

Document: EB 2019/128/R.22/Rev.1
Agenda: 7(d)(i)(c)
Date: 11 December 2019
Distribution: Public
Original: English

E



Investing in rural people

President's report

Proposed loan

Republic of Indonesia

The Development of Integrated Farming Systems in Upland Areas (UPLANDS)

Project ID: 2000002234

Note to Executive Board representatives

Focal points:

Technical questions:

Nigel Brett
Regional Director
Asia and the Pacific Division
Tel.: +39 06 5459 2516
e-mail: n.brett@ifad.org

Ivan Cossio Cortez
Country Director
Tel.: +39 06 5459 2343
e-mail: i.cossio@ifad.org

Dispatch of documentation:

Deirdre Mc Grenra
Chief
Institutional Governance and
Member Relations
Tel.: +39 06 5459 2374
e-mail: gb@ifad.org

Executive Board — 128th Session
Rome, 10-12 December 2019

For: Approval

Contents

Abbreviations and acronyms	ii
Map of the project area	iii
Financing summary	iv
I. Context	1
A. National context and rationale for IFAD involvement	1
B. Lessons learned	2
II. Project description	2
A. Project objectives, geographic area of intervention and target groups	2
B. Components/outcomes and activities	3
C. Theory of change	4
D. Alignment, ownership, and partnerships	4
E. Costs, benefits and financing	5
III. Risks	10
A. Project risks and mitigation measures	10
B. Environment and social category	10
C. Climate risk classification	11
D. Debt sustainability	11
IV. Implementation	11
A. Organizational framework	11
B. Planning, monitoring and evaluation, learning, knowledge management and communication	12
C. Implementation plans	13
V. Legal instruments and authority	13
VI. Recommendation	14

Appendices

- I. Negotiated financing agreement
- II. Logical framework

Project delivery team

Regional Director:	Nigel Brett
Country Director:	Ivan Cossio Cortez
Project Technical Lead:	Mawira Chitima
Senior Finance Officer:	Irene Li
Climate and Environment Specialist:	Roshan Cooke
Legal Officer:	Matteo Mazzoni

Abbreviations and acronyms

DGAIF	Directorate General of Agricultural Infrastructure and Facilities
DPIU	district project implementation unit
EIRR	economic internal rate of return
GDP	gross domestic product
IsDB	Islamic Development Bank
M&E	monitoring and evaluation
MoA	Ministry of Agriculture
NPMU	national project management unit
NPV	net present value
O&M	operations and maintenance
SDGs	Sustainable Development Goals
UPLANDs	The Development of Integrated Farming Systems in Upland Areas

Map of the project area



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 | 06-07-2018

Financing summary

Initiating institution:	Ministry of Agriculture
Borrower:	Republic of Indonesia
Executing agency:	Directorate General of Agricultural Infrastructure and Facilities, Ministry of Agriculture
Total project cost:	US\$151.435 million
Amount of IFAD loan:	EUR 44.850 million (equivalent to approximately US\$50.0 million)
Amount of IFAD climate finance:*	US\$41.297 million
Terms of IFAD loan:	Ordinary terms 13 years, including a grace period of 6 years, with an interest rate equal to the IFAD reference interest rate including the variable spread
Cofinancier:	Islamic Development Bank (IsDB)
Amount of cofinancing:	IsDB loan: US\$70.0 million IsDB grant: US\$0.50 million
Terms of cofinancing:	Parallel cofinancing
Contribution of borrower:	EUR 15.300 million (equivalent to approximately US\$17.097 million)
Contribution of beneficiaries:	EUR 12.600 million (equivalent to approximately US\$14.034 million)
Contribution of private sector:	US\$0.024 million
Appraising institution:	IFAD
Cooperating institution:	Directly supervised by IFAD

* As per the joint methodologies for tracking climate change adaptation finance and climate change mitigation finance agreed by the multilateral development banks, in accordance with the Common Principles for Climate Change Mitigation Finance Tracking.

Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed financing to the Republic of Indonesia for The Development of Integrated Farming Systems in Upland Areas project.

I. Context

A. National context and rationale for IFAD involvement

National context

1. The Republic of Indonesia is a fast-growing, lower-middle-income country with the fourth largest population in the world spread over 17,508 islands. Steady economic growth has led to significant poverty reduction, but the pace of poverty reduction has slowed in recent years. Among a population of 262 million, more than 100 million people live in or at risk of poverty, and are vulnerable to shocks such as illness, weather events or price volatility. The highest poverty rates are found in eastern Indonesia, and poverty is more pronounced in rural areas. Inequality is a key threat to the country's continued development and malnutrition remains high.
2. Agricultural transformation is a key priority for the Government to meet its development goals. Agriculture has historically served as a pillar of the economy, employs 32 per cent of the labour force and contributed around 13.5 per cent to GDP in 2017. Upland rural areas have a higher incidence of poverty than the national average (12.8 per cent versus 9.8 per cent in 2018) and a higher concentration of vulnerable people.

Special aspects relating to IFAD's corporate mainstreaming priorities

3. Regarding climate change, the Development of Integrated Farming Systems in Upland Areas (UPLANDs) project will: (i) promote agricultural practices to strengthen climate resilience, including water conservation and ecosystem preservation; (ii) prioritize resilient crops and activities; (iii) strengthen the skills of farmers and government services on adaptation to climate change, and include adaptation in all capacity-building activities; and (iv) integrate farmers' traditional knowledge with innovations.
4. **Gender equity.** The project values women as farmers and entrepreneurs, focuses on their economic empowerment, promotes their business development and access to assets, production services and markets, and encourages an equitable distribution of workload. It will ensure the inclusion of women who may have been sidelined by producer organizations, and will strengthen women's role in decision-making at the household, organizational and community levels.
5. Nutrition is mainstreamed by including nutrition-sensitive value chain approaches and promoting increased availability of and access to nutritious food.
6. **Youth.** Action will be taken to ensure youth participation in producer organizations, promote vocational training to generate employment opportunities, and facilitate access by young people to finance, knowledge and markets.

Rationale for IFAD involvement

7. With the need to increase productivity to feed a growing population comes increased demand for agricultural land and, as productivity stagnates in Indonesia's lowland areas, the Government of Indonesia sees considerable potential in expanding diversified agriculture in the uplands. To date, agricultural development and investment have focused mainly on irrigated lowlands, but the agricultural upland area is larger than the irrigated paddy land area, has strong potential for commercial agriculture and offers large expanses of land that could be put into production. However, limited access by smallholder farmers to inputs and

extension and financial services needs to be tackled in order to enhance their productivity.

8. Many of the 26 million smallholder farmers in upland areas are poor and marginalized. Among the challenges they face are sloping land and poor quality soils contributing to low productivity, and their lack of knowledge of sustainable agriculture practices leads to soil erosion. The uplands and lowlands are intricately connected, and land and water use problems in the former inevitably affect the latter. Expanding agriculture in the uplands in response to growing food demand could exacerbate soil and water conservation issues there, in addition to damaging lowland rivers and irrigation schemes due to increased run-off and siltation.
9. In this context, it is crucial to create synergies between the uplands and lowlands in order to contribute to national food security, sustainable natural resource management and smallholders' well-being. This should include improving agricultural productivity, developing modernized farming systems and market channels, supporting small farmers' organizations to create economies of scale, and adding value beyond the farm gate to enhance opportunities for women and youth. The Government envisions UPLANDs as an opportunity to implement this approach and develop replicable models, and invited IFAD and the Islamic Development Bank (IsDB) to partner on this effort.

B. Lessons learned

10. Although IFAD has not targeted upland areas in the past, its long-standing engagement in the country has generated a number of lessons that could be of benefit to UPLANDs, as outlined below.
11. Simple projects with a strong poverty focus and the flexibility to adapt to diverse local situations have better prospects for success; decentralized management structures contribute to such flexibility.
12. Ownership, empowerment and capacity-building at village level are key success factors. However, they should be linked to tangible social and/or economic opportunities and benefits.
13. Considering limited local capacities, making use of the technical expertise of actors such as public extension agents, farmers' organizations, NGOs and the private sector broadens options for providing qualified training and technical assistance, and brings together diverse skills and approaches.
14. The private sector can contribute to enhancing the livelihoods of 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, with a view to generating mutual benefits.

II. Project description

A. Project objectives, geographic area of intervention and target groups

15. The project goal is to reduce poverty and enhance food security in upland areas through remunerative, sustainable and resilient livelihoods. The development objective is to increase smallholders' agriculture productivity, incomes, livelihoods and resilience in the targeted uplands. The project goal and development objective, and the components presented below, refer to the whole project including IFAD and IsDB financing and support.
16. **Project area.** The project will operate in seven provinces (Banten, West Java, Central Java, East Java, West Nusa Tenggara, North Sulawesi and Gorontalo), which were selected by the Government through a competitive call for proposals from provinces detailing their commitment to develop smallholder agriculture and compliance with criteria such as poverty, unemployment and agricultural and

market potential. Within these provinces, UPLANDs will focus on 14 districts also selected on the basis of poverty, unemployment and comparative advantages in selected commodities.

17. **Target groups.** The target group of the project is smallholder men and women farmers and processors involved or with the potential to become involved in the selected commodities; high priority will be given to youth. UPLANDs will directly work with rural households, farmers' groups and women's groups.

B. Components/outcomes and activities

18. The project will have the following components:

19. **Component 1: Productivity enhancement and resilience-building.** The expected outcome is that 20,000 farmers increase their productive capacities by: (i) adopting improved inputs, technologies and practices; and (ii) improving soil and water conservation to reduce erosion and landslides.
- **Subcomponent 1.1: Land and infrastructure development** will support the construction, rehabilitation and management of land conservation infrastructure on 14,000 hectares including terracing, contouring and planting agroforestry trees and perennial horticultural crops.
 - **Subcomponent 1.2: Production and farm management** will ensure that farmers receive commodity-specific training and technical support to enhance their production and management capacity.
20. **Component 2: Agribusiness development and livelihood facilitation.** The expected outcome is to increase farmers' incomes with enhanced post-harvest activities, marketing and access to financial services by: (i) supporting farmers to profitably engage in post-harvest activities and marketing; (ii) developing market intelligence systems to improve market access; and (iii) establishing access to financial services for farmers and agri-related microenterprises.
- **Subcomponent 2.1: Development of farmer institutions** will support the establishment, equipping and development of post-harvest businesses on a sustainable basis. It will support the development of village-level farmer enterprises and apex bodies to engage in product aggregation, processing, production services and management of productive assets.
 - **Subcomponent 2.2: Market infrastructure and equipment** will supply market-related infrastructure and equipment to producer organizations for product aggregation and value addition to meet market demand. It will include construction of warehouses to house storage and processing equipment, and provision of processing, packaging and transport equipment. The beneficiaries will be farmers and their families who are members, shareholders or suppliers in the business entities.
 - **Subcomponent 2.3: Strengthening market linkages and alliances** will promote increased production with a high market value and market linkages by: (i) providing technical assistance to farmers' groups to improve market readiness, branding, packaging and sales promotion; and (ii) developing exchanges with other actors to better understand market expectations. The beneficiaries will be the farmers and their families who are members, shareholders or suppliers in the business entity.
 - **Subcomponent 2.4: Access to financial services** will facilitate farmers' groups and/or farmers' business units in accessing financial services from local district banks or microfinance institutions, and build capacities among local banks and microfinance institutions so that they provide finance services beyond the life of the project. Financial literacy training will be also offered to farmer group members.

21. **Component 3: Strengthening institutional delivery systems.** The expected outcome is enhanced delivery services and research in upland areas.

- **Subcomponent 3.1: Capacity-building for institutional development, governance and transparency** will strengthen the skills of extension services technicians in providing technical support to smallholder farmers, and of district-level staff in implementing agriculture development projects and programmes.
- **Subcomponent 3.2: Adaptive research** will disseminate agriculture research results on new crop varieties, agronomic practices, soil fertility, yields and socio-economic studies.

In addition to the three technical components described above, component 4 – project management – will aim to ensure the effective management and implementation of the project.

C. Theory of change

22. The UPLANDs theory of change is based on the assumption that, by creating an enabling environment and providing targeted support, upland smallholders will be able to increase their productivity, build sustainable livelihoods, create stronger linkages with markets and ultimately transform rural upland areas.
23. Smallholder farmers in the uplands generally have good resource potential and a willingness to produce marketable surpluses that would increase their incomes and reduce poverty. On the other hand, although there is strong demand for diversified crops, supply chains are underdeveloped and sustainable commercial relationships have failed to emerge. Smallholders face technical and organizational constraints that keep them from realizing their potential, while off-takers face other constraints that keep them from sourcing from upland areas. Smallholder farmers in uplands also face increased threats from climate variations and natural disasters.
24. The theory of change recognizes that an integrated approach is required in order to effectively support smallholders in overcoming their constraints to improving productivity and increasing their resilience. The project will therefore invest in complementary activities to address the most common problems in upland farming. By investing in infrastructure and quality climate-resilient planting materials, training and upskilling extension staff, providing technical support for farmers, ensuring access to finance, reducing post-harvest losses and improving market access, UPLANDs can promote profitable, climate-smart and sustainable upland agriculture. This will result in higher incomes for farm families, more profitable market linkages and employment opportunities for women and youth. As a result, the project will contribute to poverty reduction and economic development in the project areas.

D. Alignment, ownership, and partnerships

25. UPLANDs is aligned with national policies on food sovereignty, poverty reduction and inequality, and key sectoral priorities related to increasing land availability and utilization, improving agricultural infrastructure, strengthening farmer institutions, and increasing agricultural finance and marketing of agricultural products. UPLANDs will directly contribute to Indonesia's pursuit of Sustainable Development Goals (SDGs) 1 (no poverty), 2 (zero hunger), 10 (reduced inequalities), 12 (responsible consumption and production) and 15 (life on land). Furthermore, UPLANDs is closely aligned with IFAD's Strategic Framework 2016-2025 and country strategic opportunities programme 2016-2019 for Indonesia, both of which call for promoting sustainable and inclusive rural transformation. The project is a partnership between the Government of Indonesia, IFAD and the IsDB.

E. Costs, benefits and financing

26. Part of the funding for components 1 (Infrastructure development for productivity enhancement and resilience-building) and 3 (Strengthening institutional delivery systems) are counted as climate finance. The total amount of IFAD climate finance has been calculated on a preliminary basis as US\$41.297 million.
27. **Project costs.** Total project costs are estimated at US\$151.655 million over a five-year period. Project costs by component and category of expenditure are summarized in tables 1, 2 and 3 below. The project investments are structured in four major components: (i) Infrastructure development for productivity enhancement and resilience-building (68 per cent of total costs); (ii) Agribusiness development and livelihood facilitation (12.7 per cent); (iii) Strengthening institutional delivery systems (3.4 per cent); and (iv) Project management (15.9 per cent).

Table 1
Indicative project costs by component, subcomponent and financier
(Thousands of United States dollars)

Component	IFAD loan		IsDB loan		IsDB grant		Beneficiaries			Government of Indonesia			Private sector	Total
	Amount	%	Amount	%	Amount	%	Cash	In-kind	%	Cash	In-kind	%	Amount	Amount
1. Productivity enhancement and resilience-building														
1.1. Land and infrastructure development	2 959	5.0	40 499	67.8	-	-	-	10 858	18.2	5 432	-	9.1	-	59 748
1.2. Production and farm management	33 091	76.5	3 017	7.0	-	-	-	975	2.3	6 103	-	14.1	-	43 186
Subtotal	36 050	35.0	43 516	42.3	-	-	-	11 833	11.5	11 535	-	11.2	-	102 934
2. Agribusiness development and livelihood facilitation														
2.1. Development of farmer institutions	1 207	90.9	-	-	-	-	-	-	-	121	-	9.1	-	1 328
2.2. Market infrastructure and equipment	1 664	13.7	7 139	59.0	-	-	-	2 201	18.2	1 100	-	9.1	-	12 105
2.3. Strengthening market linkages and alliances	1 645	89.6	-	-	-	-	-	-	-	167	-	9.1	24	1 836
2.4. Access to financial services	-	-	4 001	100.0	-	-	-	-	-	-	-	-	-	4 001
Subtotal	4 516	23.4	11 140	57.8	-	-	-	2 201	11.4	1 388	-	7.2	24	19 269
3. Strengthening institutional delivery systems														
3.1. Capacity-building for institutional development, governance and transparency	2 733	77.3	-	-	500	14.1	-	-	-	301	-	8.5	-	3 534
3.2. Adaptive research	-	-	1 608	90.9	-	-	-	-	-	161	-	9.1	-	1 769
Subtotal	2 733	51.5	1 608	30.3	500	9.4	-	-	-	462	-	8.7	-	5 303
4. Project management														
4.1. Technical assistance	619	4.0	13 537	86.9	-	-	-	-	-	1 416	-	9.1	-	15 571
4.2. Operating cost	6 081	70.9	199	2.3	-	-	-	-	-	2 297	-	26.8	-	8 577
Subtotal	6 700	27.7	13 736	56.9	-	-	-	-	-	3 713	-	15.4	-	24 149
Total	50 000	33.0	70 000	46.2	500	0.3	-	14 034	9.3	17 097	-	11.3	24	151 655

Table 2
Indicative project costs by expenditure category and financier
(Thousands of United States dollars)

Expenditure category	IFAD loan		IsDB loan		IsDB grant (ISFB)		Private sector		Beneficiaries			Government of Indonesia			Total
	Amount	%	Amount	%	Amount	%	Amount	%	Cash	In-kind	%	Cash	In-kind	%	Amount
Investment costs															
A. Technical assistance and consultancies	401	2.6	13 609	88.3	-	-	-	-	-	-	-	1 401	-	9.1	15 441
B. Works	19	0.1	17 077	72.7	-	-	-	-	-	4 273	18.2	2 137	-	9.1	23 505
C. Grants and subsidies	5 399	10.3	32 715	62.6	-	-	-	-	-	9 415	18.0	4 753	-	9.1	52 282
D. Goods and services	31 791	86.2	1 608	4.4	-	-	-	-	-	130	0.4	3 353	-	9.1	36 882
E. Training, workshop and meeting	9 171	85.1	127	1.2	500	4.6	24	0.2	-	-	-	960	-	9.1	10 782
F. Micro-credit	-	-	4 001	100.0	-	-	-	-	-	-	-	-	-	9.1	4 001
G. Vehicle	77	90.9	-	-	-	-	-	-	-	-	-	8	-	9.1	85
H. Equipment	106	8.1	863	66.2	-	-	-	-	-	216	16.6	119	-	9.1	1 304
I. Operating cost	3 036	90.8	-	-	-	-	-	-	-	-	-	304	-	9.1	3 340
Total Investment cost	50 000	34.0	70 000	47.6	500	0.3	24	-	-	14 034	9.5	13 034	-	9.1	147 591
Recurrent costs															
A. Salaries	-	-	-	-	-	-	-	-	-	-	-	4 064	-	100.0	4 064
Total recurrent costs	-	-	-	-	-	-	-	-	-	-	-	4 064	-	100.0	4 064
Total	50 000	33.0	70 000	46.2	500	0.3	24	-	-	14 034	9.3	17 098	-	11.3	151 655

Table 3
Project costs by component, subcomponent and year
(Thousands of United States dollars)

	PY*1		PY2		PY3		PY4		PY5		Total
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
1. Productivity enhancement and resilience-building											
1.1. Land and infrastructure development	-	-	17 679	29.59	26 152	43.77	15 917	26.64	-	-	59 748
1.2. Production and farm management	490	1.14	18 743	43.40	21 389	49.53	1 951	4.52	613	1.42	43 186
Subtotal	490	0.48	36 422	35.38	47 541	46.19	17 868	17.36	613	0.60	102 934
2. Agribusiness development and livelihood facilitation											
2.1. Development of farmer institutions	-	-	360	27.10	366	27.59	320	24.12	281	21.19	1 328
2.2. Market infrastructure and equipment	83	0.69	8 863	73.22	3 158	26.09	-	-	-	-	12 105
2.3. Strengthening market linkages and alliances	-	-	449	24.45	457	24.89	465	25.34	465	25.31	1 836
2.4. Access to financial services	58	1.44	3 459	86.46	484	12.10	-	-	-	-	4 001
Subtotal	141	0.73	13 131	68.15	4 465	23.17	786	4.08	746	3.87	19 269
3. Strengthening institution delivery systems											
3.1. Capacity-building for institutional development, governance and transparency	1 129	31.95	729	20.63	742	21.00	716	20.26	220	6.2	3 534
3.2. Adaptive research	-	-	-	-	579	32.74	590	33.33	600	33.93	1 769
Subtotal	1 129	21.29	729	13.75	1 321	24.91	1 305	24.61	820	15.46	5 303
4. Project management											
4.1. Technical assistance	1 524	9.79	3 725	23.93	4 242	27.24	3 263	20.96	2 816	18.09	15 571
4.2. Operating cost	1 242	14.48	2 238	26.09	1 761	20.53	1 701	19.83	1 636	19.07	8 577
Subtotal	2 766	11.45	5 963	24.69	6 003	24.86	4 964	20.56	4 452	18.44	24 149
Total	4 526	2.98	56 245	37.09	59 331	39.12	24 923	16.43	6 631	4.37	151 655

* Project year

Project financing and cofinancing strategy and plan

28. Of the total project cost, total IFAD financing comes to EUR 44.85 million (equivalent to approximately US\$50 million, or 33.0 per cent of the total cost), with US\$70 million (46.2 per cent) to be provided by an IsDB loan, US\$0.50 million (0.3 per cent) by an IsDB grant, and US\$24,000 (0.016 per cent) by the private sector. The Government of Indonesia will contribute EUR 15.3 million (equivalent to approximately US\$17.1 million) (11.3 per cent), consisting of in-kind contributions by staff and tax exemptions. Beneficiaries are expected to contribute EUR 12.6 million (equivalent to approximately US\$14.0 million; 9.3 per cent of the total cost) - mostly to cofinance the purchase of machinery, equipment, building storage and production facilities. Each cofinancier, IFAD and IsDB, will administer its own financing.
29. The taxes and duties estimates were based on the rates 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 an IFAD loan, any future changes in tax legislation will not apply to the project.

Disbursement

30. IFAD loan proceeds will be disbursed in accordance with the IFAD Loan Disbursement Handbook, with detailed arrangements to be outlined in the letter to the borrower. Disbursements under IsDB and Islamic Solidarity Fund for Development financing will be made in accordance with prevailing IsDB procedures. The Government will open a designated account in United States dollars in the name of the Ministry of Finance at Bank Indonesia to receive the IFAD loan funds, and the necessary account(s) to receive the IsDB loan and grant funds. Details of the names, titles and signature(s) of the person(s) authorized to operate these accounts must reach IFAD before withdrawals are initiated. Strong fiduciary management and controls will be put in place to track and report on the utilization of funds.

Summary of benefits and economic analysis

31. The project is expected to reduce poverty and enhance food security in upland areas by building remunerative, sustainable and resilient livelihoods. As a result of project activities, the poverty level of rural area in the targeted districts will be reduced from an average of 16.41 per cent in 2017 to 13 per cent by end-2025. This will be achieved through outcome 1 (Increase in poor rural people's productive capacities), outcome 2 (Increase in poor rural people's incomes from enhanced processing and/or market participation) and outcome 3 (Enhanced delivery of UPLANDS services and research). The main benefits will be an increase in productivity, an increase in the areas under the selected commodities, a reduction in post-harvest losses, an increase in market share and reduced price vulnerability due to greater market access.
32. Women are expected to benefit from entrepreneurship activities by participating in increased processing of the selected commodities and from a reduction in their workload through access to improved technology and skills. Youth and women will also benefit from improved employment opportunities and access to skills and technologies.
33. **Economic analysis.** The project is expected to be financially and economically viable. The economic net present value (NPV) of the project's net benefit stream, discounted at 9 per cent, is Indonesian rupiah 1.98 billion (approximately US\$144.5 million). The estimated economic internal rate of return (EIRR) is 26.4 per cent and the NPV (at the discount rate of 9 per cent) is Indonesian rupiah 2.5 billion (approximately US\$182.5 million). An increase in project costs or decrease in project benefits of 10 per cent would lead to an EIRR of 24.1 per cent and 23.9 per cent respectively, while the two scenarios together would result in an EIRR of 21.7 per cent.

Exit strategy and sustainability

34. The sustainability of UPLANDs is expected to be enhanced by strong national and local government ownership and financial commitment, the focus on strengthening existing local institutions rather than creating project-based structures, and the investment in viable agribusiness business plans in a selected number of commodities. Other elements that will contribute to sustainability and the exit strategy include: (i) capacity-building and training for farmers and farmer-based agribusiness organizations; (ii) strengthening farmers' institutions; (iii) strengthening marketing and partnership building; (iv) facilitating access to financial services; and (v) strengthening local government capacity.

III. Risks

A. Project risks and mitigation measures

Table 4

<i>Risk</i>	<i>Rating</i>	<i>Mitigation</i>
Complexity of national management of 14 subprojects	M	Consistent support, supervision and advice to the national project management unit by IFAD and the IsDB, especially in establishing functional project management, supervision and monitoring for all subprojects.
Weaknesses in financial management impeding a smooth flow of funds and hampering execution of programme activities	M	Adequate provision of finance staffing, interim financial reporting and enhanced internal audit to be put in place. With the introduction of on-granting processes in financial implementation, there will be a need to focus on awareness-raising and provide budget training to district treasurers and financial staff.
Extension staff with insufficient capacity to respond to farmer needs and deliver relevant support	L-M	Strengthening demand-driven support of the extension system, combined with an upgrading of extension staff capacities. Expert technical assistance recruited to mitigate major staffing skill deficiencies.
Procurement weaknesses	L-M	Good planning, training and support for procurement processes including: (i) strengthening procurement planning and e-procurement systems; (ii) setting performance targets to improve procurement planning; (iii) implementing measures to increase competition, such as better procurement and capacity development; (iv) providing technical support for quality documentation, particularly for terms of reference prior to tendering; (v) ensuring access to highest quality consultants; and (vi) conducting procurement audits.
Lack of capacity and resources for effective operations and maintenance (O&M) of equipment and infrastructure	L-M	Plans and responsibilities defined and put into place for O&M of investments from the start: (i) ensuring farmer ownership of equipment through around 25 per cent cost recovery; (ii) training and development of the institutional framework for O&M, including setting aside funds for depreciation and replacement.
Effects of climate change on crop productivity and viability; risk of earthquakes and volcanic activity	L-M	Climate change adaptation will be carefully planned and implemented, including: (i) climate change analysis and preparation of climate adaptation programmes; (ii) developing plans and climate-resilient designs for soil and water management; (iii) improving access to appropriate seed to address climate impact; (iv) improving access to climate information, including weather forecasts. Most district schemes are in areas of seismic and volcanic risks; impact on small-scale infrastructure and agriculture would however be minimal.

B. Environment and social category

35. A preliminary screening of the project interventions has been carried out, and the project is categorized as a category B operation as described in the Social, Environmental and Climate Assessment Procedures review note. The environmental screening incorporated the requirements of IFAD, IsDB and the Government. The IsDB environmental procedures follow IFAD safeguards; in parallel, a preliminary screening of the project against government environmental regulations has been carried out.

C. Climate risk classification

36. As UPLANDs is considered a high climate risk project, it will benefit from an in-depth climate risk analysis carried out by development partners to identify climate and disaster hazards and determine the exposure and sensitivity of the project and associated communities. Based on the climate risk analysis, a detailed climate change adaptation plan and programme will be prepared. The in-depth climate risk analysis also forms the basis for the development of adequate risk transfer mechanisms such as agricultural insurance.

D. Debt sustainability

37. Indonesia's external debt remains moderate and sustainable at 34.4 per cent of GDP in 2017 after a steady increase in recent years. A downward trend was projected at end-2017 with external debt declining to 34 percent of GDP. The International Monetary Fund has warned that potentially weaker than expected revenue and contingent liabilities should be carefully monitored to limit fiscal risk exposure, although total government debt was forecast to stabilize at 36 per cent of GDP or 258 percent of revenue by 2022.

IV. Implementation

A. Organizational framework

Project management and coordination

38. The Ministry of Agriculture will assume overall leadership for the project. The project implementation structure will have strong management foundations at the national and district levels. The Directorate General of Agricultural Infrastructure and Facilities (DGAIF) in the Ministry of Agriculture will establish a project management unit, to be embedded within the Directorate of Irrigation and Low Land, to manage and supervise the project including activities financed by IFAD and IsDB.
39. The organizational structure will be as follows:
- (a) A national steering committee will provide overall guidance and oversight, complemented by a youth advisory committee;
 - (b) The Ministry of Agriculture is the executing agency, and its DGAIF will have overall responsibility for project implementation; and
 - (c) A national project management unit (NPMU) within the DGAIF will lead on implementation, supported by provincial and district programme implementation units.
40. While no dedicated structure will be established at the provincial level, provinces will focus on coordination and monitoring support and as such will not manage activities in districts. They are considered necessary to provide closer support and backstopping to the district project implementation unit (DPIU).

Financial management, procurement and governance

41. The project will be aligned with national accounting and reporting systems, standards, fund flows, asset management, audit and procurement. The NPMU will be responsible for financial management, and its responsibilities will include: (i) preparing the annual workplan and budget; (ii) treasury forecasting and annual disbursement projections; (iii) collecting and consolidating expenditure reports from districts; (iv) timely preparation and submission of withdrawal applications to IFAD; (v) interim financial reporting; (vi) preparation of annual financial statements in line with international accounting standards; (vii) coordination of audit processes; and (viii) procurement.
42. A financial management assessment, prepared in accordance with IFAD's guidelines, rated financial management risk as medium. This risk will be mitigated

by a range of measures that include: hiring of external financial management expertise at the NPMU and DPIU level; development of financial management; interim financial reporting; strengthened internal audit arrangements; and intensive support and training at start-up and regular training to promote good governance.

43. **Flow of funds.** The project will use on-granting mechanisms to finance activities at the district level. The DGAIF has experience in managing similar programmes using this particular fund flow mechanism (e.g. the World Bank-funded Water Resources and Irrigation Sector Management Programme 2). Some of the selected districts are currently implementing the IFAD-funded Integrated Participatory Development and Management of the Irrigation Sector Programme and the Rural Empowerment and Agricultural Development Programme Scaling-up Initiative, which also apply the on-granting mechanism. The Government agrees that this mechanism is best suited to meet the objectives of supporting decentralized investment delivery and creating higher district-level ownership.
44. **Procurement** will be undertaken in accordance with national procurement rules and regulations, to the extent that these are consistent with IFAD's Project Procurement Guidelines. The NPMU will prepare an integrated framework for good governance.
45. **Audit.** Consolidated annual financial statements for the project, including both IFAD and IsDB funds, will be audited annually by the supreme audit authority. One audit report covering both sources of funding will be prepared. The settlement of audit observations will be monitored by the executing agency, the auditors, IFAD and IsDB through supervisory processes. In addition, UPLANDs will be included within the workplan of the Ministry of Agriculture's internal audit unit, with reporting made available to IFAD supervision missions.
46. **Governance.** Anticorruption measures will include: (i) creating and sustaining a corruption-free environment for project activities; (ii) complying with internal procedures and controls and following international best practice standards; (iii) complying with the requirements of IFAD's Policy on Preventing Fraud and Corruption in its Activities and Operations; (iv) ensuring that a good governance framework is implemented promptly; and (v) establishing a complaints mechanism for project beneficiaries and other stakeholders.

B. Planning, monitoring and evaluation, learning, knowledge management and communication

47. **Planning** processes will be harmonized and mainstreamed with the Government of Indonesia planning process at the central, district and village levels. The districts will prepare the annual workplan and budget to be consolidated at national level for IFAD review and no objection.
48. **Monitoring and evaluation, knowledge management and learning.** UPLANDs will have an integrated monitoring and evaluation (M&E) and knowledge management system, aimed at achieving three objectives: (i) guiding implementation; (ii) sharing knowledge and scaling up good practices; and (iii) supporting decisions and policymaking.
49. UPLANDs will establish a tablet-based electronic data collection system to input field data directly into a centrally maintained management information system. This will reduce the time burden of M&E data collection and improve data timeliness and reliability, making the M&E system robust and useful as a management tool. The project will produce one annual consolidated report for IFAD, the IsDB and the Government, which will highlight its key achievements.
50. A web-based management information system will track and update gender-disaggregated financial and technical data on project outputs and

outcomes, lessons learned and good practices, and will generate periodical dashboards showing progress on key outputs and objectives, and showing progress towards meeting key project indicators. The management information system will be utilized to support an evidence-based knowledge-sharing and policy dialogue.

Innovation and scaling up

51. Innovation and scaling up is at the heart of the UPLANDs approach. The project will introduce innovative approaches and activities to farming practices including water-conserving irrigation (e.g. drip and sprinkler), organic production, mechanization, trained extension staff and paraveterinary workers, farmer extension groups, demonstration plots, access to affordable microfinance, activities for improving the livelihoods of poor women, post-harvest and market-related innovations. Key elements to facilitate scaling up will include: (i) a solid M&E and knowledge management system to track achievements, document outcomes and disseminate results to relevant stakeholders; (ii) implementation through existing institutions and structures that will mainstream successful instruments into their regular systems and operations; (iii) involvement of key national and provincial policymakers in implementation through evidence-based policy dialogue; (iv) facilitation of multi-stakeholder partnerships to disseminate knowledge on project achievements and advocate for policy changes; (v) strengthening national and district capacities; and (vi) building the capacities of upland smallholder farmers as champions for scaling up.

C. Implementation plans

Implementation readiness and start-up plans

52. To facilitate start-up and early implementation, the Ministry of Agriculture will ensure the early formal appointment of the project management team (already engaged in the project design process) and recruit a project expeditor to support establishing the project management structure and system. A start-up workshop will be held in early year 1 to sensitize all project stakeholders, including the NPMU, DPIU and district planning unit about the project approach, key components and implementation arrangements. The tools and procedures for financial management, procurement, selection of beneficiaries, strategies for M&E and knowledge management will also be introduced to staff undertaking these functions. Inception workshops will subsequently be held in each participating district to sensitize local partners about the project.

Supervision, midterm review and completion plans

53. UPLANDs will be directly and jointly supervised by IFAD with IsDB. The first implementation support mission will take place soon after effectiveness and first disbursement. An annual supervision mission and at least one implementation support mission will be undertaken, with additional missions mobilized as required. The IFAD and IsDB's respective country offices will provide continuous supervision and implementation support. The composition of the supervision missions will be based on the need for technical support of the different project components.
54. A midterm review will be conducted by IFAD, IsDB and the Government early in year 3 to: (i) assess achievements and interim impact, the efficiency and effectiveness of management arrangements, and the continued validity of the project design; (ii) identify key lessons learned and good practices; and (iii) provide recommendations for improved performance.

V. Legal instruments and authority

55. A project financing agreement between the Republic of Indonesia and IFAD will constitute the legal instrument for extending the proposed financing to the borrower. A copy of the negotiated financing agreement is attached as appendix I.

56. The Republic of Indonesia is authorized under its legal framework to receive financing from IFAD.
57. I am satisfied that the proposed financing will comply with the Agreement Establishing IFAD, as well as with IFAD's applicable rules, policies, procedures and criteria for financing.

VI. Recommendation

58. I recommend that the Executive Board approve the proposed financing in terms of the following resolution:

RESOLVED: that the Fund shall provide a loan on ordinary terms to the Republic of Indonesia in an amount of forty-four million eight hundred fifty thousand euros (EUR 44,850,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Gilbert F. Hougbo
President

Negotiated financing agreement: "The Development of Integrated Farming Systems in Upland Areas"

(Negotiations concluded on 14 November 2019)

Loan No: _____

Project name: The Development of Integrated Farming Systems in Upland Areas (the "Project")

The Republic of Indonesia (the "Borrower")

and

The International Fund for Agricultural Development ("IFAD")

(each a "Party" and both of them collectively the "Parties")

WHEREAS,

- A) The Borrower has requested a loan from IFAD for the purpose of financing the Project described in Schedule 1 to this Agreement;
- B) IFAD has agreed to provide financing for the Project;
- C) The Borrower has requested co-financing for the Project from the Islamic Development Bank ("IsDB") in the form of a loan and a grant in the amount of seventy million United States dollars (USD 70 000 000) and five hundred thousand United States dollars (USD 500 000), respectively; and
- D) The IsDB has agreed to provide co-financing for the Project.

NOW THEREFORE, the Parties hereby agree as follows:

Section A

1. The following documents collectively form this Agreement: this document, the Project Description and Implementation Arrangements (Schedule 1), and the Allocation Table (Schedule 2).

2. IFAD's General Conditions for Agricultural Development Financing dated 29 April 2009, amended as of December 2018, and as may be amended hereafter from time to time (the "General Conditions") are annexed to this Agreement, and all provisions thereof shall apply to this Agreement. For the purposes of this Agreement the terms defined in the General Conditions shall have the meanings set forth therein, unless the Parties shall otherwise agree in this Agreement.

3. IFAD shall provide a loan (the "Financing" or "Loan") to the Borrower which the Borrower shall use to implement the Project in accordance with the terms and conditions of this Agreement.

Section B

1. The amount of the Loan is forty four million eight hundred fifty thousand euro (EUR 44 850 000).

2. The Loan is granted on ordinary terms and shall be subject to interest on the principal amount outstanding of the Loan rate equal to the IFAD Reference Interest Rate, including the variable spread payable semi-annually in the Loan Service Payment Currency, and have a maturity period of 13 years, including a grace period of 6 years, starting from the date as of which IFAD has determined that all general conditions precedent to withdrawal have been fulfilled.
3. The Loan Service Payment Currency shall be in Euro (EUR).
4. The first day of the applicable Fiscal Year shall be the first of January.
5. Payments of principal and interest shall be payable on each first of March and first of September.
6. There shall be one Designated Account in EURO, opened and maintained by the Ministry of Finance ("MoF"), at Bank Indonesia ("BI"), or any other bank assigned by the Ministry of Finance for the exclusive use of the Project. The Borrower shall inform IFAD of the officials authorized to operate the Designated Account.
7. The Borrower shall provide counterpart financing for the Project in the amount of approximately fifteen million three hundred thousand euro (EUR 15 300 000) in the form of taxes on project expenditure, staffing costs and other in kind contributions. The Project beneficiaries are expected to contribute approximately twelve million six hundred thousand euro (EUR 12 600 000) to co-finance the purchase of machinery and equipment, and building storage and production facilities.

Section C

1. The Lead Project Agency ("LPA") shall be the Ministry of Agriculture ("MoA"), through the Directorate General of Agricultural Infrastructure and Facilities ("DGAIF").
2. The bodies and entities described in Part II of Schedule 1 of this Agreement are designated as additional Project Parties.
3. A Mid-Term Review will be conducted early in year three of the Project and as specified in Article VIII, Section 8.03 (b) and (c) of the General Conditions; however, the Parties may agree on a different date for the Mid-Term Review of the implementation of the Project.
4. The Project Completion Date shall be the fifth anniversary of the date of entry into force of this Agreement and the Financing Closing Date will be established as specified in the General Conditions.
5. Procurement of goods, works and services financed by the Financing shall be carried out in accordance with the provisions of the Borrower's procurement regulations, to the extent such are consistent with the IFAD Procurement Guidelines.

Section D

1. IFAD will administer the Loan and supervise the Project, and the Borrower through LPA, will implement and conduct its own administration and supervision of the Loan and the Project.

Section E

1. The following are designated as additional grounds for suspension of the right of the Borrower to request withdrawals from the Loan:

- (a) Any transfer of key staff in the Project Management Unit ("PMU"), namely the Project Manager/Director, Financial Officer and Monitoring and Evaluation Officer, has not been communicated to IFAD;
- (b) The Project Implementation Manual ("PIM") and/or any provision thereof, has been waived, suspended, terminated, amended or modified without the prior agreement of IFAD, and IFAD, after consultation with the Borrower, has determined that it has had, or is likely to have, a material adverse effect on the Project; and
- (c) The co-financing agreement between the Borrower and IsDB has failed to be effective within one hundred and eighty (180) days from the date of this Agreement, and substitute funds to finance the Project are not available to the Borrower.

2. The following are designated as additional general conditions precedent to withdrawal:

- (a) The IFAD no objection to the PIM shall have been obtained;
- (b) PMU shall have been established and key staff in the PMU shall have been appointed, (Project Manager/Director, Financial Officer and Monitoring and Evaluation Officer); and
- (c) The Designated Account shall have been duly opened and the names of the authorized signatories shall have been submitted to IFAD.

3. The following are the designated representatives and addresses to be used for any communication related to this Agreement:

For the Borrower:

Director General of Budget Financing
and Risk Management
Ministry of Finance
Frans Seda Building, 2nd Floor
Jalan Dr. Wahidin Raya No.1
Jakarta 10710, Indonesia

For Correspondence:

Attn: Director of Loans and Grants
Frans Seda Building, 6th Floor
Jalan Dr. Wahidin Raya No.1
Jakarta 10710, Indonesia
Tel: +(62-21) 3458289, 3865330
Fax: +(62-21) 3812859

For Disbursements and Payments:

Attn: Director of Evaluation,
Accounting and Settlements
Frans Seda Building, 7th Floor
Jalan Dr. Wahidin Raya No.1
Jakarta 10710, Indonesia
Tel: +(62-21) 3864778
Fax: +(62-21) 3843712
Email: deas@kemenkeu.go.id

For IFAD:

President
International Fund for Agricultural
Development
Via Paolo di Dono 44
00142 Rome, Italy

This Agreement has been prepared in the English language in two (2) original copies, one (1) for IFAD and one (1) for the Borrower and shall enter into force on the date of countersignature.

REPUBLIC OF INDONESIA

Authorised Representative name
Authorised Representative title

Date: _____

INTERNATIONAL FUND FOR
AGRICULTURAL DEVELOPMENT

Gilbert F. Houngbo
President

Date: _____

Schedule 1

Project Description and Implementation Arrangements

I. Project Description

1. *Target Population.* The Project will target small-holder men and women farmers involved or with potential to be involved in the selected commodities; particular priority will be given to youth.
2. *Project area.* The Project will be operated in seven provinces: Banten, West Java, Central Java, East Java, West Nusa Tenggara, North Sulawesi and Gorontalo (the "Project Area").
3. *Goal.* The goal of the Project is to reduce poverty and enhance food security in upland areas through remunerative, sustainable and resilient livelihoods.
4. *Objective.* The objective of the Project is to increase smallholders' agriculture productivity, incomes, livelihoods and resilience in targeted uplands.
5. *Components.* The Project shall consist of the following Components: (1) Productivity Enhancement & Resilience Building; (2) Agri-business Development and Livelihoods Facilitation; (3) Strengthening Institutional Delivery Systems, and (4) Project Management.

Component 1. Productivity Enhancement & Resilience Building will aim at increasing small farmers' productive capacity by: (1) promoting sustained adoption of improved inputs, technologies and practices including land terracing and construction of physical infrastructure (tertiary systems, well, water pumps, ponds and farm road etc.); and (2) assisting farmers to improve climate adaptation practices including soil and water conservation to reduce the risk of erosion and landslides due to agriculture activities. Through this component, the Project will invest in the productive potential and resilience building of farming households in upland areas, mainly in land development, infrastructure, production and farm management.

Component 2. Agri-business Development and Livelihoods Facilitation will focus on increasing farmers' incomes from enhanced post-harvest, processing, marketing and access to financial services to improve product quality and market participation. This will be done by supporting farmers institutional development, supplying market infrastructure and equipment, strengthening market linkages and alliances, and promoting access to financial services.

Component 3. Strengthening Institutional Delivery Systems will aim at enhancing delivery of services and research in upland areas, what will be achieved through capacity building for institutional development of MoA and Districts, and adaptive research.

Component 4. Project Management will aim at ensuring the effective management and implementation of the Project.

II. Implementation Arrangements

1. *Advisory Group (AG).* The Project will be overseen by an Advisory Group, composed of senior government officials, which will provide overall policy guidance and oversight to the Project Management Unit.
2. *Project Management Unit (PMU).* The Ministry of Agriculture will establish a Project Management Unit (PMU), with overall responsibility for Project implementation. The PMU will coordinate the District Project Implementation Units (DPIUs), and will be staffed by

dedicated full time technical and administrative staff to ensure timely and quality Project implementation.

3. *District Project Implementation Units (DPIUs)*. As the main Project activities will be undertaken at district level, in each District where the Project will be implemented a *District Project Implementation Unit (DPIU)* will be established. The DPIUs will be coordinated by the NPMU, and will be staffed by dedicated full time technical and administrative staff to ensure timely and quality Project implementation.

4. *Project Implementation Manual (PIM)*. The Borrower through the PMU shall prepare, in accordance with terms of reference acceptable to IFAD the PIM, which shall include, among other arrangements: (i) institutional coordination and day-to-day implementation of the Project; (ii) Project budgeting, disbursement, financial management, procurement monitoring, evaluation, reporting and related procedures; (iii) detailed description of implementation arrangements for each Project component; and (iv) such other administrative, financial, technical and organizational arrangements and procedures as shall be required for the Project.

The PMU shall forward the draft PIM to IFAD for comments and approval. The PMU shall adopt the PIM, substantially in the form approved by IFAD, and the PMU shall promptly provide copies thereof to IFAD. The PMU shall carry out the Project in accordance with the PIM and shall not amend, abrogate or waive the aforementioned manual, or any provision thereof, without the prior written consent of IFAD.

5. *Monitoring and Evaluation (M&E)*. The Project will set up an integrated M&E and knowledge management system, aimed at: (i) guiding programme implementation; (ii) sharing knowledge and scaling up good practices; and (iii) supporting decisions and policymaking. The M&E system will collect, process and report information on the Project implementation progress and specific indicators disaggregated by gender and integrating physical progress and financial progress.

6. *Supervision*. The Project will be directly supervised by IFAD. An annual supervision mission will be undertaken, complemented by implementation support missions as needed. The IFAD Country Office will provide continuous supervision as required.

7. *Accounting system*. The Project will utilize the government's existing national computerized accounting system for the project book keeping and reporting, as it is the practice in IFAD on-going supported projects, to satisfy International Accounting Standards and IFAD's requirements.

Schedule 2

Allocation Table

1. *Allocation of Loan Proceeds.* (a) The Table below sets forth the Categories of Eligible Expenditures to be financed by the Loan and the allocation of the amounts to each category of the Financing and the percentages of expenditures for items to be financed in each Category:

Category	Loan Amount Allocated (expressed in EUR)	Percentage (net of Government and other contribution)
I. Consultancies	370 000	100%
II. Grants and Subsidies	4 510 000	100%
III. Goods, Services a& Inputs	29 600 000	100%
IV. Training	8 240 000	100%
V. Equipment & Materials	180 000	100%
VI. Operating Costs	1 950 000	100%
Total	44 850 000	

(b) The terms used in the Table above are defined as follows:

- (i) "Grants and Subsidies" under Category II, shall mean eligible expenditures incurred related to: (i) mechanisms suited for smallholder farming under Component 1; (ii) transport of equipment used for activities carried out under Component 2 (iii); and knowledge management product that may be utilized for Project management purposes.
- (ii) "Goods, services and inputs" under Category III, shall mean eligible expenditures incurred related to: (i) Project equipment and materials; and (ii) works that may be carried out under Component 1.
- (iii) "Equipment & Material" under Category V, shall mean eligible expenditures incurred related to Project equipment and materials.

2. *Start-up Costs.* Withdrawals in respect of expenditures for start-up costs (Project start-up expenditures) incurred before the satisfaction of the general conditions precedent to withdrawal after the entry into force of the Financing Agreement shall not exceed an aggregate amount of EUR 300,000. Activities to be financed by Start-up Costs will require the no objection from IFAD to be considered eligible.

Logical framework

Results Hierarchy	Indicators				Means of Verification			Assumptions (A) / Risks (R)
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outreach	<ul style="list-style-type: none"> Number of persons receiving services promoted or supported by the project. 		15,000 households	Direct: 30,000 households Total: 250,000 people	NPMU reports	Annual	NPMU & DPIUs	
Goal: Reduce poverty and enhance food security in upland areas through remunerative, sustainable and resilient livelihoods.	<ul style="list-style-type: none"> % of population below the poverty line in the 14 project districts. 	13.9%		13%	Indonesia Bureau of Statistics	Mid-term review & project closing report	NPMU	Continued GoI commitment to promote uplands agriculture
Development Objective: increased smallholders incomes, food security and livelihoods in targeted upland areas	<ul style="list-style-type: none"> % of HHs that have increased their asset ownership. UPLANDs HHs receiving project investments, technical support &/or services (incl. nutrition) Number of women & youth directly supported by the project. 	-	5,000 10,000 W – 5000 Y - 5000	20,000 30,000 W - 15,000 Y - 7,500	Third Party Survey by the Project	Mid-term review & Project Completion survey	NPMU	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.
Outcome 1: Increase in poor rural people's productive capacities	<ul style="list-style-type: none"> Number of households with sustained adoption of improved inputs, technologies or practices. No. of households reporting an increase in production. 		8,000 6000	20,000 22,000	Project survey	Semi-annual reports	NPMU & project partners	Sufficient numbers of upland smallholder are interested in improving their production rather than leaving farming or switching to other production systems entirely.
Outputs 1 1.1 Physical Infrastructure schemes constructed or rehabilitated 1.2 Production technical support & machinery provided on sustainable basis	<ul style="list-style-type: none"> Irrigation practices improved on land area. No. farmers trained in production practices and/or technologies. No. farmer groups, operating & maintaining machinery & equipment Number of persons in rural areas accessing financial services disaggregated by insurance, and by sex 		5,000 ha 7,000 incl. 40% women 200 farmer groups 3,000 (female 1,200)	14,000 ha 30,000 (incl. 40% women) 600 farmer groups 10,000 (female 4,000)	Project reports	Semi-annual reports	NPMU & project partners	Good quality genetics and other critical are available in sufficient quantities to allow widespread adoption.

Results Hierarchy	Indicators				Means of Verification			Assumptions (A) / Risks (R)
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outcome 2: Increase poor rural people's incomes from enhanced processing and/or market participation	<ul style="list-style-type: none"> % HHs with improved access to markets, processing, storage facilities % farmer Groups reporting increase in sales & profits 		50%	80%	Project survey	MTR and project	NPMU	Agribusiness interested in expanding market links with upland smallholders
Outputs 2: 2.1 Farmer post-harvest business established, equipped & supported on sustainable basis 2.2 Business management & technical training delivered 2.3 Commodities with higher value participation in markets. 2.4 Farmer/businesses with enhanced access to finance	<ul style="list-style-type: none"> No. of market, processing or storage facilities constructed or rehabilitated No. of groups trained in post-harvest technical or business management % HHs reporting improved incomes from improved processing/market linkages No. of loans to farmers/businesses via UPLANDs credit lines 		30 KUBEs/2 BLUDs	180 KUBEs/14 BLUDs	Project reports	Semi-annual reports	NPMU & project partners	Private entrepreneurs and businesses are interested to run service businesses in programme districts development. Willingness of key parts of MoA to have genuine PPP with private firms.
Outcome 3: Enhanced delivery of UPLANDs services & research.	<ul style="list-style-type: none"> % HHs adopting on farm technical messages % DPIUs on schedule with on-granting, procurement targets 		33%	80%	Project survey M&E data	MTR and project Completion surveys	NPMU	Smallholders wiliness to engage in commercialization of target commodities
Outputs 3: 3.1 Commodity training courses prepared & delivered. 3.2 Intensive DPIU on-granting & procurement mentoring	<ul style="list-style-type: none"> No. extension receiving commodity specific training No. DPIU staff trained in on-granting & procurement 		Extension 231	Extension 231	Project reports	Semi-annual reports	NPMU & project partners	Capacity building and technical support timely and of adequate quality
			District finance 28	District finance 28				