

Document: EB 2018/125/R.34
Agenda: 5(e)(ii)(b)
Date: 14 November 2018
Distribution: Public
Original: English

E



President's memorandum

Proposed additional financing to the Republic of Kenya for the Aquaculture Business Development Programme

Note to Executive Board representatives

Focal points:

Technical questions:

Esther Kasalu-Coffin
Country Director
East and Southern Africa Division
Tel.: +254 (0) 20 762 1028
e-mail: e.kasalu-coffin@ifad.org

Dispatch of documentation:

Deirdre McGrenra
Chief
Governing Bodies
Tel.: +39 06 5459 2374
e-mail: gb@ifad.org

Executive Board — 125th Session
Rome, 12-14 December 2018

For: Approval

Contents

Abbreviations and acronyms	ii
Recommendation for approval	1
I. Background and programme description	1
A. Background	1
B. Original programme description	1
II. Justification for the additional financing	2
A. Description of geographic area and target groups that will benefit from additional financing activities	3
B. Components/outcomes and activities of both original and additional financed activities	3
C. Benefits, costs and financing	4
III. Risks of implementing the additional financed activities	5
IV. Implementation	6
V. Legal instruments and authority	7
VI. Recommendation	7

Appendix

Updated logical framework

Abbreviations and acronyms

FAO	Food and Agriculture Organization of the United Nations
M&E	monitoring and evaluation
MoALF&I	Ministry of Agriculture, Livestock, Fisheries and Irrigation
PCU	programme coordination unit
PIM	programme implementation manual
4Ps	public-private-producer partnership
PSC	Programme Steering Committee
SDFA&BE	State Department of Fisheries, Aquaculture and Blue Economy
SECAP	Social, Environmental and Climate Assessment Procedures
TCP	technical cooperation programme

Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed additional financing for the Aquaculture Business Development Programme in the Republic of Kenya, as contained in paragraph 31.

Proposed additional financing for the Aquaculture Business Development Programme

I. Background and programme description

A. Background

1. The Aquaculture Business Development Programme (ABDP) was approved by the December 2017 Executive Board (document EB 2017/122/R.10) and went into force on 22 June 2018. The original completion and financing closing dates are 30 June 2026 and 31 December 2026, respectively. The original total programme cost is US\$143.3 million, comprising a US\$40 million IFAD loan; a financing gap of US\$27.9 million (EUR 24,150,000); US\$0.4 million from the Food and Agriculture Organization of the United Nations (FAO) through a complementary technical cooperation programme (TCP); a US\$31.4 million contribution from the Government of Kenya; and a beneficiary contribution of US\$43.6 million. The FAO TCP project was approved in September 2018 and launched in October 2018. The ABDP's lead implementing agency is the State Department of Fisheries, Aquaculture and Blue Economy (SDFA&BE) under the Ministry of Agriculture, Livestock, Fisheries and Irrigation (MoALF&I).
2. This memorandum seeks approval for additional financing from the 2016-2018 performance-based allocation system (PBAS) allocation, in the form of a highly concessional loan of US\$27.9 million for the ABDP. This is in response to a formal request from the Government for additional financing to fill the financing gap for IFAD loan number 2000002052. The ABDP was designed with a financing gap that was expected to be cofinanced with resources from other donors. However, when the financing agreement was signed on 22 June 2018, the financing gap had yet to be filled.
3. The programme's goal, objectives, components and subcomponents and its implementation and financial arrangements will remain as originally formulated. Likewise, its completion and closing dates will remain unchanged as 30 June 2026 and 31 December 2026, respectively.

B. Original programme description

4. The goal of ABDP is reduced poverty and increased food security and nutrition in rural communities. In pursuit of this goal, the programme development objective is to increase the income, food security and nutritional status of the wider communities of poor rural households involved in aquaculture in the targeted counties. The main indicators for measuring progress are the percentage of beneficiaries reporting increased annual net income and the percentage increase in national annual fish consumption. The programme is implemented through three components:
 - (i) Smallholder aquaculture development, aimed at increasing the efficiency, profitability and sustainability of ongoing and new aquaculture activities in mixed smallholder farming systems, with associated nutrition activities to improve dietary quality and food security in the wider rural communities (US\$79.7 million);

- (ii) Aquaculture value chain development, aimed at boosting efficiency throughout the aquaculture value chain, concentrating programme efforts and resources on operations that either directly include smallholders or demonstrably benefit the bulk of small-scale producers (US\$55.8 million); and
- (iii) Programme management and coordination, aimed at coordinating and managing the full implementation of the programme (US\$7.8 million).

II. Justification for the additional financing

Programme implementation performance

5. The Government has formally requested additional financing from the current PBAS cycle to cover the ABDP financing gap of US\$27.9 million. The programme was approved by the Executive Board in December 2017 with a financing gap in the amount requested.
6. With the additional financing, the programme will be able to:
 - (a) Cover the financing gap to ensure coverage of all programme activities as designed. The financing gaps per component are as follows:
 - (i) Component 1: US\$15.9 million, distributed per activity as follows:
 - (i) smallholder aquaculture development: US\$13.6 million;
 - (ii) enterprise development in support of smallholders: US\$1.9 million; and (iii) community nutrition initiative: US\$0.4 million.
 - (ii) Component 2: US\$11.6 million, distributed per activity as follows:
 - (i) identification of potential intervention areas - US\$3.0 million;
 - (ii) investment for the development of value chains - US\$6.1 million; and (iii) aquaculture enabling environment and support services (policy engagement, extension, research, fish quality assurance, etc.) - US\$2.5 million; and
 - (iii) Component 3: US\$0.4 million, distributed to cover the national and regional programme coordination units (PCUs) at US\$0.2 million each.
 - (b) Fully cover the geographical phasing in 15 counties. Programme design envisages starting with six counties in year 1, with the potential to expand coverage to all 15 targeted counties, subject to the availability of funds. The additional financing requested will fill the existing funding gap to ensure full coverage of the programme's target beneficiaries of 35,500 households with the above interventions in the 15 targeted counties, as per the design.
7. Implementation status of start-up activities. With the IFAD-approved start-up facility and retroactive financing of US\$0.55 million and US\$0.36 million respectively, the programme is implementing key activities to ensure speedier implementation, thanks to continuous IFAD support. These achievements include the following: (i) the implementing agency has appointed a programme start-up facilitator to coordinate and manage the programme, pending competitive recruitment of key PCU staff through an independent human resources firm contracted following IFAD approval; (ii) the Programme Steering Committee (PSC) has been formed, holding its first meeting in January 2018 and providing strategic guidance on the implementation of start-up activities; (iii) the start-up facilitator is heading up the drafting of the programme implementation manual (PIM) and annual work plan and budget with support from the PCUs of ongoing IFAD-funded programmes; (iv) a location for the PCU office has been identified in one of the counties, while procurement of the required office set-up and refurbishment has begun; (v) the Government has allocated KES 37.6 million to cover eligible

retroactive financing activities, and (vi) FAO TCP cofinancing of US\$0.4 million for ABDP has been released to fund institutional capacity-building activities.

A. Description of geographic area and target groups that will benefit from additional financing activities

8. Geographic targeting. The ABDP is grounded in a geographically-phased targeting approach that is national in scope but targets counties with high concentrations of aquaculture activity, high production, existing infrastructure (processing, marketing and research), adequate water resources and marketing potential. Poverty targeting criteria are also considered in selecting the areas. The programme will target 15 counties (Migori, Kakamega, Homa Bay, Nyeri, Meru, Kirinyaga, Tharaka Nithi, Kisii, Kisumu, Siaya, Busia, Embu, Kiambu, Machakos and Kajiado), starting with six (Homa Bay, Migori and Kakamega (in Western Kenya Region) and Kirinyaga, Nyeri and Meru (in the Central/Eastern Region) in the first two years and then expand as needed beginning in the third year, based on clear selection criteria.
9. Beneficiaries. The total number of direct beneficiary households is estimated at 35,500, or 213,000 people. These beneficiaries consist of male and female smallholder fish farmers (29,900) engaged in fish farming at different production levels (subsistence and medium-scale). The fish farmers will include 30 per cent women and 20 per cent youth. The beneficiaries' households will include 5,500 youth (50 per cent male and 50 per cent female) benefiting from employment and self-employment opportunities along the non-production segments of the aquaculture value chain. The total outreach to indirect beneficiaries will include about 300,000 people benefiting from nutrition initiatives.
10. The programme completion and financing closing dates remain unchanged as the original dates: 30 June 2026 and 31 December 2026, respectively.

B. Components/outcomes and activities of both original and additional financed activities

11. The programme comprises two mutually supportive components focused on strengthening aquaculture value chains to benefit smallholder fish producers, small-scale supporting service providers and their rural communities:
 - (i) Component 1. Smallholder aquaculture development: The objective is to strengthen the capacity of smallholders, mostly aquaculture pond farmers, to increase production and productivity and create opportunities for non-fish farming actors interested in developing microenterprises along the aquaculture value chain. The three main interventions are: (i) support to smallholder aquaculture production, involving community mobilization and sensitization, beneficiary training and capacity-building, the creation of smallholder aquaculture groups that include women and youth and the development of appropriate aquaculture infrastructure; (ii) the development of enterprises in support of smallholder aquaculture production, strengthening aquaculture support enterprises devoted to youth; and (iii) support to community nutrition initiatives, including the financing of nutrition surveys and studies, curriculum and training materials development and support to community nutrition activities. No new activity will be introduced, as the financing gap was already included in the original design.
 - (ii) Component 2. Aquaculture value chain development: This component complements component 1 and seeks to boost efficiency throughout the aquaculture value chain, concentrating programme efforts and resources in operations that either directly include smallholders or benefit the mass of smallholder producers. The two main interventions are: (i) developing smallholder-based aquaculture value chains, including the promotion of public-private-producer partnerships (4P) and investments for aquaculture

support enterprises and smallholder aquaculture groups based on business plan competition windows; and (ii) an enabling environment and support services for the aquaculture sector. No new activity will be introduced, as the financing gap was already included in the original design.

12. Expected outcomes. (i) Improved production, productivity, food security and diet of smallholder farmers; and (ii) greater efficiency in the fish and fish-product value chain by promoting a business approach at all scales. No new outcomes are expected, as the financing gap was already included in the original design.

C. Benefits, costs and financing

Programme costs: original and additional

13. The original programme cost, US\$143.3 million, remains the same, as it had already been factored into the financing gap identified at design. The additional financing of US\$27.9 million will therefore cover this envisaged financing gap. The table below summarizes the programme costs, including the additional financing.

Table 1
Programme costs by component and financier
(Thousands of United States dollars)

Component	IFAD loan		IFAD additional financing		FAO		Beneficiaries		Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Smallholder aquaculture development	19 300	24.2	15 900	20.0	400	0.5	16 300	20.4	27 800	34.9	79 700	55.6
2. Aquaculture value chain development	14 200	25.4	11 600	20.8	-	-	27 300	48.9	2 700	4.9	55 800	39.0
3. Programme management, M&E	6 500	83.3	400	5.1	-	-	-	-	900	11.6	7 800	5.4
Total programme costs	40 000	27.9	27 900	19.5	400	0.3	43 600	30.4	31 400	21.9	143 300	100.0

Programme financing strategy and plan: original and additional

14. The programme financing at design includes an IFAD loan of US\$40 million, an FAO contribution of US\$0.4 million, a beneficiary contribution of US\$43.6 million, a contribution from the Government of US\$31.4 million (covering taxes, salaries, etc.) and a financing gap of US\$27.9 million. The strategy/plan under the additional financing is to increase the amount of IFAD financing by US\$27.9 million to bring total IFAD financing to US\$67.9 million under the 2016-2018 cycle of the performance-based allocation system; IFAD financing will represent 47.4 per cent of the original total cost, but the additional financing will represent 19.5 per cent.

Table 2
Programme costs by category and financier
(Thousands of United States dollars)

Category/financier	IFAD loan		IFAD additional financing		FAO		Beneficiaries		Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Civil works	500	5.4	300	3.2	-	-	8 400	90.3	100	1.1	9 300	6.6
Consultancies (studies and technical assistance)	10 200	47.0	9 500	43.8	300	1.4	-	-	1 700	7.8	21 700	15.1
Goods, services and inputs	11 200	18.5	10 700	17.7	100	0.2	35 200	58.2	3 300	5.4	60 500	42.3
Grants	7 400	50.0	7 400	50.0	-	-	-	-	-	-	14 800	10.3
Operating costs	5 000	74.6	-	-	-	-	-	-	1 700	25.4	6 700	4.6
Salaries and allowances	5 700	18.8	-	-	-	-	-	-	24 600	81.2	30 300	21.1
Total programme costs	40 000	27.9	27 900	19.5	400	0.3	43 600	30.4	31 400	21.9	143 300	100.0

Disbursement profile and plan: original and additional

15. The authorized allocation to expenditure categories under IFAD financing will be increased to reflect the additional financing. However, there are no anticipated changes to the original disbursement mechanism in the ABDP design. As designed,

programme funds will flow through dedicated accounts (DAs) (national- and county-level) operating on an imprest system, and each will receive an appropriate initial deposit directly from IFAD. The first DA will be opened by the National Treasury for national programme activities under the SDFA&BE and its institutions, while the second will receive funds from IFAD for activities in the targeted programme counties. For each DA, a local operational bank account denominated in Kenyan shillings will be opened and maintained by MoALF&I. Subsequent fund flows will be based on replenishment requests through withdrawal applications filed pursuant to IFAD guidelines and procedures.

Summary of benefits and economic analysis: original and additional

16. programme benefits and economic justification. ABDP is expected to generate benefits for all actors involved in the production, processing, value addition and trade in fish and fish products from the burgeoning aquaculture sector, predominantly as incremental income for smallholders from financially and environmentally sustainable fish production. Benefits will also accrue to rural communities through improved nutritional status; to domestic consumers through greater access to affordable fish; to the country as a whole through foreign exchange savings from import substitution; and to the Government through additional income tax revenues.
17. Economic analysis. The viability of ABDP from the standpoint of the Kenyan economy has been estimated through an economic cost-benefit analysis using illustrative models and economic prices.¹ Considering the value of the benefits to be generated by the proposed ABDP interventions, the ERR was estimated at 21.1 per cent and the net present value, at the equivalent of US\$74.5 million. A sensitivity analysis showed the programme to be relatively sensitive to a reduction in productivity and/or fish prices but robust against the risk of cost increases and/or lower numbers of beneficiaries adopting the proposed production improvements. These results serve to justify the programme investments.

Sustainability

18. The programme has inbuilt economic sustainability. The strengthening and use of existing public services and community structures are expected to establish a strong institutional framework that will support sustainability. The positioning of ABDP as a fixed-term initiative, contributing to an open-ended Government 4Ps programme is appealing in terms of the sustainability of the investment but does draw attention to the continuing commitment of the Government to ensure the necessary recurrent budget for field support services.

III. Risks of implementing the additional financed activities

Programme risks (including fiduciary risks) and mitigation measures: original and additional

19. Financial management of the programme will be governed by the 2015 Government financial regulations, the Public Finance Management Act 2012 and IFAD guidelines under the financing agreement, as documented in the PIM. The programme will adopt appropriate systems, including financial planning through annual workplan and budgets, financial accounting and reporting, fund flow management, procurement and audit. Oversight will be exercised by MoALF&I management, SDF&BE, PSC and the National Treasury.
20. Financial management risk assessment. The initial inherent risk assessment was considered "high," based on the Transparency International score and the latest Public Expenditure and Financial Accountability reports. However, since

¹ Assuming 2017 values in constant terms over 20 years, an investment conversion factor (CF) of 0.88, a wage CF of 0.70, an imported fish feed CF of 0.85 and a discount rate of 10 per cent.

MoALF&I has experience managing IFAD-funded projects, the rating can be expected to improve as mitigating controls are put in place. No additional fiduciary risks are foreseen other than those anticipated in the original financing, as this request is for financing a gap already reflected in ABDP design.

Environment and social category: original and additional

21. The ABDP Social, Environmental and Climate Assessment Procedures (SECAP) classification is category B. However, after completion of the programme design, an additional county, Kajiado, was added, and its consideration was anticipated, subject to the availability of additional funds and a SECAP review.

Climate risk classification: original and additional

22. The overall ADBP climate risk is classified as moderate. Since small-scale aquaculture will be the primary focus of ABDP, environmental sustainability and adaptation to climate change are cross-cutting themes for the programme. The SECAP note identifies potential environmental and climate risks and proposes mitigation measures, some of which include the promotion of climate-smart aquaculture² technologies and practices to minimize the impact of climate change while striking a balance between income and food security objectives in climate-change adaptation. A key focus of the programme will be to ensure that sufficient attention is paid to water quality and quantity, as well as appropriate agroecological zones for aquaculture development.

IV. Implementation

Compliance with IFAD policies: original and additional

23. The ABDP design is aligned with all relevant IFAD strategies and policies, including the Strategic Framework 2016-2025, the Targeting Policy, the Policy on Gender Equality and Women's Empowerment; Gender Mainstreaming in IFAD, the Climate Change Strategy, the Environment and Natural Resource Management Policy, SECAP, the Private-Sector Strategy, the Rural Finance Policy, the Development Effectiveness Framework, the Innovation and Knowledge Management Policy, the Procurement Guidelines; the Policy on Supervision and Implementation Support and the Policy on Preventing Fraud and Corruption.

Organizational framework

Programme coordination, financial management, procurement and governance: original and additional

24. The programme's lead agency is the SDFA&BE in MoALF&I. A PSC, chaired by the Principal Secretary for SDFA&BE, has been established to provide overall policy guidance. A PCU will be established for day-to-day coordination and management, while county programme implementation teams will be established in each of the targeted counties to oversee the implementation of programme activities with support from a technical assistance team as part of the original design.

Monitoring and evaluation (M&E), learning, knowledge management and strategic communication approaches: original and additional

25. Knowledge management and M&E. The PCU will bear overall responsibility for continuous M&E and regular reporting on progress and the achievement of programme objectives, milestones and outcomes. A programme-level M&E system will be developed in compliance with IFAD requirements and aligned with the Government's National Integrated M&E System. Moreover, during the first year of implementation, a detailed M&E manual will be prepared that stipulates the roles and responsibilities of different programme players in tracking and managing

² ABDP defines "climate-smart aquaculture" as "the integration of appropriate site selection, development of a dependable year round water supplies, selection of appropriate species (especially fast maturing species) and stocking rates, and for example promotion of solar/wind powered pumps to pump water to hatcheries or processing plants, simple interventions at farm level (for examples ultra-violet pond liners to reduce loss of water, soil erosion control, ensuring ideal pond design and depth to conserve water, aqua phonic systems to limit water and land utilization), with a focus on optimal water use efficiency."

outcomes and data collection and management modalities. An M&E capacity assessment will be conducted for the targeted counties to identify possible gaps and propose capacity-building activities.

26. Knowledge services will meet the needs of beneficiaries through a learning-by-doing approach and rigorous analysis of experiences. The programme will share lessons learned through knowledge networking, learning events and publications. South-South learning and knowledge-sharing opportunities will provide beneficiaries with up-to-date knowledge and experience as part of the original design.

Proposed modifications to the programme financing agreement

27. All three programme components have been retained as at design. The institutional and implementation arrangements remain unchanged. The programme financing agreement will be modified in order to increase the IFAD loan amount with additional financing of US\$27.9 million to fill the financing gap already reflected in the programme design. This will bring IFAD's cumulative total financing to US\$67.9 million. The additional loan will be denominated in euros.

V. Legal instruments and authority

28. A programme financing agreement signed between the Republic of Kenya and IFAD constitutes the legal instrument for the financing to the borrower. Upon approval of the proposal by the Executive Board, the financing agreement will be amended to reflect the additional financing.
29. The Republic of Kenya is empowered under its laws to receive financing from IFAD.
30. 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

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

RESOLVED: that the Fund shall provide an additional loan under highly concessional terms to the Republic of Kenya in the amount of twenty-four million, one hundred and fifty thousand euros (EUR 24,150,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Gilbert F. Hougbo
President

Original Logical Framework fully reflected the Additional Financing

Results Hierarchy	Indicators				Means of verification			Assumptions (A) and Risks (R)
	Name	Base-line ³	Mid-Term	End Target	Source	Frequency	Responsible	
Outreach:	▪ # of persons receiving technical and/or financial services promoted or supported by the Programme. ⁴	0	150,000 (25,000 HH)	213,000 (35,000 HH)	Fisheries enterprise records, Economic Surveys, Programme reports, baseline and impact studies.	Annual.	PCU and Counties.	A: Supportive policy and legal framework.
Goal: Reduced poverty and increased food security and nutrition in rural communities.	▪ # households have improved asset ownership index compared to baseline ³	0	17,750	35,500	RIMS baseline and impact surveys, household survey.	Year 1, mid-term & Year 8.	PCU.	A: Favourable conditions for domestic fish trade.
	▪ % good dietary diversity (data for households and women). ⁵	0	30% increase	60% increase	RIMS baseline and impact surveys, household survey.	Year 1, mid-term & Year 8.	PCU.	A: Favourable conditions for domestic fish trade.
Development Objective: To increase the incomes, food security and nutritional status of the wider communities of poor rural households involved in aquaculture in the targeted Counties.	▪ % of target households reporting increased annual net income from baseline, disaggregated by fish farmers, processors and traders. ³	0	30%	50%	Fisheries enterprise records, Economic Surveys, Programme reports, baseline and impact studies	Annual.	PCU.	A: Favourable conditions for aquaculture farming.
	▪ % increase in national annual fish consumption, (current national average 3.6 kg/capita).	0	10%	25%	Household Food Survey.	Year 1, mid-term & Year 8.	PCU, MoALF.	A: Supportive GoK foreign trade policy for fish.
Outcomes/Components: Outcome 1: To improve production, productivity as well as food security and nutrition of smallholder farmers.	▪ # households reporting an increase in production and graduated from level 1 (subsistence) to level 2 (semi-commercial). ³	0	11,700	16,400	Economic Surveys, Programme reports (baseline and impact studies), specific survey to monitor performance of farmers targeted under Component 1 (in particular level 1 farmers).	Six-monthly.	PCU, service provider	
	▪ Composite index of market prices of fish and fish products in Programme areas.	100	95	80	Price monitoring sample surveys in target and control areas.	Six-monthly	Service provider.	(A) Prices and costs fall with greater value chain efficiency.
	▪ # households reporting adoption of environmentally sustainable and climate resilient technologies and practices. ³	0	15,000	24,800	Programme reports (baseline and impact studies).	Annual.	PCU.	
	▪ # persons reporting an increase in consumption of fish. ³	0	120,000	300,000	Programme reports (baseline and impact studies).	Annual	PCU	
Outputs: 1.1 Enhanced smallholder aquaculture production.	▪ # households accessing aquaculture production input and/or technological packages. ³	0	20,000	29,900	PCU M&E surveys and reports.	Six - monthly.	PCU.	R: Poor maintenance of investments and/or inadequate business skills result in early collapse of individual/ group fish production or support enterprises.
	1.2 Development of enterprises in support of smallholder aquaculture production.	▪ # fishponds constructed, upgraded or rehabilitated and stocked with fish in an environmentally sustainable and climate smart manner.	0	20,000	29,900	PCU M&E surveys and reports.	Six-monthly.	PCU.
	▪ # persons trained in business management. ^{6,3}	0	25,000	30,400	PCU M&E surveys and reports.	Six-monthly.	PCU.	
1.3 Community nutrition initiatives.	▪ # households provided with targeted support to improve their nutrition. ³	0	25,000	35,400	PCU M&E surveys and reports.	Six-monthly.	PCU	

³ All without-Programme data to be determined in baseline survey and verified/updated at Programme start.

⁴ All target groups are disaggregated by gender and age. Each farmer or non-producing value chain actor represents an average household of six persons.

⁵ Good dietary diversity for households defined as intake of 5 food groups out of 12 food groups, and for women intake of 5 food groups out of 10 food groups.

⁶ Including: (i) fish production practices and technologies; (ii) fish farming as a business; (iii) good environmental and climate smart farm management; and (iv) off-farm activities, such as post-harvest handling; food safety, hygiene.

Results Hierarchy	Indicators				Means of verification			Assumptions (A) and Risks (R)
	Name	Base-line ³	Mid-Term	End Target	Source	Frequency	Responsible	
Outcome 2: To improve the efficiency of the value chain in fish and fish products by promoting a business approach at all scales.	▪ value of fish products marketed by Programme beneficiaries. ⁷	0	USD 70 million	USD 110 million	Economic Surveys, Programme reports, baseline and impact studies.	Annual.	PCU, MoALF and Counties.	A: Favourable climate conditions and no disease outbreak. R: Limited local fish marketing opportunities for lack of local purchasing power.
	▪ # supported rural aquaculture related enterprises reporting an increase in profit.*	0	105	240	PCU M&E surveys and reports.	Annual.	PCU, MoALF and Counties.	A: Favourable climate conditions and no disease outbreak. R: Limited local fish marketing opportunities for lack of local purchasing power.
Outputs: 2.1 Smallholder-based aquaculture value chain development.	▪ # ₃ persons trained in business management.	0	5,000	15,760	PCU M&E surveys and reports.	Six-Monthly.	PCU.	R: High transaction costs deter enterprises from entering outgrower arrangements with Programme smallholders.
	▪ # smallholder households included in outgrower schemes and linked to the market. ³	0	3,500	9,360	PCU M&E surveys and reports.	Six-monthly.	PCU.	R: High transaction costs deter enterprises from entering outgrower arrangements with Programme smallholders.
	▪ # aquaculture-related enterprises accessing business development services.*	0	5,000	14,000	PCU M&E surveys and reports.	Six - monthly.	PCU.	R: High transaction costs deter enterprises from entering outgrower arrangements with Programme smallholders.
2.2 Aquaculture sector enabling environment and support services.	▪ # extension officers trained by the Programme. ³	0	170	170 ⁸	PCU M&E surveys and reports.	Six monthly.	PCU.	
	▪ # knowledge management products developed to support aquaculture.	0	15	25	PCU M&E surveys and reports.	Biannual.	PCU.	A: Supportive policy and legal framework.
	▪ # regulations and policies proposed for decision makers for ratification / approval	0	1	2	PCU M&E surveys and reports.	Six-monthly.	PCU.	A: Supportive policy and legal framework.

⁷ The baseline value for different fish products will be estimated during baseline survey.

⁸ Exact number to be defined during needs assessment.