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President's memorandum Proposed additional financing to The Union of the Comoros for the Family Farming Productivity and Resilience Support Project

Project ID: 2000001157

Note to Executive Board representatives

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Abbreviations and acronyms

ASAP Adaptation for Smallholder Agriculture Programme

DA designated account

DHC blend of Debt Sustainability Framework and highly concessional lending terms

M&E monitoring and evaluation

PBAS performance-based allocation system
PCMU project coordination and management unit

PREFER Family Farming Productivity and Resilience Support Project

SOE statement of expenditures

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Financing summary

Initiating institution **IFAD**

Borrower/recipient The Union of the Comoros

Ministry of Agriculture, Fisheries, Environment, Land **Executing agency**

Use and Urban Planning

US\$10.65 million Total project cost

Amount of original IFAD financing US\$3 million (equivalent to approximately

SDR 2.22 million)

Terms of original IFAD financing Blend of Debt Sustainability Framework and highly

concessional lending terms (DHC): 50 per cent grant /

50 per cent highly concession loan

US\$3 million (equivalent to approximately Amount of additional IFAD financing

SDR 2.12 million)

Terms of additional IFAD financing DHC: 27 per cent grant / 73 per cent highly

concessional loan

Cofinancier(s) International Institute for Tropical Agriculture

Adaptation for Smallholder Agriculture Programme

(ASAP) Trust Fund of IFAD

Amount of original cofinancing International Institute for Tropical Agriculture:

US\$0.6 million

ASAP Trust Fund of IFAD: US\$1.0 million

Terms of original cofinancing Grant

Original contribution of

borrower/recipient

US\$0.46 million

Original contribution of beneficiaries US\$2.64 million

Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed additional financing contained in paragraph 35.

I. Background and project description

A. Background

1. The Family Farming Productivity and Resilience Support Project (PREFER) was approved by the Executive Board in May 2017 (EB 2017/LOT/P.4). It was signed in July 2017 and went into force on 29 December 2017, with completion set at 31 December 2022. Total financing is US\$10.96 million, including: a highly concessional IFAD loan of US\$1.5 million and a Debt Sustainability Framework grant of US\$1.50 million; a grant of US\$1.0 million from the Adaptation for Smallholder Agriculture Programme (ASAP); US\$0.55 million in cofinancing from the International Institute for Tropical Agriculture; a government contribution of about US\$0.46 million; and beneficiary contributions of US\$2.64 million. PREFER was designed with a financing gap of US\$3 million, which was expected to be financed under the 2019-2021 performance-based allocation system (PBAS).

B. Original project description

2. The project aims to improve food and nutritional security, and livelihoods for poor rural people. It intends, within that framework, to sustainably increase food availability and farming incomes in beneficiary households. The specific project objectives are to: (i) improve the productive base and climate change resilience of small-scale farmers, and to strengthen their organizations; and (ii) raise the agricultural productivity of the targeted farming households.

II. Rationale for additional financing

A. Rationale

- 3. With a history of political instability and weak institutional capacity, the Union of the Comoros is classified by the World Bank among countries with high institutional and social fragility. Unlike other small island developing states (SIDS), Comoros is heavily dependent on agriculture, which accounts for 30.5 per cent of GDP¹ and around 56.8 per cent of employment.² Food imports amount to 70 per cent of total food consumption,³ making Comoros' food and nutritional security vulnerable to shocks such as COVID-19. To remedy this situation, Comorian authorities intend to promote the development of local food systems in order to: (i) improve the food and nutritional security of farming households; and (ii) produce surpluses for the domestic market while generating income for small-scale producers.
- 4. Two and half years into the project,⁴ the prospects of achieving its development objectives are improving. The two key supervision and implementation support indicators, namely "Likelihood of achieving the development objectives" and "Assessment of the overall implementation performance" are both rated as moderately satisfactory. As of May 2020, PREFER had directly assisted 8,670 rural people, representing 25 per cent of its final outreach target. Tangible progress has been recorded, notably in terms of investments contributing to agricultural productivity and sustainable land management. Advances have also been made as regards improved access to enhanced planting materials for cassava and banana,

¹ National Institute of Statistics and Economic and Demographic Studies 2019.

² https://data.worldbank.org/country/comoros

³ Note sectorielle de politique agricole. Food and Agriculture Organization of the United Nations, May 2013.

⁴ Due to delays in ratifying the financing agreement, the start of field-level investments was delayed by six months. As a result, the actual duration of PREFER implementation since its start-up is about two years.

- as well as the community-based agroforestry approach known as *embocagement*.⁵ Measures to restore and protect steep, degraded lands against erosion have met with success too.
- 5. Currently, PREFER's disbursement performance is rated satisfactory, with 74 per cent of the initial IFAD loan and grant already paid out.
- 6. PREFER recently graduated from an "actual problem project" to a "potential problem project", with further strengthening still needed in financial management and procurement. With regard to financial management, the weakest aspect of the project, significant improvement is expected following the hire of a technical assistant to strengthen the project coordination and management unit (PCMU) and help implement a set of recommendations made by external audit and supervision missions. The Government has also discontinued the contract of the project's finance manager, whose lack of qualifications was the main hindrance to progress on the project's financial front. A new finance manager came on board in September 2020, following a competitive recruitment process. It is expected that technical assistance and strong government proactivity, including training of project and government staff on procurement, will soon allow the project to graduate from "potential problem project" to "not at risk".
- 7. Given the pace of PREFER investments and the high disbursement of initial IFAD funding, available resources will not fully to cover the 2020 annual workplan. Unless planned gap financing of US\$3 million is mobilized, several high-impact investments for vulnerable beneficiaries, such as nutrition education, water harvesting technologies and support to agricultural productivity and sustainable land management, may be delayed.

B. Description of geographical area and target groups

- 8. The project is being implemented in 48 villages situated as follows: 10 villages in Grande Comore, 22 in Anjouan and 16 in Mohéli.
- 9. Project beneficiaries are: (i) small-scale farm households with less than 1 hectare of land; (ii) small-scale farm households headed by women; and (iii) young people of both sexes, aged 25–35 and working in agriculture and related activities. The project will reach some 7,000 households, particularly highly vulnerable families, including 35,000 smallholders, 14,000 women (40 per cent) and 5,250 young people (15 per cent).

C. Components, outcomes and activities

- 10. The project is designed around two technical components: (i) improving the productive base of small-scale farmers and promoting farmers' organizations; and (ii) improving productivity and diets in farm households.
- 11. **Component 1. Improving the productive base and organizing smallholder farmers** aims to: (i) upgrade and secure the natural capital of smallholders to check soil loss from erosion and reinforce the natural fertility of plots; and (ii) organize producers around activities, starting with collective improvements to the natural environment. The activities planned include: (i) sustainable management of productive natural assets; and (ii) forming producers' organizations.
- 12. **Component 2. Improving agricultural productivity and diets in rural households** calls for enhancing agricultural output and thus ensuring the nutritional security of beneficiary households. Project activities will lead to: (i) stronger mastery of production techniques by farmers; (ii) access by beneficiaries to improved planting materials; (iii) easier access to markets; and (iv) education regarding good nutritional practices. The activities planned include:

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⁵ Live fences using nitrogen-fixing plants around plots containing crop or livestock.

(i) agricultural advisory services to producers; (ii) access to improved planting materials, seeds and inputs; (iii) facilitated access to markets; and (iv) promotion of nutritional best practices.

D. Costs, benefits and financing Project costs

- 13. The total project cost, including about 17 per cent for physical and price contingencies, is US\$10.65 million, over a five-year period. Incremental recurrent costs represents 20.5 per cent of IFAD loan/grant, which exceeds the 15 per cent recommended. The breakdown of costs in United States dollars by component/output and finance sources is shown in table 1 below.
- 14. Additional IFAD financing of US\$3.00 million under the 2019-2021 PBAS, consisting of a loan of US\$2.2 million and a grant of US\$0.8 million, is sought to fill the financing gap. Any additional financing will have the same closing date and expenditure categories as the original financing.

Table 1
Original and additional financing summary
(Thousands of United States dollars)

	Original financing*	Additional financing	Total
IFAD loan	1 500	2 190	3 690
IFAD grant	1 500	810	2 310
Other cofinanciers			
ASAP	1000	-	1000
International Institute of Tropical Agriculture	551	-	551
Beneficiaries	2 639	-	2 639
Recipient/counterpart	458	-	458
Total	7 648	3 000	10 648

^{*} See tables 5 and 6 on page 136 of project document Report 4091-KM for detailed breakdown.

Table 2
Additional financing: project costs by component, subcomponent and financier (Thousands of United States dollars)

								Addition	nal				
	Addition IFAD loa		Addition IFAD gra		Other cofinancier	s	Bene	ficiaries			ecipient/ unterpart		Total
Component/subcomponent	Amount	%	Amount	%	Amount	%	Cash	In-kind	%	Cash	In-kind	%	Amount
1. Improving the productive base and	d organizin	g sm	allholder f	arme	ers								
Sustainable management of natural productive capital	656.0	73	242.6	27	-	-	-	-	-	-	-	-	898.6
1.2. Strengthening farmers' organizations	157.7	73	58.3	27	-	-	-	-	-	-	-	-	216.0
Subtotal	813.7	73	301.0	27	-	-	-	-	-	-	-	-	1 114.6
2. Improving agricultural productivity	y and diets	in ru	ral housel	olds	;								
2.1. Advisory assistance to producers	115.0	73	42.5	27	-	-	-	-	-	-	-	-	157.5
2.2. Access to planting material, other inputs and production equipment	124.4	73	46.0	27	-	-	-	-	-	-	-	-	170.4
2.3. Facilitating market access	275.3	73	101.8	27	-	-	-	-	-	-	-	-	377.1
2.4. Education and promotion of nutritional best practices	199.1	73	73.6	27	-	-	-	-	-	-	-	-	272.7
Subtotal	713.9	73	264.0	27	-	-	-	-	-	-	-	-	977.7
3. Project coordination and managen	nent												
3.1. National-level management and monitoring	426.5	73	157.7	27	-	-	-	-	-	=	-	-	584.2
3.2. Island-level management and monitoring	235.9	73	87.3	27	-	-	-	-	-	-	-	-	323.2
Subtotal	662.4	73	245.0	27	-	-	-	-	-	-	-	-	907.4
Total	2 190.0	73	810.0	27	-	-	-	-	-	-	-	-	3 000.0

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Table 3
Additional financing: project costs by expenditure category and financier (Thousands of United States dollars)

							Additio	nal				
	Addition IFAD Io		Additiona IFAD gra		Other cofinanciers	Ben	eficiaries	S		ecipient/ unterpart		Total
Expenditure category	Amount	%	Amount	%	Amount %	Cash	In-kind	%	Cash	In-kind	%	Amount
1. Rural/civil engineering	194.2	73	71.8	27		-	-	-	_	-	-	266.0
2. Vehicles and equipment	31.6	73	11.7	27		-	-	-	-	-	-	43.3
3. Training and workshops	595.3	73	220.2	27		-	-	-	-	-	-	815.5
4. Consulting services	349.6	73	129.3	27		-	-	-	-	-	-	478.9
5. Grant and subsidies	568.6	73	210.3	27		-	-	-	-	-	-	778.9
6. Salaries and benefits	374.6	73	138.6	27		-	-	-	-	-	-	513.2
7. Operation	76.1	73	28.1	27		-	-	-	-	-	-	104.2
Total	2190.0	73	810.0	27		-	-	-	-	-	-	3 000.0

Table 4 **Project costs by component and project year (PY)**(Thousands of United States dollars)

	PY	1	PY.	2	PY.	3	PY4		PY5		Total
Component/subcomponent	Amount	%	Amount								
1. Improving the productive base and organizing smallholder farmers											
1.1. Sustainable management of natural productive capital	105.8	4.4	388.1	16.2	872.1	36.4	876.0	36.5	157.0	6.5	2 399.0
1.2. Strengthening farmers' organizations	41.9	10.4	61.8	15.3	135.1	33.5	136.0	33.7	29.0	7.2	403.8
Subtotal	147.7	5.3	449.9	16.1	1 007.2	35.9	1 012.0	36.1	186.0	6.6	2 802.7
2. Improving agricultural productivity and diets in rural households											
2.1. Advisory assistance to producers	19.7	6.8	43.6	15.2	99.4	34.6	124.8	43.4	-	-	287.5
2.2. Access to planting material, other inputs and production equipment	209.1	5.9	186.4	5.24	227.3	6.4	348.1	9.8	2 585.3	72.7	3 556.2
2.3. Facilitating market access	37.9	5.6	117.5	17.4	105.5	15.6	253.3	37.5	161.1	23.9	675.3
2.4. Education and promotion of nutritional best practices	1.3	0.3	66.9	15.3	139.5	32.0	216.3	49.6	12.3	2.8	436.3
Subtotal	268.0	5.4	414.4	8.4	571.7	11.5	942.5	19.0	2 758.7	55.7	4 955.3
3. Project coordination and management											
3.1. National-level management and monitoring	626.0	30.8	351.2	17.3	348.9	17.2	359.2	17.7	344.5	17.0	2 029.8
3.2. Island-level management and monitoring	178.2	20.7	169.8	19.7	169.1	19.7	170.7	19.8	172.5	20.0	860.3
Subtotal	804.2	27.8	521.0	18.0	518.0	17.9	529.9	18.3	517.0	17.9	2 890.1
Total project costs	1 219.7	11.5	1 385.4	13.0	2 096.8	19.7	2484.5	23.3	3 461.7	32.5	10 648.1

Financing and cofinancing strategy and plan

15. PREFER's original financing plan included: (i) IFAD financing of US\$6.0 million; (ii) a grant of US\$1.0 million from ASAP; (iii) cofinancing of US\$0.6 million from the International Institute of Tropical Agriculture; (iv) a government contribution of US\$0.46 million; and (vi) a contribution of US\$2.6 million from beneficiaries. Additional financing of US\$3.0 million from IFAD was programmed under the country's PBAS for 2019-2021.

Disbursement

16. The letter to the borrower/recipient mentions the following disbursement methods applicable to PREFER: (a) advances to the designated account (DA); initial deposits and subsequent replenishments/justifications of advances to the DA; (b) reimbursements, where the borrower/recipient pre-finances project costs; (c) direct payments made by the Fund to contractors on behalf of the borrower/recipient using financing proceeds. IFAD allows the borrower/recipient to use statements of expenditures (SOEs) for withdrawals from the loan/grant accounts. The letter to the borrower/recipient outlines types and categories of expenditures eligible for SOE withdrawals as well as SOE thresholds, established at EUR 50,000. PREFER's disbursement profile is aligned with the implementation period.

Summary of benefits and economic analysis

- 17. PREFER provides smallholders with direct socio-economic benefits through an increase in food production bananas, cassava, tomatoes, onions and carrots projected at 35,200 tons per annum during the lean season in year five, in addition to the benefits deriving from a more diversified diet.
- 18. Environmental benefits, calculated using the EX-ACT tool of the Food and Agriculture Organization of the United Nations, show a potential for mitigation in the order of 70,000 tons of CO₂ equivalent for PREFER, or an average of 3,500 metric tons of CO₂ equivalent per annum. This represents 20 per cent of the target set for the country's agroforestry sector by 2022. At the nutritional level, the project will improve access by poor people to staple foods by making them more diversified, more abundant and cheaper in island markets. Finally, at the institutional level, the project will help build the logistics, technical and operational capacity of public and private support operators. It will make *in vitro* banana and cassava plants available for multiplication and sale to farms.
- 19. The project's economic internal rate of return is 15.9 per cent, well above the cost of capital. Net present value is estimated at US\$21.9 million. The analysis shows that rates of return remain high, even if food production costs increase.

Exit strategy and sustainability

20. PREFER's sustainability strategy is based mainly on the accountability of producers and is built around three complementary thrusts: (i) developing and strengthening the capacity of producers' groups to develop internal support and solidarity services; (ii) setting up and strengthening farm leaders who can make a positive impact on agricultural development in given areas and provide advice to other producers; and (iii) forging stronger links between producers' organizations and other value chain actors to promote increased production and higher incomes.

III. Risk management

A. Risks and mitigation measures

21. The main project risks concern the following: climate hazards and more prolonged periods of drought, discouraging farmers from investing in agriculture; and limited markets for crop and horticultural produce as a result of high costs and poor interisland transport. In addition to these economic risks, there are political and institutional hazards such as insufficient public investment in agriculture and rural

areas in general. More specifically, inadequate human and financial resources are being made available to regional economic development centres, limiting their ability to provide quality advisory assistance to producers. There are also fiduciary risks with respect to financial management, and the country and individual intervention risks are high as well. But the mitigation measures in place are gradually lowering them to moderate. Finally, in order to improve currently weak procurement capacity, the mitigation measures planned include training and technical assistance.

Debt sustainability

22. Comoros remains at moderate risk of external debt distress but has little space to absorb shocks. All debt burden indicators show a continuing upward trend. The country's reduced capacity to absorb shocks reflects the fact that the Government has taken on a large new loan, a downward revision of projected exports due to lower export prices and the impact of Cyclone Kenneth. Shock scenarios indicate vulnerability to deteriorated export performance, natural disasters and exchange rate instability. Comoros' overall risk of debt distress remains moderate, however, given that domestic debt is expected to remain minimal.

B. Environment and social category

23. At design, PREFER was classified in category B (moderate environmental risk) and a social and environmental management plan was prepared. It was estimated that the benefits of using acclimatized but non-native cover plants to reclaim *padza* (virtually sterile land) areas are greater than those of leaving the land in its current state. The promotion of high-yielding varieties and the *embocagement* technique will increase the opportunity cost of deforestation and animal management in forest areas. ASAP funding goes to areas that best preserve agricultural land and protect small producers against the effects of erosion and climate change.

C. Climate risk classification

24. The impact of climate on project activities are moderate or even favourable for some crops. The project's watershed and erosion control approach is a structural element that slows erosion. The project is classified as posing a moderate climate risk.

IV. Implementation

A. Compliance with IFAD policies

- 25. No adjustment has been made to the original project design. PREFER complies with the strategic approach adopted by IFAD on SIDS. As with other SIDS, Comoros has somewhat limited agricultural potential and a small domestic market. The strategy for these states focuses on providing specific solutions for smallholders, who are made more vulnerable by climate change, a fragile environment, geographical isolation and small markets. PREFER also aligns with IFAD's Action Plan for Rural Youth and with the Eleventh Replenishment of IFAD's Resources commitment to mainstream nutrition, gender, youth and climate including through the introduction of the Gender Action Learning System.
- 26. The approach adopted by PREFER is consistent with the country strategic opportunities programme reviewed by the Executive Board in September 2020. The programme underscores the importance of production sites, sustainable natural resources management and the resilience of farm production systems in the context of climate change.

B. Organizational framework Management and coordination

27. PREFER is overseen by the Ministry of Agriculture, Fisheries, Environment, Land Use and Urban Planning. Coordination at country level will be provided by a national steering committee and by regional steering groups in the three islands. Coordination is further ensured by the PCMU with administrative and financial autonomy. Implementation on each island is coordinated by a regional technical support unit.

Financial management, procurement and governance

- 28. PREFER's financial management is aligned with Comoros' own financial management system. The financial management risk is rated high due to scarce national expertise. To improve the PCMU's skills, training and technical assistance will be mobilized. The project will be managed through a dedicated project coordination unit, located at Ministry of Agriculture, which will be responsible for all the management of the project's financial affairs. Oversight will be provided through the line ministry. The project will retain one DA at the Central Bank to receive loan/grant funds from IFAD. A project operational account has been opened with a commercial bank to cater for day-to-day transactions. This account will be replenished through transfers from the DA.
- 29. Procurement takes place in accordance with IFAD guidelines and prevailing regulatory and legislative requirements in Comoros. To the extent possible, contracts are grouped to attract bidders, favour competition and obtain the best offers. Procurement procedures are set forth in the letter to the borrower/recipient and in the project's administrative, financial and accounting management regulations. The capacity-building support is being provided to the PCMU and the Government in procurement in order to address prevailing weaknesses, including through training provided by a procurement consultant and training organized by the East and Southern Africa Division in July 2020. A local consultant will also be recruited to provide backstopping support to the PCMU during key procurement activities and periods.

C. Monitoring and evaluation, learning, knowledge management and strategic communication

30. The existing monitoring and evaluation (M&E) system remains unchanged. The national project coordination team prepares and submits annual workplans and budgets to the steering committee and IFAD for approval. The M&E system is based on ongoing internal monitoring and regular evaluations. The project submits semi-annual and annual reports to local administration and IFAD. A midterm review will be performed to determine whether the project strategy and approach are still relevant or need adjustment. During the final year of implementation, the PCMU will conduct a final impact study and prepare a completion report following the IFAD methodology and format. The project M&E officer is also responsible for communication and knowledge management. The project recruits expertise as needed to prepare capitalization manuals, best practices guides, technical documentation, posters, videos and radio broadcasts, and will organize exchanges of lessons learned and know-how.

D. Proposed amendments to the financing agreement

31. On approval by the Executive Board, PREFER's financing agreement will be amended to reflect the proposed activities and the additional financing in the project budget. This additional funding will fill the financing gap and complement the financing plan agreed at design.

V. Legal instruments and authority

- 32. A financing agreement between The Union of the Comoros and IFAD will constitute the legal instrument for extending the proposed financing to the borrower/recipient. The signed financing agreement will be amended following approval of the additional financing.
- 33. The Union of the Comoros is empowered under its laws to receive financing from IFAD.
- 34. I am satisfied that the proposed additional financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

VI. Recommendation

35. I recommend that the Executive Board approve additional financing in terms of the following resolution:

RESOLVED: that the Fund shall provide a loan on highly concessional terms to the Union of the Comoros in an amount of two million one hundred and ninety thousands United States dollars (US\$2,190,000) equivalent to about one million five hundred fifty thousand special drawing rights (SDR 1.550 million) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

RESOLVED FURTHER: that the Fund shall provide a grant under the Debt Sustainability Framework to the Union of the Comoros in an amount of eight hundred and ten thousands United States dollars (US\$810,000) equivalent to about five hundred seventy three thousand special drawing rights (SDR 573 000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Gilbert F. Houngbo President

Updated logical framework incorporating the additional financing

Résumé descriptif	Indicateurs clés (*:Sygri)	Situation de référence ⁶	Mi-parcours	Cible finale	Source	Fréquence	Responsable	Suppositions
But: Sécurité alimentaire, nutritionnelle et moyens d'existence des populations rurales pauvres améliorées	biens - Prévalence de la malnutrition chronique chez les enfants de moins de 5 chronique des enfants de moins de 5 chronique des enfants de moins de 5 chronique de 5 ans < 26% ménages ciblés ménages ci		Etudes RIMS de base ; enquête de référence et d'impact EDS- MICS	Années 1 et 5	UCGP	Stabilité politique;		
Objectif de développement: Disponibilité alimentaire et revenus agricoles durablement accrus au niveau des ménages appuyés	-la quantité de produits par spéculation ciblée -Augmentation moyenne de 20% des revenus agricoles dans les ménages ciblés	banane: 3700 t manioc: 4000 t Tomates: 0,7t; Oignons: 7t Carottes: 6.4t - Revenu (voir enquête de référence)		banane: 9500 t manioc: 10000t Tomates : 28.4t; Oignons: 20.2t Carottes : 15t	Enquête annuelle Rapports de missions et d'activités	Annuelle	UCGP Ministère en charge de la Production	Bénéficiaires adoptent tes techniques et technologies adaptées.
Effet 1. La base productive et la structuration des petites exploitations agricoles sont améliorées	Nombre d'exploitations familiales dont la résilience climatique est accrue ⁷ (RIMS 1.8.6) Nombre de ménages bénéficiaires dont 40% de femmes et 15% de jeunes touchés.	A confirmer par l'enquête de référence 0	460 ha 60 OP □ 3500 ménages	1 380 ha 135 OP □ 7 000 ménages	Enquête annuelle Rapports de missions et d'activités	Annuelle	UCGP	Les exploitants disposés à aménager de manière systématique et appropriée leur terroir.
Produit 1.1. Les superficies agricoles sont protégées de l'érosion	Superficies embocagées. Superficies de forte pente/ padza protégée dont services écosystémiques restaurés (RIMS1.1.17) Superficies bénéficiant de systèmes d'irrigation efficients en eau (proxy RIMS 1.2.11)	467 ha embocagées par le PNDHD	350 ha additionnels 110 ha 6 ha	1 100 ha additionnels 170 ha 12 ha	Enquête annuelle Rapports de missions et d'activités	Annuelle	UCGP	 Producteurs (trices) intéressés aux techniques GDT.

⁶ La plupart des valeurs des indicateurs de référence seront fournis par les études spécifiques à réaliser au démarrage du projet

⁷ Une exploitation familiale est considérée comme plus résiliente au climat si elle bénéficie d'au moins deux des actions suivantes : (i) parcelle embocagées et pratique anti érosive dans la parcelle, (ii) utilisation de variétés de manioc ou banane tolérantes aux maladies et au stress hydrique, (iii) les terres de forte pente/padza en amont de leurs exploitations sont protégées contre l'érosion, (iv) exploitation d'une parcelle en irrigation efficiente en eau

Résumé descriptif	Indicateurs clés (*:Sygri)	Situation de référence	Mi-parcours	Cible finale	Source	Fréquence	Respons able	Suppositions
Produit 1.2. Capacités organisationnelles des producteurs renforcées	Nombre de personnes formées*.	0	745	1 080		Annuelle	UCGP	Les producteurs s'impliquent dans tous les segments de la production
Effet 2. La productivité agricole et l'alimentation des ménages ruraux sont améliorés	 Augmentation des rendements / ha par spéculation Score de diversité alimentaire des ménages (SDAM) 	Banane: 5,95 t/ha Manioc: 6,8 t /ha Tomate: 6 t/ha Oignon: 4 t/ha Carotte: 3,6 t/ha	Banane: 10,2 t/ha; Manioc: 11,9 t/ha; Tomate: 11,25 t/ha; Oignon: 6,4 t/ha; Carotte: 5,9 /ha	Banane: 12,75 t/ha; Manioc: 14,45 t/ha Tomate: 13,5 t/ha Oignon: 9,6 t /ha; Carotte: 7,2 tg/ha		Annuelle	UCGP	Pas de catastrophes naturelles.
Produit 2.1. Les producteurs ont accès à du matériel végétal amélioré	% des ménages ciblés qui parviennent à satisfaire leurs besoins matériel végétal amélioré	Négligeable		70%	Rapport d'activités du projet Rapport de supervision	Annuelle	UCGP	IITA apportera appui technique en multiplication matériel végétal.
Produit 2.2. Les producteurs maitrisent les techniques de production durables	 Nombre de personnes ayant reçu une formation : de base ; spécialisée. Nombre de personnes ayant participé à une visite échange. 	0	1 440 ; 225 90	4 560 ; 450 270	apport d'activités du projet	Annuelle	UCGP	☐ Matériel végétal amélioré disponible à temps et contrats de solidarité respectés.
Produit 2.3. Les producteurs ont un accès facilité au marché	% des produits commercialisés au niveau des exploitations. Quantité de cossettes de manioc produites/an.	20%	10 t additionnelles	50% 60 t additionnelles	Rapport d'activités du projet Rapport de supervision	Annuelle	UCGP	☐ Opérateurs de marché intéressés de faire contrats d'approvisionnem ent avec les producteurs.
Produit 2.4. Les ménages sont formés à la dimension nutritionnelle de l'alimentation	Nombre de personnes formées aux bonnes pratiques nutritionnelles*	A déterminer à la suite de l'enquête de référence			apport d'activités du projet	Annuelle	UCGP	

Updated summary of the economic and financial analysis

Table A

Financial cash flow models

Tableau A: Modèles financiers d'exploitation production vivrière

Modèles	Unité	Revenu sans projet (KMF)	Revenu dû au projet (KMF)	TRI	VAN à 10% (KMF)
Production vivrière polyvalente à Anjouan sans l'intervention du Projet	0,6 ha	-82 320	464 114,7	17,6%	1 711 168,2
Production vivrière polyvalente à Anjouan avec l'intervention du Projet	0,0118	-02 320	404 114,7	36,0%	2 976 815,2
Production vivrière polyvalente à Grande Comore sans l'intervention du Projet	0,8ha	-44 020	1 455 290	24,5%	4 865 765,6
Production vivrière polyvalente à Grande Comore avec l'intervention du Projet	o,ona	-44 020	1 433 230	32,2%	5 656 801,1
Production vivrière polyvalente à Mohéli sans l'intervention du Projet	1,2ha	12 425	1 955 599	12,1%	830 668,8
Production vivrière polyvalente à Mohéli avec l'intervention du Projet	1,2114	12 425	1 933 399	31,8%	9 051 590,0
Transformation de manioc sans l'intervention du Projet		-116 000	455 000	39,6%	1380872,9
Transformation de manioc avec l'intervention du Projet		-110 000	400 000	nd	2236153,6

Table B Project costs and logframe targets

	PY1	L	PY2	!	PY3		PY4	1	PY5	5	Total
Component/subcomponent	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
A. Improving the productive base											
and organizing smallholder farmers											
A.1. Sustainable management of											
natural productive capital	105.8	4.4	388.1	16.2	872.1	36.4	876.0	36.5	157.0	6.5	2 399.0
Strengthening the capacities of											
farmers' organizations	41.9	10.4	61.8	15.3	135.1	33.5	136.0	33.7	29.0	7.2	403.7
Subtotal A	147.7	5.3	449.9	16.1	1 007.2	35.9	1012.0	36.1	186.0	6.6	2 802.7
B. Improving agricultural productivity											
and food for rural households											
B.1. Advisory assistance to producers	19.7	6.8	43.6	15.2	99.4	34.6	124.8	43.4	-	-	287.6
B.2. Access to plant material, other											
inputs and production equipment	209.1	5.9	186.4	5.24	227.3	6.4	348.1	9.8	2 585.3	72.7	3 556.2
B.3. Facilitating market access	37.9	5.6	117.5	17.4	105.5	15.6	253.3	37.5	161.1	23.9	675.3
B.4. Education and promotion of nutritional											
best practices	1.3	0.3	66.9	15.3	139.5	32.0	216.3	49.6	12.3	2.8	436.3
Subtotal B	267.9	5.4	414.5	8.4	571.7	11.5	942.6	19.0	2 758.7	55.7	4 955.3
C. Project coordination and											
management											
C.1. National-level management and											
monitoring	626.0	30.8	351.2	17.3	348.9	17.2	359.2	17.7	344.5	17.0	2 029.8
C.2. Island-level management and											
monitoring	178.2	20.7	169.8	19.7	169.1	19.7	170.7	19.8	172.5	20.0	860.3
Subtotal C	804.2	27.8	521.0	18.0	517.9	17.9	530.0	18.3	517.0	17.9	2 890.0
Total project costs	1219.7	11.5	1 385.4	13.0	2 096.8	19.7	2484.5	23.3	3 461.7	32.5	10 648.1

Appendix II EB 2020/LOT/P.8/Rev.1

Table C Main assumptions and shadow prices

Tableau C1: Production et rendement productions vivrières de base ciblées

Spéculations agricoles		Production	on (kg)		SAU (ha)		Rendemei	nt (kg/ha)	
	Sans projet	Avec projet	Accroissement	%		Sans projet	Avec Projet	Accroissement	%
Anjouan	3308,7	7072,0	3763,3	113,7%	0,56	16317	35200	18883	116,4%
Banane	1344,0	2880,0	1536,0	114,3%	0,24	5600	12000	6400	114,3%
Manioc	1792,0	3808,0	2016,0	112,5%	0,28	6400	13600	7200	112,5%
Maraîchage	172,7	384,0	211,3	122,4%	0,04	4317	9600	5283	122,4%
Grande Comore	4963,0	10608,0	5645,0	113,7%	0,84	16317	35200	18883	116,4%
Banane	2016,0	4320,0	2304,0	114,3%	0,36	5600	12000	6400	114,3%
Manioc	2688,0	5712,0	3024,0	112,5%	0,42	6400	13600	7200	112,5%
Maraîchage	259,0	576,0	317,0	122,4%	0,06	4317	9600	5283	122,4%
Mohéli	27331,5	58344,4	31012,9	113,5%	1,23	60931	131447	70516	116,4%
			,	•					•
Banane	11710,7	25094,4	13383,7	114,3%	0,56	20912	44811	23899	114,3%
Manioc	15056,6	31995,3	16938,7	112,5%	0,63	23899	50786	26887	112,5%
Maraîchage	564,2	1254,7	690,5	122,4%	0,035	16120	35849	19729	122,4%
Unité de transformation (kg/cycle)	210	1750,0	1540,0	733,3%	-,				

Tableau C2: Principales hypothèses de prix d'intrants et de produits

Intrants / Produits	Unité		Coût /prix (KI	MF)
			Avant-projet	Avec projet
Main-d'œuvre saisonnière	Personne jour		2000	2000
Main-d'œuvre permanente	Personne mois		60000	60000
NPK	Kg		700	700
Urée	Kg		700	700
Fumure organique	Tonne		10000	10000
Produits de traitement	Litre		15000	15000
Bouture et rejet améliorés				
Banane	Rejet		5000	500
Manioc	Bouture		100	40
Semences importées				
Tomate	Kg	400	000	400000
Carotte	Kg	160	000	160000
Oignon	Kg	800	000	80000
Productions				
Banane	Kg	400)	300
Manioc frais	Kg	300	1	180
Manioc cossette	Kg 1000		0	700
Tomate	Kg 700			300
Oignon	Kg	Kg 750		300
Carottte	Kg	100	0	300

Table D **Beneficiary adoption rates and phasing**

Tableau D: Répartition des Bénéficiaires du PREFER selon l'année de début de collaboration avec le projet en termes d'accès au matériel végétal performant

Modèles de ferme	Années	Années						Total
	2017	2018	2019	2020	2021	2022	2023	
Modèle Anjouan		89	1058	1177	1177			3501
Modèle Grande Comore		44	529	588	588			1749
Modèle Mohéli		44	529	588	588			1749
Modèle transformation			12	24	42			78
Total		177	2128	2377	2395			7077

Table E Sensitivity analysis

	TRE	VAN	VAN
		Million KMF	Million USD
Base (VAN = 0)	16,5%	10731,0	25,0
Si hausse des coûts de 10%	16,4%	10562,8	24,6
Si hausse des coûts de 20%	16,3%	10394,5	24,2
Si hausse des coûts de 30%	16,1%	10226,3	23,8
Si hausse des coûts de 50%	15,9%	9889,8	23,0
Si baisse de la Marge brute de 10%	16,4%	9489,7	22,1
Si Baisse de la marge brute de 20%	16,2%	8248,3	19,2
Si Baisse de la marge brute de 30%	15,9%	7007,0	16,3
Si Baisse de la marge brute de 50%	15,2%	4524,3	10,5
Si bénéfices retardés de 1 an	14,7%	6461,5	15,0
Si bénéfices retardés de 2 ans	12,3%	2580,1	6,0