,200,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	0 5,040,000	
Foregone income Self-consumption Total sales Total revenue	-		1,425,000 0 1,425,000	0 4,200,000 1,800,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,0 2,160,0
Foregone income Self-consumption Total sales Total revenue nvestment input costs	-		1,425,000 0 1,425,000 1,425,000	0 4,200,000 1,800,000 6,000,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,0 2,160,0 7,200,0
Foregone income Self-consumption Total sales Total revenue investment input costs Seeds			1,425,000 0 1,425,000	0 4,200,000 1,800,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,000 2,160,000	0 5,040,0 2,160,0
Foregone income Self-consumption Total sales Total revenue Investment input costs Seeds Fertilizer:			1,425,000 0 1,425,000 1,425,000	0 4,200,000 1,800,000 6,000,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,000 2,160,000 7,200,000	0 5,040,0 2,160,0 7,200,0
Foregone income Self-consumption Total sales Total revenue Investment input costs Seeds Fertilizer: Urea			1,425,000 0 1,425,000 1,425,000 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,0 2,160,0 7,200,0 150,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK	-		1,425,000 0 1,425,000 1,425,000 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50
Foregone income Self-consumption Total sales Total revenue Investment input costs Seeds Fertilizer: Urea Phonska_NPK Compound			1,425,000 0 1,425,000 1,425,000 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides			1,425,000 0 1,425,000 1,425,000 0 0	150,000 27,000 34,500 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides			1,425,000 0 1,425,000 1,425,000 0 0 0	150,000 27,000 34,500 0 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00
Foregone income Self-consumption Total sales Total revenue investment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides			1,425,000 0 1,425,000 1,425,000 0 0	150,000 27,000 34,500 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment			1,425,000 0 1,425,000 1,425,000 0 0 0 0	150,000 27,000 34,500 0 150,000 150,000 150,000 150,000 150,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 10,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance			1,425,000 0 1,425,000 7,425,000 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 10,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system			1,425,000 0 1,425,000 1,425,000 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0 0
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system			1,425,000 0 1,425,000 7,425,000 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 10,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs			1,425,000 0 1,425,000 1,425,000 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0	5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Deparating input costs			1,425,000 0 1,425,000 7,425,000 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 0 0 389,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0 0 539,50
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Deparating input costs WUA Fees			1,425,000 0 1,425,000 7,425,000 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 10,000 0 389,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500	0, 5,040,0 5,040,0 6,0 6,0 6,0 6,0 6,0 6,0 6,0 6,0 6,0
Foregone income Self-consumption Fotal sales Fotal revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Operating input costs WUA Fees Land tax			1,425,000 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 10,000 0 0 389,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,(2,160,(7,200,(150,00 27,00 34,50 300,00 10,00 0 539,50
Foregone income Self-consumption Fotal sales Fotal revenue Investment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Departing input costs WUA Fees Land tax Plastic Bags_15 kg of chili each			1,425,000 0 1,425,000 7,425,000 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 180,000 2,500 180,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 0 389,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,(2,160,(7,200,(150,00 27,00 34,50 300,00 18,00 0 0 539,50 216,00 2,500 18,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Departing input costs WUA Fees Land tax Plastic Bags_15 kg of chili each			1,425,000 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 10,000 0 0 389,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500	0 5,040,(2,160,(7,200,(150,00 27,00 34,50 300,00 18,00 0 0 539,50 216,00 2,500 18,00
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Derating input costs WUA Fees Land tax Plastic Bags_15 kg of chili each			1,425,000 0 1,425,000 7,425,000 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 180,000 2,500 180,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 18,000 0 389,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0 0 539,50 216,00 2,500 18,00
Foregone income Self-consumption Total sales Total revenue Nevestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Insecticides Herbicides Herbicides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Operating input costs WUA Fees Land tax Plastic Bags_15 kg of chilli each Sub-total operating costs abour costs			1,425,000 0 1,425,000 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 2,500 18,000 20,500	0 5,040,000 2,160,000 7,200,000 150,000 150,000 150,000 10,000 0 0 389,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,55 300,00 0 0 539,50 2,50 18,00 2,50 2,50 18,00 2,36,50
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Derating input costs Land tax Plastic Bags_15 kg of chili each Sub-total operating costs abour costs Herbicides Sub-total operating costs Labour costs Herbicides			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 750,000 300,000 1,289,500 180,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 150,000 0 0 389,500 216,000 2,500 18,000 2,500	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 0 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 0 18,000 0 539,500 216,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 539,500 216,000 2,500 18,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0 0 0 539,50 216,00 2,500 18,00 2,500
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Derating input costs WUA Fees Land tax Plastic Bags_15 kg of chili each Sub-total operating costs Labour costs Labour costs Labour costs Labour costs			1,425,000 0 1,425,000 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 18,000 10,000 0 0 369,500 216,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,0 18,00 0 539,56 216,00 2,500 18,00 236,50
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Herbicides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Departing input costs WUA Fees Land tax Plastic Bags_15 kg of chili each Sub-total operating costs -abour costs -irred labour costs Usb-total dabour costs Sub-total labour costs Sub-total labour costs Sub-total labour costs			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 750,000 300,000 1,289,500 18,000 20,500 0 1,260,000 1,260,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 150,000 0 0 389,500 216,000 236,500 0 1,260,000 1,260,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000 0 0	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 236,500	0 5,040,0,0 2,160,0 7,200,0 150,00 27,00 34,55 300,0 18,00 2,500 18,00 2,500 18,00 2,36,50
Foregone income Self-consumption Total sales Total revenue Nestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Derating input costs WUA Fees Land tax Plastic Bags_15 kg of chili each Sub-total abour costs -abour costs -abour costs -amily labour costs Sub-total labour costs Sub-total labour costs Sub-total labour costs			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2,500 0 0 0 0 2,500	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 2,500 18,000 2,500 1,260,000 1,260,000 1,260,000 1,260,000 2,500 2,500 2,500 2,500 2,250,000 2,500 2,250,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 18,000 10,000 0 0 389,500 216,000 2,500 18,000 2,500 1,260,000 1,260,000 1,886,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 1,330,000 1,330,000 1,330,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 1,330,000 1,330,000 1,330,000 2,106,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 0 2,500 18,000 2,500 18,000 2,500 1,330,000 1,330,000 1,330,000 2,106,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 0 2,500 18,000 2,500 18,000 2,500 1,330,000 1,330,000 1,330,000 2,106,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 0 2,500 18,000 2,500 18,000 2,500 1,330,000 1,330,000 1,330,000 2,106,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 1,330,000 1,330,000 1,330,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 2,500 1,330,000 1,330,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 10,00 0 0 539,50 2,500 18,00 2,500 18,00 2,300,0 18,00 2,300,0 18,00 2,300,0
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Operating input costs WUA Fees Land tax Plastic Bags_15 kg of chili each Sub-total operating costs			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 20,500 0 1,260,000 1,260,000 1,260,000 2,750,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 150,000 18,000 0 0 389,500 216,000 2,500 18,000 236,500 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 236,500 18,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 236,500 1,330,000 1,330,000 2,106,000 776,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 2,500 18,00 2,500 18,00 2,500 18,00 2,500 18,00 2,160,0 2,160,
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Departing input costs WUA Fees Land tax Plastic Bags 15 kg of chili each Sub-total operating costs			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2,500 0 0 0 0 2,500	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 2,500 18,000 2,500 0 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 3,250,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 150,000 0 0 389,500 216,000 2,500 18,000 2,500 18,000 2,500 18,000 1,260,000 1,260,000 626,000 626,000	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 10,000 0 539,500 216,000 2,500 18,000 236,500 0 1,330,000 1,330,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 18,000 10,000 0 539,500 216,000 2,500 18,000 236,500 0 1,330,000 1,330,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,360,500 0 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,36,500 0 1,330,000 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,500 18,000 2,36,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,500 18,000 2,36,500	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 10,000 0 539,500 216,000 2,500 18,000 236,500 0 1,330,000 1,330,000 1,330,000 2,105,000 776,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0 539,50 2,500 18,00 236,50 1,330,0 18,00 2,500 18,00 18
Foregone income Self-consumption Total sales Total revenue Investment input costs Seeds Fertilizer: Urea Phonska_NPK Compound Pesticides Insecticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Operating input costs WUA Fees Land tax Plastic Bags_15 kg of chili each Sub-total operating costs Labour costs Labour costs Fimily labour costs Sub-total labour costs with family labour Total production costs without family labour Income (after labour costs) Income (after labour costs) Income (after labour costs)			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2,500 0 2,500 0 2,500 1,422,500	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 20,500 1,260,000 1,260,000 1,260,000 1,260,000 3,250,000 3,250,000 3,250,000 1,490,000 3,250,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 150,000 10,000 0 0 389,500 216,000 236,500 18,000 1,260,000 1,260,000 1,260,000 5,314,000 5,314,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 2,500 18,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 18,000 30,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 3,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 239,500 216,000 236,500 18,000 1,330,000 1,330,000 1,330,000 5,094,000 5,094,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 239,500 216,000 236,500 18,000 1,330,000 1,330,000 1,330,000 5,094,000 5,094,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 0 0 539,500 216,000 2,500 18,000 236,500 0 1,330,000 1,330,000 776,000 5,094,000 5,094,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 2,500 18,000 2,500 18,000 236,500 2,105,000 1,330,000 1,330,000 776,000 5,094,000 5,094,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 2,500 18,000 2,500 18,000 236,500 2,105,000 1,330,000 7,105,000 5,094,000 5,094,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 10,000 0 0 539,500 216,000 2,500 18,000 236,500 0 1,330,000 1,330,000 1,330,000 5,094,000 5,094,000	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 10,00 216,00 2,500 18,00 236,50 18,00 236,50 18,00 236,50 18,00 2,500 18,0
Foregone income Self-consumption Total sales Total revenue nvestment input costs Seeds Fertilizer: Urea Phonska NPK Compound Pesticides Insecticides Herbicides Mechanization/Equipment Tools/Equipment/maintanance Micro-irrigation system Sub-total investment costs Departing input costs WUA Fees Land tax Plastic Bags 15 kg of chili each Sub-total operating costs			1,425,000 0 1,425,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2,500 0 0 2,500 1,422,500 1,422,500	0 4,200,000 1,800,000 6,000,000 150,000 27,000 34,500 0 18,000 10,000 750,000 300,000 1,289,500 18,000 2,500 18,000 2,500 0 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 1,260,000 3,250,000	0 5,040,000 2,160,000 7,200,000 150,000 150,000 150,000 0 0 389,500 216,000 2,500 18,000 2,500 18,000 2,500 18,000 1,260,000 1,260,000 626,000 626,000	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 0 10,000 0 539,500 216,000 2,500 18,000 2,500 18,000 2,500 18,000 2,500 0 1,330,000 2,106,000 776,000 5,094,000 3,671,500	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 0 18,000 10,000 0 539,500 216,000 2,500 18,000 2,500 18,000 2,500 18,000 776,000 776,000 5,094,000 3,671,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,360,500 0 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,36,500 0 1,330,000 1,330,000 1,330,000 2,106,000 776,000	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,500 18,000 2,36,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 18,000 10,000 0 539,500 2,500 18,000 2,500 18,000 2,36,500	0 5,040,000 2,160,000 7,200,000 150,000 27,000 34,500 300,000 0 10,000 0 0 539,500 216,000 2,500 18,000 2,500 18,000 2,500 18,000 776,000 776,000 7,040,000 7,040,000 3,671,500	0 5,040,0 2,160,0 7,200,0 150,00 27,00 34,50 300,00 18,00 0 539,50 2,500 18,00 236,50 18,00 236,50 18,00 236,50 18,00 236,50 776,00

Return to family labour*	338,105
*consider full development year family labour requirements	
Discount rate	12%
NPV @12%	19,273,748
NPVb	39,610,177

NPVc 12,298,987 B/C ratio 3.2

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Final project design report

Appendix 10: Economic and Financial Analysis

YIELDS AND INPUTS		WITHO	OUT PROJEC					Gross Ma	rgins 1 ha				
ITEMS	UNIT	PRICE (IDR)		1	2	3	4	5	6	7	8	9	10
Main production													
Copra total output	kg	4,000	1,500	900	1,100	1,400	1,600	2,000	2,500	2,900	3,100	3,200	3,200
Investment inputs	···9	1,000	1,000	000	.,	., .00	.,000	2,000	2,000	2,000	0,.00	0,200	0,200
Seedlings - re-planting half of the plants	unit	2.500	o	50									
Copra drying facility (cost per group member)		800,000	0	1									
	unit	800,000	0	'									
Fertilizers													
Urea (2 times)	kg	1,800	150	200	230	250	280	300	300	300	300	300	300
Salt (2 times)	kg	1,000	0	120	140	160	180	200	200	200	200	200	200
Tools	set	500,000	1	1					1				
Operating inputs													
Transportation	kg	400	1,500	900	1,100	1,400	1,600	2,000	2,500	2,900	3,100	3,200	3,200
Labour	Ng	400	1,500	300	1,100	1,400	1,000	2,000	2,500	2,300	3, 100	5,200	3,200
		S/F	0	5	0	0	0	0	0	0	0	0	0
Lining and holing			-	-	-	-	-	-	-	-	-	-	-
Planting		S/F	0	5	0	0	0	0	0	0	0	0	0
Weeding and input application		S/F	25	25	25	25	25	25	25	25	25	25	25
Harvesting		S/F	8	5	6	7	8	10	13	15	16	16	16
Drying		S/F	3	2	2	3	3	4	5	6	6	6	6
Peeling		S/F S/F	3	2	2	3	3	4	5	6	6	6	6
Sub-total labour days		5/F	39	43	35	38	39	43	48	51	53	54	54
Skilled (paid) labour (S)	pers. day	75,000	0	0	7	8	8	13	14	15	16	16	16
Family labour (F)	pers. day	75,000	39	43	28	30	32	30	33	36	37	38	38
		<u> </u>	•										
FINANCIAL BUDGET ITEMS		WIT	HOUT PRO	1	2	3	4	Gross Ma 5	rgins 1 ha 6	7	8	9	10
						3	4	<u> </u>				9	10
Main production revenue					4 400 000	5 000 000	0 400 000	0 000 000	10 000 000	44 000 000	40. 400. 000	40 000 000	40 000 000
Copra total output			6,000,000	3,600,000	4,400,000	5,600,000	6,400,000	8,000,000		11,600,000			
Total revenue			6,000,000	3,600,000	4,400,000	5,600,000	6,400,000	8,000,000	10,000,000	11,600,000	12,400,000	12,800,000	12,800,000
Investment input costs													
Seedlings - re-planting half of the plants			0	125,000	0	0	0	0	0	0	0	0	0
Copra drying facility (cost per group member)			О	800,000	0	0	0	0	0	0	0	0	0
Fertilizers			Ö	0	0	0	0	0	0	0	0	0	0
Urea (2 times)			270,000	360,000	414,000	450,000	504,000	540,000	540,000	540,000	540,000	540,000	540,000
Salt (2 times)			0	120,000	140,000	160,000	180,000	200,000	200,000	200,000	200,000	200,000	200,000
Tools			500.000	500,000	0	0	0	200,000	500,000	200,000	0	0	200,000
Sub-total investment costs			770,000	1,905,000	554,000	610,000	684,000	740,000	1,240,000	740.000	740,000	740,000	740,000
			-,	, ,	,,,,,	,	,,,,,,	-,	, .,	-,	-,	-,	-,
Operating input costs													
Transportation			600,000	360,000	440,000	560,000	640,000	800,000	1,000,000	1,160,000	1,240,000	1,280,000	1,280,000
Sub-total operating costs			600,000	360,000	440,000	560,000	640,000	800,000	1,000,000	1,160,000	1,240,000	1,280,000	1,280,000
Labourante													
Labour costs			l .	l ,	500 50-	E04.00-	E04 00-	007 50-	4 000 75-	4 4 40 75-	4 400 05-	4 040 5	4 040 5
Skilled (paid) labour costs			0	0	523,500	564,000	591,000	967,500	1,068,750	1,149,750	1,190,250	1,210,500	1,210,500
Family labour costs			2,887,500	3,232,500	2,094,000	2,256,000	2,364,000	2,257,500	2,493,750	2,682,750	2,777,250	2,824,500	2,824,500
Sub-total labour costs			2,887,500	3,232,500	2,617,500	2,820,000	2,955,000	3,225,000	3,562,500	3,832,500	3,967,500	4,035,000	4,035,000
Total production costs without family labour			1,370,000	2,265,000	1,517,500	1,734,000	1,915,000	2,507,500	3,308,750	3,049,750	3,170,250	3,230,500	3,230,500
Total production costs with family labour			4,257,500	5,497,500	3,611,500	3,990,000	4,279,000	4,765,000	5,802,500	5,732,500	5,947,500	6,055,000	6,055,000
Income (after labour costs)			1,742,500	-1,897,500	788,500	1,610,000	2,121,000	3,235,000	4,197,500	5,867,500	6,452,500	6,745,000	6,745,000
Incremental net income				-3,640,000	-954,000	-132,500	378,500	1,492,500	2,455,000	4,125,000	4,710,000	5,002,500	5,002,500
Income before labour costs			4,630,000	1,335,000	2,882,500	3,866,000	4,485,000	5,492,500	6,691,250	8,550,250	9,229,750	9,569,500	9,569,500
	-		4.630.000	2,135,000	2.882.500	3.866.000	4,485,000	5,492,500	6.691,250	8.550.250	9.229.750	9.569.500	9.569.500
Net Benefits (liquidity)*													

Return to family labour*	201,241
*consider full development year family labour requirements	
Discount rate	12%
NPV @ 0.12	5,409,227
IRR	28%
NPVb	43,373,419
NPVc	28,118,678
B/C ratio	1.54
Switching values Benefits	-35%
Switching values Costs	54%

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Appendix 10: Economic and Financial Analysis

YIELDS AND INPUTS													
Items		Unit	Price IDR					Witho	ut Project				
				1	2	3	4	5	6	7	8	9	1
Flock Physical Parameters													
Stock		heads		3	4	4	3	3	3	3	4	3	;
Mortality		%		6%	6%	8%		10%	10%	10%	10%	10%	109
Birth		heads		2	2	2	2	2	2	2	2	1	2
Take-off		heads		1	2	2	2	2	1	1	2	1	1
Main Production													
Goats		heads	900,000		1	1							
			900,000				-	- 2	- ,		- 2		
Self-consumption Total Sales		5		1	1	1	2		1	1		1	1
Total Sales				-		į	-	-	-	-	-	-	-
Investment Inputs													
Housing		heads	1,300,000	-	-	-	-	-	-	-	-	-	-
Operating Inputs		h a a da	00.000										
Vaccines		heads	60,000										
Other expenses including animal feed		per year	300,000	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Labour													
hired labour (herder)		pers/day	75,000	_	_	_	_	_	_	_	_	_	
Family labour		pers/day	75,000	8	8	8	8	8	8	8	8	8	8
Tariny labour		poro/day	70,000	Ü	· ·	Ü	Ü	Ü	· ·	Ü	· ·	O .	
FINANCIAL BUDGET (IDR)								18774	. 5				
Items				1	2	3	4		ut Project	7	8	9	1
Revenues						3	4	<u> </u>	6		0	9	!
Goats				_	900,000	900,000	_	_	_	_	_	_	_
Self-consumption				900,000	900,000	900,000	1,800,000	1,800,000	900,000	900,000	1,800,000	900,000	873,000
Total Sales			-	-	900,000	900,000	1,000,000	1,000,000	-	300,000	-	-	-
Total Sales	Subtotal revenues		-	900,000	1,800,000		1,800,000	1,800,000	900,000	900,000	1,800,000	900,000	873,000
Investment Inputs	Subtotal revenues			900,000	1,000,000	1,000,000	1,000,000	1,000,000	900,000	900,000	1,600,000	900,000	073,000
Housing				_	_	_	_	_	_	_	_	_	_
	Sub-total investment costs		-	-							-		-
Operating Inputs													
Vaccines													
Other expenses including animal feed			-	90,000	90,000	90,000	90,000	60,000	60,000	60,000	60,000	60,000	60,000
	Sub-total operating costs			90,000	90,000	90,000	90,000	60,000	60,000	60,000	60,000	60,000	60,000
Labour													
Hired labour				_	_	_	_	_	_	_	_	_	_
Family labour				600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
·, ·	Subtotal Labour costs		-	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
				•	•	•	•	•	•	•	•	•	•
Total cost				690,000	690,000	690,000	690,000	660,000	660,000	660,000	660,000	660,000	660,000
Gross Income before labour				810,000	1,710,000	1,710,000	1,710,000	1,740,000	840,000	840,000	1,740,000	840,000	813,000
Gross Income after labour				210,000	1,110,000	1,110,000	1,110,000	1,140,000	240,000	240,000	1,140,000	240,000	213,000
Goate Production Model													
Goats Production Model WP SCENARIO													

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Appendix 10: Economic and Financial Analysis

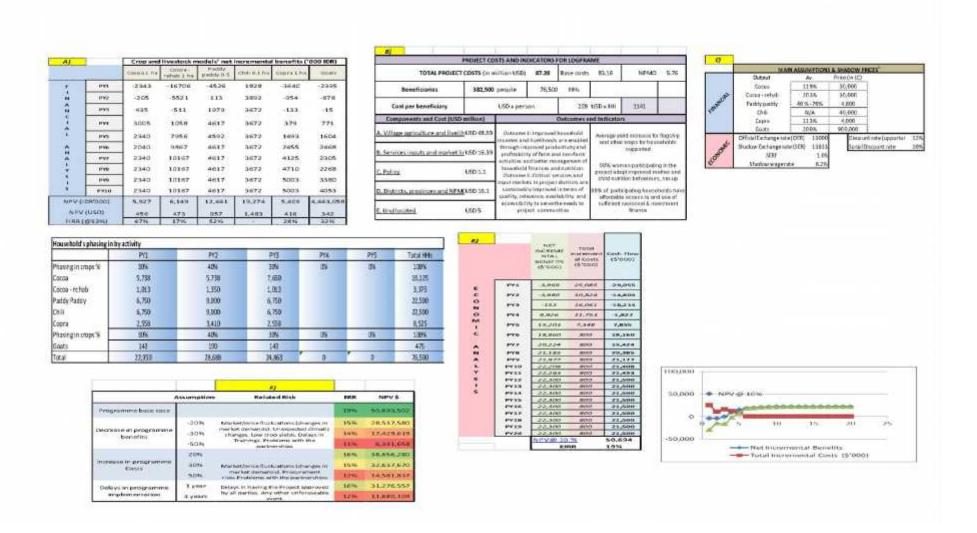
Parameter Para		YIELDS AND INPUTS													
Parameters	Items			Unit	Price IDR										
Stock (the programmer provides 3 2 yrs old breeding lennises) heads 6 8 7 8 8 7 8 6 9 10 10 10 10 10 10 10						1	2	3	4	5	6	7	8	9	10
Marcality Paciety Pa		ma provides 3.2 yrs old broading famoles)		boodo		6		7			0	0	10	10	11
Sign		ime provides 3.2 yrs old breeding lemales)													5%
Take of griding 1															7
Pass of pilitating 2 months 1															7
Main Production		0 months)		ricads		- '		-		-	-	-	-	-	
Total Sales	Main Production														
Total Sales	Goats			heads	900,000	-	-	1	2	2	2	2	3	3	3
Needs	Self-consumption			5		1	2	2							4
Pleade 1,000,000 1		Total Sales				-	-	1	2	2	2	2	3	3	3
Pleade 1,000,000 1															
Parametrian				1 1	4 000 000							0.4			
Nacional	Housing			neads	1,300,000	1	-	-	-	-	-	0.1	-	-	-
Nacional	Operating Inpute														
Part				heads	60,000	6	8	7	8	8	a	a	10	10	11
Labour Hilfed Islatour pers/month 75,000 15 11 11 11 12 12 12 12 12 12 13 13 13 1 1 1 1		luding animal feed													1.4
Final labour Pers/month 75,000 15	Other expended inci	rading diffinal rood		por you.	000,000										
FRIANCIAL BUDGET (IDR) Items	Labour														
FINANCIAL BUDGET (IDR)	Hired labour			pers/month	75,000	-	-	-	-	-	-	-	-	-	-
Revenue	Family labour			pers/month	75,000	15	11	11	12	12	12	12	13	13	13
Revenue															
Revenue															
Revenue		NANCIAL DUDGET (IDD)	٦												
Revenues		NANCIAL BUDGET (IDR)	<u> </u>							\A/i+	n Project				
Revenues Solition	items					1	2	3	4			7	8	9	10
Self-consumption Protain Self-consumption	Revenues											•			
Self-consumption Protein Prote						_	_	900.000	1.800.000	1.800.000	1.800.000	1.800.000	2.700.000	2 700 000	2 700 000
Total Sales Subtotal revenues Subtotal r															
Investment Inputs Housing Sub-total investment costs 1,300,000 - - - - - 130,000 - - - - - - 130,000 - - - - - - - - -	•					900,000	2,079,000	1,800,000	1,800,000	2,700,000	2,700,000	2,700,000			3,600,000
1,300,000 1,30		Total Sales				900,000	2,079,000						2,700,000	2,941,640	
Sub-total investment costs 1,300,000 - - - - 130,000 - - - - 130,000 - - - - - - - - -		Total Sales	Subtotal revenues				-	900,000	1,800,000	1,800,000	1,800,000	1,800,000	2,700,000 2,700,000	2,941,640 2,700,000	3,600,000
Vaccines	Investment Inputs	Total Sales	Subtotal revenues			900,000	-	900,000	1,800,000	1,800,000	1,800,000	1,800,000 4,500,000	2,700,000 2,700,000	2,941,640 2,700,000	3,600,000 2,700,000
Vaccines 360,000 462,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 420,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 420,000 <		Total Sales				900,000	2,079,000 -	900,000 2,700,000	1,800,000	1,800,000	1,800,000 4,500,000	1,800,000 4,500,000 130,000	2,700,000 2,700,000 5,400,000	2,941,640 2,700,000	3,600,000 2,700,000
Vaccines 360,000 462,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 420,000 360,000 360,000 360,000 360,000 360,000 360,000 360,000 420,000 <		Total Sales				900,000	2,079,000 -	900,000 2,700,000	1,800,000	1,800,000	1,800,000 4,500,000	1,800,000 4,500,000 130,000	2,700,000 2,700,000 5,400,000	2,941,640 2,700,000	3,600,000 2,700,000
Other expenses including animal feed 300,000 360,000 360,000 360,000 360,000 360,000 420,000	Housing	Total Sales				900,000	2,079,000 -	900,000 2,700,000	1,800,000	1,800,000	1,800,000 4,500,000	1,800,000 4,500,000 130,000	2,700,000 2,700,000 5,400,000	2,941,640 2,700,000	3,600,000 2,700,000
Labour Hired labour (herder) Family labour Total cost Gross Income after labour Net Incremental Income Gross Income after labour WOP Gross Income after labour WP 440,000 1,257,000 1,919,700 1,9	Housing Operating Inputs	Total Sales				900,000 1,300,000 1,300,000	- 2,079,000 - -	900,000 2,700,000 - -	1,800,000 3,600,000	1,800,000 4,500,000	1,800,000 4,500,000	1,800,000 4,500,000 130,000 130,000	2,700,000 2,700,000 5,400,000	2,941,640 2,700,000 5,641,640	3,600,000 2,700,000 6,300,000
Labour Hired labour (herder) Family labour Subtotal Labour costs 1,125,000 825,000 825,000 900,000 900,000 900,000 900,000 975,000 9	Housing Operating Inputs Vaccines					900,000 1,300,000 1,300,000 360,000	- 2,079,000 - - 462,000	900,000 2,700,000 - - 420,300	1,800,000 3,600,000 - - 459,285	1,800,000 4,500,000 - - - 496,321	1,800,000 4,500,000 - - - 531,505	1,800,000 4,500,000 130,000 130,000 564,929	2,700,000 2,700,000 5,400,000	2,941,640 2,700,000 5,641,640 - - 626,849	3,600,000 2,700,000 6,300,000 - - - 639,397
Hired labour (herder) Family labour Subtotal Labour costs 1,125,000 825,000 825,000 825,000 900,000 9	Housing Operating Inputs Vaccines		Sub-total investment costs			900,000 1,300,000 1,300,000 360,000 300,000	- 2,079,000 - - - 462,000 360,000	900,000 2,700,000 - - 420,300 360,000	1,800,000 3,600,000 - - - 459,285 360,000	1,800,000 4,500,000 - - 496,321 360,000	1,800,000 4,500,000 - - 531,505 360,000	1,800,000 4,500,000 130,000 130,000 564,929 360,000	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000	2,941,640 2,700,000 5,641,640 - - 626,849 420,000	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000
Family labour Subtotal Labour costs	Housing Operating Inputs Vaccines		Sub-total investment costs			900,000 1,300,000 1,300,000 360,000 300,000	- 2,079,000 - - - 462,000 360,000	900,000 2,700,000 - - 420,300 360,000	1,800,000 3,600,000 - - - 459,285 360,000	1,800,000 4,500,000 - - 496,321 360,000	1,800,000 4,500,000 - - 531,505 360,000	1,800,000 4,500,000 130,000 130,000 564,929 360,000	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000	2,941,640 2,700,000 5,641,640 - - 626,849 420,000	3,600,000 2,700,000 6,300,000 - - - 639,397
Total cost 3,085,000 1,647,000 1,605,300 1,719,285 1,756,321 1,791,505 1,954,929 1,991,683 2,021,849 2,034,39	Operating Inputs Vaccines Other expenses incl		Sub-total investment costs			900,000 1,300,000 1,300,000 360,000 300,000	- 2,079,000 - - - 462,000 360,000	900,000 2,700,000 - - 420,300 360,000	1,800,000 3,600,000 - - - 459,285 360,000	1,800,000 4,500,000 - - 496,321 360,000	1,800,000 4,500,000 - - 531,505 360,000	1,800,000 4,500,000 130,000 130,000 564,929 360,000	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000	2,941,640 2,700,000 5,641,640 - - 626,849 420,000	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000
Total cost 3,085,000 1,647,000 1,605,300 1,719,285 1,756,321 1,791,505 1,954,929 1,991,683 2,021,849 2,034,39 Gross Income after labour -2,185,000 432,000 1,094,700 1,880,715 2,743,679 2,708,495 2,545,071 3,408,317 3,619,791 4,265,600 Gross Income before labour -1,060,000 1,257,000 1,919,700 2,780,715 3,643,679 3,608,495 3,445,071 4,383,317 4,594,791 5,240,60 Net Incremental Income -2,395,000 - 678,000 - 15,300 770,715 1,603,679 2,468,495 2,305,071 2,268,317 3,379,791 4,052,60 Gross Income after labour WOP -210,000 1,110,000 1,110,000 1,140,000 240,000 1,140,000	Operating Inputs Vaccines Other expenses incl	luding animal feed	Sub-total investment costs			900,000 1,300,000 1,300,000 360,000 300,000	- 2,079,000 - - - 462,000 360,000	900,000 2,700,000 - - 420,300 360,000	1,800,000 3,600,000 - - - 459,285 360,000	1,800,000 4,500,000 - - 496,321 360,000	1,800,000 4,500,000 - - 531,505 360,000	1,800,000 4,500,000 130,000 130,000 564,929 360,000	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000	2,941,640 2,700,000 5,641,640 - - 626,849 420,000	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000
Gross Income after labour Gross Income after labour Gross Income after labour Gross Income after labour WP 2,185,000 432,000 1,094,700 1,880,715 2,743,679 2,708,495 2,545,071 3,408,317 3,619,791 4,265,600 1,257,000 1,919,700 2,780,715 3,643,679 3,608,495 3,445,071 4,383,317 4,594,791 5,240,600 1,100,000 1,100,000 1,110,000 1	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder)	luding animal feed	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000	- 2,079,000 - - 462,000 360,000 822,000	900,000 2,700,000 - - 420,300 360,000 780,300	1,800,000 3,600,000 - - 459,285 360,000 819,285	1,800,000 4,500,000 - - - 496,321 360,000 856,321	1,800,000 4,500,000 - - 531,505 360,000 891,505	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000 1,016,683	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000 1,059,397
Gross Income after labour Gross Income after labour Gross Income after labour Gross Income after labour WP 2,185,000 432,000 1,094,700 1,880,715 2,743,679 2,708,495 2,545,071 3,408,317 3,619,791 4,265,600 1,257,000 1,919,700 2,780,715 3,643,679 3,608,495 3,445,071 4,383,317 4,594,791 5,240,600 1,100,000 1,100,000 1,110,000 1	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder)	luding animal feed	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000	- 2,079,000 - - 462,000 360,000 822,000	900,000 2,700,000 - - 420,300 360,000 780,300	1,800,000 3,600,000 - - 459,285 360,000 819,285	1,800,000 4,500,000 - - - 496,321 360,000 856,321	1,800,000 4,500,000 - - 531,505 360,000 891,505	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000 1,016,683	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000 1,059,397
Gross Income after labour Gross Income after labour Gross Income after labour Gross Income after labour WP 2,185,000 432,000 1,094,700 1,880,715 2,743,679 2,708,495 2,545,071 3,408,317 3,619,791 4,265,600 1,257,000 1,919,700 2,780,715 3,643,679 3,608,495 3,445,071 4,383,317 4,594,791 5,240,600 1,100,000 1,100,000 1,110,000 1	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder)	luding animal feed	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000	- 2,079,000 - - 462,000 360,000 822,000	900,000 2,700,000 - - 420,300 360,000 780,300	1,800,000 3,600,000 - - 459,285 360,000 819,285	1,800,000 4,500,000 - - - 496,321 360,000 856,321	1,800,000 4,500,000 - - 531,505 360,000 891,505	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000 1,016,683	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000 1,059,397
Net Incremental Income -2,395,000 -678,000 -1,100	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	luding animal feed)	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 660,000 1,125,000	2,079,000 - - 462,000 360,000 822,000 825,000	900,000 2,700,000 - - 420,300 360,000 780,300 - 825,000 825,000	1,800,000 3,600,000 	1,800,000 4,500,000 	1,800,000 4,500,000 - - 531,505 360,000 891,505 - 900,000 900,000	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000	2,700,000 2,700,000 5,400,000 - - 596,683 420,000 1,016,683 975,000 975,000	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849 975,000 975,000	3,600,000 2,700,000 6,300,000 - - - 639,397 420,000 1,059,397 - 975,000 975,000
Net Incremental Income -2,395,000 - 678,000 - 15,300 - 15,300 - 15,300 770,715 - 1,603,679 - 2,468,495 - 2,305,071 - 2,268,317 - 3,379,791 - 4,052,60 3,379,791 - 4,052,60 4,052,60 Gross Income after labour WOP Gross Income after labour WP 210,000 - 1,110,000 - 1,110,000 - 1,110,000 - 1,110,000 - 1,140,000 - 240,000 - 2,780,715 - 2,743,679 - 2,708,495 - 2,545,071 - 3,408,317 - 3,619,791 - 4,265,60 3,619,791 - 4,265,60 Net Benefits (liquidity)* 440,000 * 1,257,000 - 1,919,700 - 2,780,715 - 3,643,679 - 3,608,495 - 3,445,071 - 4,383,317 - 4,594,791 - 5,240,60 4,594,791 - 5,240,60	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	luding animal feed) Total cost	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 3,085,000	- 2,079,000 - - 462,000 360,000 822,000 - 825,000 8,647,000	900,000 2,700,000 - - 420,300 360,000 780,300 - 825,000 825,000	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000	1,800,000 4,500,000 - - - 496,321 360,000 856,321 - 900,000 900,000	1,800,000 4,500,000 - - 531,505 360,000 891,505 - 900,000 900,000	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000	2,700,000 2,700,000 5,400,000 	2,941,640 2,700,000 5,641,640 - - - 626,849 420,000 1,046,849 - 975,000 975,000	3,600,000 2,700,000 6,300,000 639,397 420,000 1,059,397 975,000 975,000
Gross Income after labour WOP 210,000 1,110,000 1,110,000 1,110,000 1,140,000 240,000 240,000 1,140,000 240,000 213,00	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	luding animal feed) Total cost Gross Income after labour	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 1,125,000 3,085,000 -2,185,000	- 2,079,000 - - 462,000 360,000 822,000 825,000 1,647,000 432,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 825,000 1,605,300 1,094,700	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000 1,719,285	1,800,000 4,500,000 - - - 496,321 360,000 856,321 - 900,000 900,000 1,756,321 2,743,679	1,800,000 4,500,000 - - 531,505 360,000 891,505 900,000 900,000 1,791,505 2,708,495	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000 1,016,683 - 975,000 975,000 1,991,683 3,408,317	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849 - 975,000 975,000 2,021,849 3,619,791	3,600,000 2,700,000 6,300,000 - - 639,397 420,000 1,059,397 - 975,000 975,000 2,034,397 4,265,603
Gross Income after labour WOP 210,000 1,110,000 1,110,000 1,110,000 1,140,000 240,000 240,000 1,140,000 240,000 240,000 213,000 240,00	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	luding animal feed) Total cost Gross Income after labour	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 1,125,000 3,085,000 -2,185,000	- 2,079,000 - - 462,000 360,000 822,000 825,000 1,647,000 432,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 825,000 1,605,300 1,094,700	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000 1,719,285	1,800,000 4,500,000 - - - 496,321 360,000 856,321 - 900,000 900,000 1,756,321 2,743,679	1,800,000 4,500,000 - - 531,505 360,000 891,505 900,000 900,000 1,791,505 2,708,495	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000 1,016,683 - 975,000 975,000 1,991,683 3,408,317	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849 - 975,000 975,000 2,021,849 3,619,791	3,600,000 2,700,000 6,300,000 639,397 420,000 1,059,397 975,000 975,000
Gross Income after labour WP -2,185,000 432,000 1,094,700 1,880,715 2,743,679 2,708,495 2,545,071 3,408,317 3,619,791 4,265,60 Net Benefits (liquidity)* 440,000 1,257,000 1,919,700 2,780,715 3,643,679 3,608,495 3,445,071 4,383,317 4,594,791 5,240,60	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	luding animal feed) Total cost Gross Income after labour	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 1,125,000 3,085,000 -2,185,000	- 2,079,000 - - 462,000 360,000 822,000 825,000 1,647,000 432,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 825,000 1,605,300 1,094,700	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000 1,719,285	1,800,000 4,500,000 - - - 496,321 360,000 856,321 - 900,000 900,000 1,756,321 2,743,679	1,800,000 4,500,000 - - 531,505 360,000 891,505 900,000 900,000 1,791,505 2,708,495	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071	2,700,000 2,700,000 5,400,000 - - - 596,683 420,000 1,016,683 - 975,000 975,000 1,991,683 3,408,317	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849 - 975,000 975,000 2,021,849 3,619,791	3,600,000 2,700,000 6,300,000 - - 639,397 420,000 1,059,397 - 975,000 975,000 2,034,397 4,265,603
Net Benefits (liquidity)* 440,000 1,257,000 1,919,700 2,780,715 3,643,679 3,608,495 3,445,071 4,383,317 4,594,791 5,240,60	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	luding animal feed) Total cost Gross Income after labour Gross Income before labour	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 1,125,000 -2,185,000 -2,185,000	2,079,000 - 462,000 360,000 822,000 825,000 825,000 432,000 1,647,000 1,257,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 825,000 1,605,300 1,094,700 1,919,700	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000 1,719,285 1,880,715 2,780,715	1,800,000 4,500,000 - - 496,321 360,000 856,321 - 900,000 900,000 1,756,321 2,743,679 3,643,679	1,800,000 4,500,000 531,505 360,000 891,505 900,000 900,000 1,791,505 2,708,495 3,608,495	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071 3,445,071	2,700,000 2,700,000 5,400,000 5,400,000 	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849 975,000 975,000 2,021,849 3,619,791 4,594,791	3,600,000 2,700,000 6,300,000
	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	Total cost Gross Income after labour Gross Income before labour Net Incremental Income Gross Income after labour WOP	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 1,125,000 2,185,000 -1,060,000	2,079,000 - 462,000 360,000 822,000 825,000 1,647,000 432,000 1,257,000 - 678,000 1,110,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 825,000 1,605,300 1,094,700 1,919,700 - 15,300 1,110,000	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000 1,719,285 1,880,715 2,780,715 770,715 1,110,000	1,800,000 4,500,000 - - 496,321 360,000 856,321 - 900,000 900,000 1,756,321 2,743,679 3,643,679 1,603,679	1,800,000 4,500,000 	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071 3,445,071 240,000	2,700,000 2,700,000 5,400,000 5,400,000 - - 596,683 420,000 1,016,683 - 975,000 975,000 1,991,683 3,408,317 4,383,317	2,941,640 2,700,000 5,641,640 	3,600,000 2,700,000 6,300,000 - - 639,397 420,000 975,000 975,000 2,034,397 4,265,603 5,240,603
	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	Total cost Gross Income after labour Gross Income before labour Net Incremental Income Gross Income after labour WOP	Sub-total investment costs Sub-total operating costs			900,000 1,300,000 1,300,000 360,000 300,000 660,000 1,125,000 1,125,000 2,185,000 -1,060,000	2,079,000 - 462,000 360,000 822,000 825,000 1,647,000 432,000 1,257,000 - 678,000 1,110,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 825,000 1,605,300 1,094,700 1,919,700 - 15,300 1,110,000	1,800,000 3,600,000 - - 459,285 360,000 819,285 - 900,000 900,000 1,719,285 1,880,715 2,780,715 770,715 1,110,000	1,800,000 4,500,000 - - 496,321 360,000 856,321 - 900,000 900,000 1,756,321 2,743,679 3,643,679 1,603,679	1,800,000 4,500,000 	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071 3,445,071 240,000	2,700,000 2,700,000 5,400,000 5,400,000 - - 596,683 420,000 1,016,683 - 975,000 975,000 1,991,683 3,408,317 4,383,317	2,941,640 2,700,000 5,641,640 	3,600,000 2,700,000 6,300,000
	Operating Inputs Vaccines Other expenses incl Labour Hired labour (herder) Family labour	Total cost Gross Income after labour Wet Incremental Income Gross Income after labour WOP Gross Income after labour WOP Gross Income after labour WP	Sub-total investment costs Sub-total operating costs			360,000 360,000 360,000 660,000 1,125,000 1,125,000 1,125,000 -2,185,000 -2,395,000 210,000 -2,185,000	2,079,000 - 462,000 360,000 822,000 825,000 825,000 1,647,000 432,000 1,257,000 - 678,000 1,110,000 432,000	900,000 2,700,000 - - 420,300 360,000 780,300 825,000 1,605,300 1,094,700 1,919,700 - 15,300 1,110,000 1,094,700	1,800,000 3,600,000 	1,800,000 4,500,000 	1,800,000 4,500,000 531,505 360,000 891,505 900,000 900,000 1,791,505 2,708,495 3,608,495 2,468,495 240,000 2,708,495	1,800,000 4,500,000 130,000 130,000 564,929 360,000 924,929 - 900,000 900,000 1,954,929 2,545,071 240,000 2,545,071	2,700,000 2,700,000 5,400,000 - - 596,683 420,000 1,016,683 - 975,000 975,000 1,991,683 3,408,317 4,383,317 1,140,000 3,408,317	2,941,640 2,700,000 5,641,640 - - 626,849 420,000 1,046,849 - 975,000 975,000 2,021,849 3,619,791 4,594,791 3,379,791 240,000 3,619,791	3,600,000 2,700,000 6,300,000 639,397 420,000 1,059,397 975,000 975,000 2,034,397 4,265,603 5,240,603

i.	
NPV @ 12% IDR	4,443,058
IRR	32%
Return to Family Labour	137,814
NPVb	19,783,274
NPVc	11,279,754
B/C ratio	1.75
Switching values Benefits	-43%
Switching values Costs	75%

Final project design report

Appendix 10: Economic and Financial Analysis

EFA Summary Sheet



Appendix 11: Draft programme implementation manual

READ SI PIM should be based on updating the READ PIM. This updating process should be led by the central and district managers of READ with support from the READ SI design team.

The READ SI PIM will be developed during 2017 prior to programme effectiveness.

Appendix 12: Compliance with IFAD policies

Appendix 12: Compliance with IFAD policies

Policy

Strategic Objectives

IFAD Strategic Framework 2011-2015 Under the 2016-2025 Strategic Framework, IFAD aims to invest in rural people to enable them to overcome poverty and achieve food security through remunerative, sustainable and resilient livelihoods. IFAD will pursue three closely interlinked and mutually reinforcing strategic objectives (SOs) to achieve its goal: SO1: Increase poor rural people's productive capacities; SO2: Increase poor rural people's benefits from market participation; and SO3: Strengthen the environmental sustainability and climate resilience of poor rural people's economic activities. In order to achieve these objectives, IFAD intends to work in a way that is bigger, better and smarter: Bigger: by mobilizing substantially more funds and resources for investment in rural areas; Better: by strengthening the quality of IFAD's country programmes through innovation, knowledgesharing, partnerships and policy engagement; and Smarter: by delivering development results in a cost-effective way that best responds to partner countries' evolving needs.

READ SI directly feeds into the development goal and furthers works particularly towards SO1 and 2. Given the prominent scaling up agenda and innovation focus, the READ SI investment is aligned with the bigger, better, smarter way of working.

Indonesia 2016-2019 COSOP The Country Strategic Opportunities Programme (COSOP), which is aligned with the policies and strategies of Gol aims to support inclusive rural transformation to enable rural people to reduce poverty and achieve sustainable livelihoods. The country strategy is organized around three interconnected strategic objectives. The first objective is to facilitate the access of small-scale producers to remunerative agricultural markets, to enable them capture the benefits emerging from a growing and diversifying demand for food-based products, and earn higher income. The second strategic objective is to build the resilience of small-scale producers and their families and to optimize their risk mitigation strategies to reduce their vulnerability. The third objective is to strengthen rural institutions so that they can support inclusive rural transformation and deliver accountable services that meet the needs of small producers.

By developing a scalable model for rural development investments, READ SI is expected to contribute to rural transformation and particularly support strategic objectives 1 and 3. By considering climate change risks and building resilience through greater financial inclusion, READ SI is also expected to contribute to strategic objective 2.

Environmental Natural Resource Management (ENRM) Policy READ SI supports the primary and secondary objective of this policy by promoting a systemic change in inputs, services and advice delivery, by. introducing sustainable production methodologies, including training on safe and appropriate use of agricultural inputs (and chemicals) and introduction of organic/bio pesticides, herbicides and fertilizers. READ SI will particularly adhere to promoting the following policy principles: (i) Scaled-up investment in multiple-benefit approaches for sustainable agricultural intensification; (ii) Recognition and greater awareness of the economic, social and cultural value of natural assets; (iii) 'Climate-smart'

Policy

Strategic Objectives

approaches to rural development; (iv) Greater attention to risk and resilience in order to manage environment- and natural-resource-related shocks; (v) Improved governance of natural assets for poor rural people by strengthening land tenure and community-led empowerment; (vi) Livelihood diversification to reduce vulnerability and build resilience for sustainable natural resource management.

IFAD's Climate Change Strategy Consistent with the goal to maximize IFAD's impact on rural poverty in a changing climate and the strategy's three statements of purpose, READ SI will mainstream climate smart approaches into its agricultural development activities. Climate change resilience is an increasingly important issue in Sulawesi and will be reflected with greater prominence in the design and delivery of agriculture and livelihoods activities, but also in building resilience through greater financial inclusion to enable households to cope better with shocks.

IFAD's Policy for Gender equality and Women's empowerment READ SI will systematically address issues of gender equality and women's empowerment. It will help women and their organizations in their advocacy for access to resources and knowledge. It will strengthen the capacity of programme partners (national, local and decentralized institutions, training centers, private sector providers and NGOs) to take into account issues of gender equality and community empowerment. This is particularly considered a difficult group to reach and therefore will be subject to special attention.

IFAD's Rural Finance Strategy READ SI will build smallholders financial capacities and link them to financial service provider. Thereby it is fully aligned with the Rural Finance strategy's objectives to make clients "bankable" by enabling them to participate in the design of viable business undertakings and by enhancing their understanding of services and products through financial literacy training. The programme will also look at supporting CBFO, working towards the objective to enhance the sustainability of financial service providers.

IFAD's Strategy for Private Sector and 4Ps As outlined under the Private Sector Strategy, IFAD will act as a broker of partnership agreements between private sector companies (in the cocoa sector), the programme and the farmer groups. The programme will work with lead cocoa businesses to explore mechanisms to ensure that smallholder producers are respected partners. However, the particular dynamics of the cocoa value chain in Sulawesi currently mean that in most location there are multiple layers of traders between the farmers and the lead cocoa firms (who are the business partners in the PPPs). As such, the specific modalities advocated by the IFAD 4P model are not feasible to be applied directly.

IFAD's Policy for indigenous people READ SI complies with the policy on indigenous people. READ SI will not directly target IP through village selection or other mechanism. However, where IP are living in the villages chosen on the basis of the other selection criteria, then the implementing teams (especially the VF and PPL) will adapt the programme delivery modalities to reflect any particular cultural aspects. This will be particularly important in the social mobilization activities, but also in the way technical training, SCG and other activities are organized and delivered.

IFAD's Policy

It is expect that in some of the READ SI communities there will be some

Final project design report
Appendix 12: Compliance with IFAD policies

Policy	Strategic Objectives
to improve access to Land and security of Tenure	households with little or no land or insecure land usage rights. It is however recognized that the security of land usage varies substantially from village to village, including under share cropping and fixed rental. As such READ SI will need to be able to provide additional support on improving security of land usage arrangements in villages where this is a barrier to further investment and improvement of production practice. This is only expected to be the case in a minority of village and, where it is an issue, largely concerning rice crop land but not affecting cocoa and other estate and upland crops.
IFAD's Knowledge Management Strategy	READ SI, particularly with activities under component 3, is aligned with the Knowledge Management strategy, especially in the following areas (i) strengthening the process of knowledge sharing and learning; (ii) development of partnerships to provide a broader base of knowledge sharing and learning and; (iii) promotion of a dynamic platform for knowledge sharing and learning. The programme will use (human and financial) resources to enhance its impact by sharing knowledge and learning.

Appendix 13: Contents of the Programme Life File

OSC Concept Note

OSC Minutes

CPMT Minutes, 18 February

CPMT Minutes, 6 June

Mission TORs

PDR: Detailed Design