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## President's report

Proposed Ioan to the Republic of Kenya for the Aquaculture Business Development Programme

## Note to Executive Board representatives Focal points:

Technical questions:

**Dispatch of documentation:** 

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For: Approval

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- Negotiated financing agreement
   Logical framework

## Abbreviations and acronyms

AWP/B annual workplan and budget

FAO Food and Agriculture Organization of the United Nations

KES Kenya shillings

M&E monitoring and evaluation

MoALF Ministry of Agriculture, Livestock and Fisheries

PCU programme coordination unit

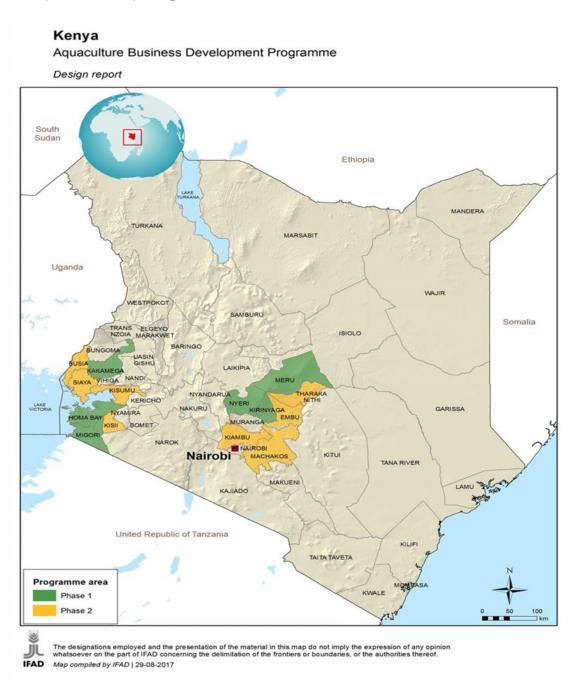
PIM programme implementation manual 4Ps public-private-producer partnership PSC programme steering committee

RB-COSOP results-based country strategic opportunities programme

SDF&BE State Department of Fisheries and Blue Economy

SECAP Social, Environmental and Climate Assessment Procedures

## Map of the programme area



## Republic of Kenya

## Aquaculture Business Development Programme

## Financing summary

Initiating institution: IFAD

Borrower: Republic of Kenya

**Executing agency:** State Department of Fisheries and Blue Economy

Total programme cost: US\$143.3 million

Amount of IFAD loan: US\$40 million

Terms of IFAD loan: Highly concessional: free of interest and with a service

charge of 0.75 percent per annum payable semiannually in the loan service payment currency. Maturity period of 40 years, including a grace period of 10 years starting from the date of Executive Board approval.

Financing gap: US\$27.9 million

**Cofinancier:** Food and Agricultural Organization of the United

Nations (FAO)

Amount of cofinancing: US\$400,000

**Terms of cofinancing:** Provision of training and implementation of farmer field

schools

Contribution of borrower: US\$31.4 million

Contribution of beneficiaries: US\$43.6 million

Appraising institution: IFAD

Cooperating institution: Directly supervised by IFAD

## Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed financing to Republic of Kenya for the Aquaculture Business Development Programme, as contained in paragraph 56.

# Proposed Ioan to the Republic of Kenya for the Aquaculture Business Development Programme

## I. Strategic context and rationale

#### A. Country and rural development and poverty context

- 1. Rural development context. Kenya has a total land area of 582,646 km² and an estimated population of 46 million (the population growth rate is 2.6 per cent). Despite political tensions, rising insecurity and erratic weather, economic growth has been solid over the past few years, although recent political developments have slowed down the economy. Meanwhile, the challenges of poverty and income inequality remain. More than 75 per cent of Kenya's population lives in rural areas, where poverty affects 50.5 per cent of all people. Kenya remains a food-insecure country, with approximately 10 million Kenyans suffering from chronic food insecurity and poor nutrition.
- 2. Approximately 75 per cent of Kenya's population is employed in the agricultural sector. While the share of agricultural GDP and export earnings related to fisheries and aquaculture is limited, the sector has significant potential, which is not fully exploited.
- 3. Kenya's youth accounts for 35.4 per cent of the total population and 60 per cent of the total labour force, of which only 10 per cent are employed in agriculture (World Bank, 2014). Youth unemployment is very high, with the majority moving out of the rural agriculture sector into urban areas. This reduces the labour force in rural areas and highlights the need to support rural youth. Many believe that radicalization and participation in illegal activities are direct results of this lack of employment opportunities for youth.
- 4. Women comprise 50.1 per cent of Kenya's total population, yet women are underrepresented in decision-making positions. Women also have less access to education, land and employment than men. Recent studies show that while women are engaged in most areas of fish value chains, their participation in and benefits from the sector are more limited than men's.
- 5. The new 2010 constitution brought about fundamental changes in the way Kenya is governed, with the devolution of some executive functions including those related to agricultural development and administrative responsibilities to the counties. The Government has also developed a strong policy and legal framework to support the expansion of aquaculture, including direct investment in the sector.

## B. Rationale and alignment with government priorities and RB-COSOP

6. The rise of aquaculture. Kenya's growing aquaculture subsector presents a major opportunity to reduce persistent rural poverty in the country by increasing incomes and tackling diet-related issues. Historically, fish production and consumption have been low nationwide, with relatively little production or consumption except in the western region. Domestic supplies have mainly come from inland and marine-

- capture fisheries; however the quantities of fish caught are in steep decline. With national demand increasing, prices are rising and imports are not able to fill the widening gap.
- 7. A profitable aquaculture subsector is emerging in response to growing demand, accelerated by a substantial government investment through the Economic Stimulus Programme implemented from 2008 to 2013. Although progress on this programme was slowed by a lack of linkages to larger private-sector value-chain operators and the decision to devolve implementation responsibilities to newly formed county governments, the programme was instrumental in introducing aquaculture to a wide constituency.
- 8. The roles of smallholders in the aquaculture subsector. The aquaculture value chain comprises large-scale producers and many small-scale and subsistence farmers who practice fish farming in mixed farming systems. Essential support services the supply of feed and fingerlings, and functional marketing arrangements for this perishable commodity are also developing but have not yet caught up with potential. Most large-scale producers create integrated businesses that combine key operations.
- 9. There are good prospects for rural people to move into aquaculture as primary fish producers or support-service providers. However, recent experience has shown that challenges with inputs, technology and marketing limit the sustainability of profitable on-farm aquaculture enterprises. As with other agricultural and livestock activities, the way forward is to progress from subsistence to a sustainable commercial model.
- 10. Rural poverty reduction through aquaculture. The rapid and continuing expansion of Kenya's aquaculture subsector offers a major opportunity for alleviating rural poverty and malnutrition, and building poor households' climate resilience. The aim is to assist large numbers of smallholders in becoming profitable fish producers or village-level providers of support services within a secure value chain. In doing so, it is possible to make positive impacts on nutritional well-being within wider communities.
- 11. In this context, the Aquaculture Business Development Programme seeks to enable existing and potential aquaculture producers to benefit from fish production in an economically and environmentally sustainable fashion, and to promote local income-generating businesses that provide support services. Recognizing the underdeveloped state of the aquaculture value chain, the programme would also promote an array of public-private-producer partnerships (4Ps) operating at scale sufficient to establish a robust aquaculture industry. Given the overarching programme goal of rural poverty reduction, these 4Ps need to demonstrate that a significant number of smallholder fish producers and support enterprises would benefit from the arrangement. The proposed approach blends public- and private-sector investments in the aquaculture value chain with community-wide initiatives that promote good nutrition and food security.
- 12. The proposed programme is in line with IFAD's strategic objectives and Kenya's results-based country strategic opportunities programme (RB-COSOP) for 2013-2018. As a key player in rural development and smallholder agriculture, IFAD has a strong comparative advantage in assisting Government efforts to revitalize smallholder-based aquaculture and reach out to marginalized groups such as women, youth and landless people.

## II. Programme description

- A. Programme area and target group
- 13. The programme is national in scope but targets counties with high concentrations of aquaculture activity, high production, existing aquaculture-related infrastructure,

adequate water resources and marketing potential, and high poverty rates. The programme will target 15 counties: Migori, Kakamega, Homa Bay, Nyeri, Meru, Kirinyaga, Tharaka Nithi, Kisii, Kisumu, Siaya, Busia, Embu, Kiambu, Machakos, and Kajiado. Kajiado County will be included subject to a review of availability of financial resources and compliance with Social, Environmental and Climate Assessment Procedures (SECAP).

14. The programme's direct beneficiaries will include women, youth, landless people and other disadvantaged groups. These direct beneficiaries will consist of men and women smallholders (including youth) involved in fish farming (subsistence and medium farming). Direct beneficiaries will also include landless youth (50 per cent men and 50 per cent women), who will benefit from employment opportunities in non-fish production segments of the value chain. Total direct programme beneficiaries include 35,500 households. Indirect beneficiaries will include rural communities, which will benefit from improved education in nutrition and enhanced access to an affordable diet. The programme will also strengthen the capacity of public and private entities providing support services to the aquaculture subsector.

#### B. Programme development objective

15. The programme goal is reduced poverty and increased food security and nutrition in rural communities. The corresponding development objective is to increase the incomes, food security and nutritional status of the wider communities of poor rural households involved in aquaculture in the targeted counties.

#### C. Components/outcomes

- 16. The programme comprises two mutually supportive components. The two programme components are facilitated by an implementation support structure (component 3) providing physical and financial management, knowledge management and monitoring and evaluation (M&E).
- Component 1: Smallholder aquaculture development. The objective of this component is to strengthen the capacity of smallholder aquaculture farmers to increase production and productivity, and create opportunities for non-fish farming actors (youth) interested in developing micro-enterprises along the value chain. The component will also contribute to improved quality of diets through increased awareness of the benefits of consuming fish and fish products, and increasing dietary diversity. Subcomponent 1.1: Smallholder aquaculture production will involve: (i) working with community-based organizations and local institutions to sensitize communities to aquaculture-related opportunities; (ii) technical training and skill transfer for smallholder aquaculture producers; (iii) rehabilitation of existing and introduction of new aquaculture production facilities; and (iv) capacity building for small-scale aquaculture input industry. Subcomponent 1.2: Development of enterprises in support of smallholder aquaculture production will promote aquaculture-support enterprises as a means of income generation and empowerment for young non-fish producers by improving their access to resources and productive assets. Subcomponent 1.3: Community nutrition initiatives aim to contribute to good nutrition using fish as a means to improve the quality of diets for women, children and households in the targeted counties.
- 18. Component 2: Aquaculture value chain development. This component comprises interventions to: broaden and deepen the aquaculture value chain with a series of strategic 4Ps; and contribute to modernizing the public-sector framework. Subcomponent 2.1: Smallholder-based aquaculture value chain development will contribute to the establishment of a commercially viable aquaculture value chain in Kenya, with a focus on small- and medium-sized value chain actors. The 4Ps and business plans are vehicles for leveraging economies of scale and overcoming identified weaknesses. The 4Ps and business plan competitions will be carried out based on number of generic models. These include: (i) 4Ps related to independent aquaculture aggregators (outgrower schemes) that aim to increase the production

capacities of small aquaculture farmers; (ii) 4Ps using lease-contract models for improving production capacity and productivity in the management of existing government processing plants, linked with fish producing outgrowers; (iii) support for aquaculture production business plans by smallholder aquaculture production groups; and (iv) support for business plans by youth-based small aquaculture enterprises engaged in non-fish production activities throughout the value chain. Subcomponent 2.2: Aquaculture sector enabling environment and support services aim to strengthen the public services crucial to success in the subsector, including the policy and regulatory framework, public infrastructure, extension capacity, research, quality assurance, fish health and surveillance services, and access to financial services.

## III. Programme implementation

#### A. Approach

19. The programme will be implemented over eight years (2018 to 2025). Implementation arrangements will be set out in a programme implementation manual (PIM). Guiding principles for implementation will be: (i) a flexible approach in response to the needs of rural producers and value-adders; (ii) competitive private sector-led activities driven by effective local and national market demand; (iii) strategic investments in aquaculture and related economic activities founded on participatory planning; (iv) individual producers and group enterprises as managerowners of supported activities; (v) improved policy and regulatory frameworks to create an enabling environment; and (vi) inclusiveness of rural poor, women, youth and disadvantaged groups.

#### B. Organizational framework

- 20. The programme will be coordinated and implemented by the Government through existing institutions. The National Treasury will be the recipient of IFAD financing. The State Department of Fisheries and the Blue Economy (SDF&BE) within the Ministry of Agriculture, Livestock and Fisheries (MoALF) will be the lead agency. SDF&BE will collaborate with and delegate some technical implementation duties to other entities as identified in the design document.
- 21. A programme steering committee (PSC) under the leadership of the SDF&BE Principal Secretary will be established to provide policy guidance. The main responsibility of the PSC will be to ensure successful implementation of the programme.
- 22. For daily coordination and management of the programme, and according to the financing agreement established by the Government, IFAD and other financiers, SDF&BE will delegate oversight and supervision responsibilities to a programme coordination unit (PCU) located in one of the programme counties. The PCU staff will be recruited competitively on performance-based contracts. Programme activities at the county level will be implemented using existing county governance structures.

## Planning, monitoring and evaluation, and learning and knowledge management

- 23. The programme will be implemented on the basis of an annual workplan and budget (AWP/B) developed and approved at the beginning of each fiscal year. The PCU will be responsible for the timely development, implementation and monitoring of AWP/Bs in collaboration with programme partners.
- 24. The PCU will be responsible for M&E, regular reporting on progress and the achievement of programme objectives, milestones and results. A programme-level knowledge management and M&E system compliant with IFAD requirements and aligned with the Government's national system will be developed and rolled out within six months of programme startup. The PCU will also be responsible for

- preparing progress reports, interim reports as required and the programme completion report.
- 25. 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.
- D. Financial management, procurement and governance
- 26. A comprehensive financial management risk assessment has rated the programme's financial management risk as high, improving to medium after conditions for disbursement have been met and mitigation measures implemented. Financial management will be in line with the 2015 Government Financial Regulation, the 2012 Public Finance Management Act and IFAD requirements in accordance with the financing agreement and letter to the borrower as documented in the PIM. The programme will adopt appropriate systems for financial planning through AWP/Bs, financial accounting and reporting, fund-flow management, procurement and audit. Oversight will be provided by MoALF management, SDF&BE, the PSC and the National Treasury. The systems governing expenditures from programme funds will be subject to national and IFAD anti-corruption standards.
- 27. Financial management arrangements. The PCU will be responsible for the management and coordination of programme implementation, with: (i) an appropriate financial management team within the PCU and accounting focal points in the programme counties; and (ii) suitable accounting software connected with the National Integrated Financial Management Information System in conjunction with dedicated accounting and reporting software to produce financial statements disaggregated by programme component, expense category and financier. The International Public Sector Accounting Standards cash basis will be used as the accounting standard for financial reporting. Arrangements for internal audit will be made for both the PCU and participating counties. The Kenya National Audit Office has been satisfactorily auditing the financial statements of IFAD-financed projects in accordance with International Standards on Auditing, and this arrangement will apply to the programme. The MoALF Audit Committee will review the implementation status of internal and external audit recommendations.
- 28. Flow of funds and disbursements. Apart from infrequent direct payments and reimbursements, the programme funds will flow through two designated accounts in United States dollars operating on an imprest system, and each will receive an appropriate initial deposit directly from IFAD. The first designated account will be opened by the National Treasury in United States dollars for programme activities under SDF&BE and its institutions. The second designated account will be opened by the National Treasury denominated in United States dollars to receive funds from IFAD for activities to be carried out in the programme counties. For each designated account, a local operational bank account denominated in Kenyan shillings will be opened and maintained by MoALF. Subsequent funds flows into these accounts will be dependent upon the eligible expenditures incurred, which will be the basis for replenishment requests through withdrawal applications in line with IFAD quidelines and procedures.
- 29. Each programme county will be required to open and maintain a dedicated bank account for IFAD funds, into which the funds from the PCU's county local currency bank account (held by MoALF) will be transferred through the county revenue fund. The funds from this account will finance approved AWP/B activities at the county level. The accounting of national Government expenditures and those of the counties will be kept distinct to ensure results-based monitoring. Statements of expenditure and other documentation will be submitted to the PCU regularly within

- set deadlines. A counterpart funding account denominated in Kenyan shillings will be opened at the PCU to cover government contributions.
- 30. Programme advance and retroactive financing. A programme start-up advance not exceeding US\$550,000 will be disbursable from the IFAD loan upon request by the National Treasury after signature of the financing agreement by both parties and before satisfaction of the disbursement conditions. The Government will support activities starting from 1 October 2017 from its own budget through retroactive financing (US\$360,000), which will be reimbursed once the programme is approved by IFAD's Executive Board, signed by both parties and the disbursement conditions have been satisfied. The programme advance and retroactive financing will support activities necessary to meet disbursement conditions and enhance implementation readiness.
- 31. Procurement. The programme will be aligned with the 2015 Kenya Public Procurement and Disposal Act and the Public Procurement Regulations to the extent they are consistent with the 2010 IFAD Procurement Guidelines. National systems will be applied to all procurements except those above the threshold for international competitive bidding, which will be implemented according to World Bank guidelines.
- 32. The programme will be implemented through a two-tiered institutional arrangement at the national and county levels. At the national level, the PCU, anchored within SDF&BE, will be responsible for carrying out all procurement transactions that use open tenders and international competitive bidding, in addition to other procurements at the national level. Only small procurements will take place at the county level. County programme implementation teams to be established within each participating county will execute small procurement activities that apply the request-for-quotations method.

#### E. Supervision

- 33. IFAD will be responsible for: (i) reviewing withdrawal applications for IFAD funds; (ii) reviewing progress and financial reports, annual financial statements, internal audit reports and annual audits; (iii) reviewing and approving on a no-objection basis all procurements financed by IFAD funds that are subject to prior review; (iv) monitoring compliance with the financing agreement and recommending remedies for non-compliance; and (v) carrying out all other functions needed to administer the financing agreement and supervise the programme. Supervision and implementation support will be a continuous process involving ongoing engagement with the Government, programme managers and other stakeholders. The IFAD Country Office in Nairobi will expedite these processes.
- 34. The frequency and composition of supervision and implementation support missions will be determined by the requirements, but will consist of at least one annual supervision mission complemented by short, focused implementation support missions as appropriate.

## IV. Programme costs, financing and benefits

35. The financing gap of US\$27.9 million may be sourced by subsequent performance-based allocation system cycles (under financing terms to be determined and subject to internal procedures and Executive Board approval) or by cofinancing identified during implementation. Discussions regarding cofinancing are currently underway with the KfW Development Bank.

#### A. Programme costs

36. The total cost of the programme, including physical and price contingencies, is estimated at US\$143.3 million. The costs of activities have been assessed at: US\$79.7 million for component 1; US\$55.8 million for component 2; and US\$7.8 million for implementation support (including contingencies). These

components represent 55.6 per cent, 39 per cent and 5.4 per cent of the total cost respectively.

Table 1

Programme costs by component and financier (contingencies included in component costs)
(Thousands of United States dollars)

	IFAD loa	an	Financing	gap	FAO		Beneficia	ries	Borrower , counterpa		Tota	n/
Component	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Smallholder aquaculture development	19 300	24.2	15 900	20	400	0.5	16 300	20.4	27 800	34.9	79 700	55.6
Aquaculture value-chain development	14 200	25.4	11 600	20.8	-	-	27 300	48.9	2 700	4.9	55 800	39
3. Programme management, monitoring and evaluation												
anu evaluation	6 500	83.3	400	5.1	-	-	-	-	900	11.6	7 800	5.4
Total	40 000	27.9	27 900	19.5	400	0.3	43 600	30.4	31 400	21.9	143 300	100.0

## B. Programme financing

37. The programme will be financed with an IFAD loan drawn from the 2016-2018 performance-based allocation system cycle, which is estimated at US\$40 million, corresponding to 27.9 per cent of the total programme costs. FAO will contribute US\$400,000 (0.3 per cent) while the beneficiaries and the Government will contribute US\$43.6 million (30.4 per cent) and US\$31.4 million (21.9 per cent) respectively. The financing gap of US\$27.9 million represents 19.5 per cent of the total cost.

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

	IFAD loa	an	Financing	gap	FAO		Beneficia	Borrower / ciaries counterpart				nl
Component	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Civil works     Consultancies     (studies and technical)	500	5.4	300	3.2	-	-	8 400	90.3	100	1.1	9 300	6.6
assistance) 3. Goods, services and	10 200	47.0	9 500	43.8	300	1.4	-	-	1 700	7.8	21 700	15.1
inputs	11 200	18.5	10 700	17.7	100	0.2	35 200	58.2	3 300	5.4	60 500	42.3
4. Grants	7 400	50.0	7 400	50.0	-	-	-	-	-	-	14 800	10.3
<ol><li>Operating costs</li></ol>	5 000	74.6	-	-	-	_	-	-	1 700	25.4	6 700	4.6
6. Salaries and allowances	5 700	18.8	-	-	_	-	_	-	24 600	81.2	30 300	21.1
Total	40 000	27.9	27 900	19.5	400	0.3	43 600	30.4	31 400	21.9	143 300	100.0

#### C. Summary of benefit and economic analysis

38. Component 1 will provide technical assistance and support for enhancing individual farmers' productivity of around existing and new smallholder fish production facilities. The component will support and create income-generating opportunities in non-fish production activities through training and start-up support. Under component 2, the programme will develop vertically integrated linkages for building partnerships and collaboration among stakeholders. Successful beneficiaries will progress to more purposeful business models through 4Ps.

39. Taking into consideration the value of benefits to be generated by the proposed interventions while excluding the less-quantifiable benefits from improved nutrition among poor people – since fish protein will be made available at an affordable price – the economic internal rate of return was estimated at 21.1 per cent and the net present value is KES 7.48 billion. The economic rate of return was calculated per component, with sensitivity analysis showing the programme's robustness.

#### D. Sustainability

- 40. As a development intervention, the programme is embedded within government structures and has no need for an exit strategy. Furthermore, the programme has built-in economic sustainability. The interventions for the strengthening and use of the existing public services and community structures are expected to establish a strong institutional framework that supports sustainability. Beneficiaries and stakeholders will be prepared from the outset for post-programme engagement through training and advice.
- 41. The investment in this programme is highly sustainable since it is a fixed-term initiative contributing to an open-ended government 4Ps programme. A post-programme decline from the increased level of household and enterprise fish production (and related trade) achieved during implementation is unlikely since this increase will be accomplished through the use of appropriate, affordable and widely available technologies and business skills in real market conditions.
- 42. It is expected that increased smallholder productivity combined with the use of environmentally friendly aquaculture best practices will have a positive impact on the agricultural landscape, especially the efficient use of scarce water resources and enhanced forest cover.

#### E. Risk identification and mitigation

- 43. At the programme level, the main potential risks to the programme are: (i) a policy environment that would hinder private-sector willingness to invest in aquaculture value addition based on smallholder production; (ii) budgetary constraints on county governments' capacity; (iii) administrative and practical challenges related to devolution to county governments; (iv) social norms that deter women and youth from sharing benefits; (v) climate and environmental risks; and (vi) fiduciary risks.
- 44. The overall programme structure and logical framework entail a robust approach to supporting rural poor people using sound business principles seeking an equitable balance in risk sharing among parties in 4Ps arrangements. Risks related to government policies and public budgetary constraints will be dealt with through policy dialogue and partnering with the Central Bank and National Treasury. Risks stemming from social norms and existing behaviours, for example in gender and youth participation, and traditional diets, will be addressed thorough awareness raising and developing economic incentives. Environmental and climate risks will be addressed through programme interventions and detailed assessments at programme startup. Fiduciary risks have been assessed and measures will be put in place to address both financial management and procurement risks.

## V. Corporate considerations

#### A. Compliance with IFAD policies

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

- 46. The SECAP considered the likely impact of significant additional spontaneous and programme-driven aquaculture development in the country, given that smallholder aquaculture poses medium risks to the environment. The overall climate risk is classified as moderate. This assessment concluded that the potential impacts of the programme are manageable or reversible. Therefore, the programme was categorized as category B. The SECAP note provides the comprehensive risk assessment and corresponding mitigation measures.
- 47. A strategy for gender mainstreaming and the social and economic inclusion of youth and other vulnerable and marginalized groups has been designed to: (i) ensure that men and women (including youth), and vulnerable and marginalized groups benefit equitably from the programme; (ii) reduce the gender gap across different social groups; (iii) build collaboration and synergies with government ministries to ensure inclusivity of all the vulnerable members of beneficiary communities; and (iv) build awareness of gender mainstreaming among all programme stakeholders.

#### B. Alignment and harmonization

- 48. The programme is in line with Kenya's poverty and social inclusion policies and strategies. Kenya's policy direction is articulated in various government documents such as the Poverty Reduction Strategy Paper, the 2010 Kenyan Constitution and Kenya Vision 2030, focusing on the elimination of rural poverty. The Government recognizes adequate nutrition as a human right and the 2011 Food and Nutrition Security Policy states that nutrition is central to human development. The programme's gender and youth strategy will be in line with the Government's gender-targeting approach and the Agribusiness Youth Strategy.
- 49. Financial management and anti-corruption arrangements for the programme are aligned with the Government's 2015 Financial Regulations, the 2012 Public Finance Management Act and national anti-corruption practices. Procurement arrangements for the programme will be aligned with the 2015 Kenya Public Procurement and Disposal Act to the extent that it is consistent with the 2010 IFAD Procurement Guidelines. The national procurement system will be applied to all transactions below the threshold for international competitive bidding. World Bank guidelines will be applied for all procurements above the threshold.

#### C. Innovations and scaling up

- 50. The programme combines scaling-up with the adoption of innovative approaches. By catalyzing the achievements of the Economic Stimulus Programme, it replicates that programme's successful approaches and consolidates the gains it made.
- 51. At the same time, the programme introduces number of innovations, such as the adoption of the farmer field school methodology for fish farming and other extension interventions. These innovations foster more holistic extension systems in which the technologies introduced for intensification: build farmers' capacity for climate-smart aquaculture; develop mechanisms for reaching women and youth; foster efficient and sustainable technologies; and reduce vulnerability to risks and shocks (strategic objectives 1 and 2 of the current RB-COSOP). The innovative partnerships and 4Ps under component 2 will reinforce market structures and access to financial services to revive the weak aquaculture value chain (strategic objective 3).

#### D. Policy engagement

52. The programme will facilitate policy review and advocacy to improve policy guidance at the national and county levels. The initial list of topics includes: (i) a review of the legal, policy and institutional environment for aquaculture development to ensure its relevance for the subsector's development; (ii) the development of aquaculture regulations linked to the newly enacted Fisheries Management and Development Act N°35 of 2016; (iii) development of guidelines for

using water bodies for cage culture; and (iv) the transfer of national legislation to the devolved counties' fisheries administrations.

## VI. Legal instruments and authority

- 53. A programme financing agreement between the Republic of Kenya 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 an appendix.
- 54. The Republic of Kenya is empowered under its laws to receive financing from IFAD.
- 55. I am satisfied that the proposed financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

#### VII. Recommendation

56. 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 highly concessional terms to the Republic of Kenya in the amount of forty million United Sates dollars (US\$40,000,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Gilbert F. Houngbo President

## Negotiated financing agreement

(Negotiations concluded on 3 October 2017)

Loan No:
Aquaculture Business Development Programme (ABDP) ("the Programme")
Republic of Kenya (the "Borrower")
and
The International Fund for Agricultural Development (the "Fund" or "IFAD")
(each a "Party" and both of them collectively the "Parties")
hereby agree as follows:

#### Section A

- 1. The following documents collectively form this Agreement: this document, the Programme Description and Implementation Arrangements (Schedule 1), the Allocation Table (Schedule 2), and the Special Covenants (Schedule 3).
- 2. The Fund's General Conditions for Agricultural Development Financing dated 29 April 2009, amended as of April 2014, 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.
- 3. The Fund shall provide a Loan to the Borrower (the "Financing"), which the Borrower shall use to implement the Programme in accordance with the terms and conditions of this Agreement.

#### Section B

- 1. The amount of the Loan is forty million United States dollars (USD 40 000 000).
- 2. The Loan is granted on highly concessional terms, and shall be free of interest but bear a service charge of three fourths of one per cent (0.75%) per annum payable semi-annually in the Loan Service Payment Currency, and shall have a maturity period of forty (40) years, including a grace period of ten (10) years starting from the date of approval of the Loan by the Fund's Executive Board.
- 3. The Loan Service Payment Currency shall be the United States Dollar.
- 4. The first day of the applicable Fiscal Year shall be the 1 July.
- 5. Payments of principal and service charge shall be payable on each 15 May and 15 November.
- 6. The arrangements for the Designated Accounts denominated in USD (the "Designated Accounts") opened by the Borrower through which the proceeds of the Financing shall be channelled as well as the dedicated bank account for receipt of

counterpart funding and the operational bank accounts shall be detailed in the Letter to the Borrower.

7. The Borrower shall provide counterpart financing for the Programme in an amount equivalent to thirty one million four hundred and twenty two thousand United States dollars (USD 31 422 000), mainly for salaries of government staff, operations costs, taxes and duties.

#### Section C

- 1. The Lead Programme Agency (LPA) shall be the State Department for Fisheries and the Blue Economy (SDF&BE) in the Ministry of Agriculture, Livestock and Fisheries (MoALF).
- 2. The Lead Programme Agency shall collaborate with the additional Programme Parties identified under paragraph 9, Schedule I hereto.
- 3. The Programme Completion Date shall be the eighth anniversary of the date of entry into force of this Agreement.

#### Section D

The Loan will be administered and the Programme supervised by the Fund.

#### Section E

- 1. The following are designated as additional grounds for suspension of this Agreement in accordance with Section 12.01(a)xxvi) of the General Conditions:
  - (a) Key Programme Coordination Unit (PCU) staff (Programme Coordinator and the Financial Controller) have been appointed, transferred or moved from the PCU without the non-objection of the Fund;
  - (b) The Programme Implementation Manual (PIM), or any provision thereof, has been waived, suspended, terminated, amended or modified without the non-objection of the Fund, and the Fund has determined that such waiver, suspension, termination, amendment or modification has had, or is likely to have, a material adverse effect on the Programme.
- 2. The following are designated as additional general conditions precedent to withdrawal in accordance with Section 4.02(b) of the General Conditions:
  - (a) The first Annual Work Plan and Budget (AWPB) shall have received IFAD's non-objection;
  - (b) The Designated Accounts in USD shall have been opened by the National Treasury;
  - (c) The Programme Coordinator and the Financial Controller within PCU shall have been appointed with terms and reference and qualification acceptable to the Fund;
  - (d) The PIM as described in Section II of Schedule 1, shall have been prepared in form and substance satisfactory to the Fund;
  - (e) A suitable off-the-shelf accounting software shall have been procured, installed and implemented at PCU; and
  - (f) The Programme Steering Committee (PSC) shall have been established.

3. The following are the designated representatives and addresses to be used for any communication related to this Agreement:
For the Borrower:
Cabinet Secretary The National Treasury P.O. Box 30007-00100 Nairobi Kenya
For the Fund:
The President International Fund for Agricultural Development Via Paolo di Dono 44 00142 Rome, Italy
This Agreement, dated, has been prepared in the English language in two (2) original copies, one (1) for the Fund and one (1) for the Borrower.
REPUBLIC OF KENYA
Authorized Representative
International Fund for Agricultural Development
Gilbert F. Houngbo President

#### Schedule 1

#### Programme Description and Implementation Arrangements

#### I. Programme Description

- 1. Target Population. The Programme shall benefit to male and female smallholders fish farmers involved in fish farming including youth benefitting from employment and self-employment opportunities along the segments of the aquaculture value chain.
- 2. Programme Area. The Programme is envisaged as national in scope but targeting counties with high concentrations of aquaculture activity, high production, existing sectoral infrastructure (processing, marketing and research), adequate water resources and marketing potential. The Programme will target fifteen counties (Migori, Kakamega, Homa Bay, Nyeri, Meru, Kirinyaga, Tharaka-Nithi, Kisii, Kisumu, Siaya, Busia, Embu, Kiambu, Machakos and Kajiado). The programme will target a number of selected counties during the first year and will further expand along the project implementation on a need basis.
- 3. Goal. The overall goal of the Programme is to reduce poverty and increase food security and nutrition in rural communities.
- 4. Objectives. The Programme development objective is to increase the incomes, food security and nutritional status of the wider communities of poor rural households involved in aquaculture in the targeted counties.
- 5. Components. The Programme shall consist of the following two mutually supportive Components concentrated on strengthening the aquaculture value chains to benefit smallholder fish producers, small-scale supporting service providers and their rural communities.
- 5.1 Component 1: Smallholder aquaculture development. This component aims at improving the production and productivity as well as the food security and diet quality of smallholder farmers through the following activities:
  - Subcomponent 1.1: Smallholder aquaculture production. This subcomponent will focus on improving the productivity and incomes of smallholders with the land and resources to farm fish for profit through the following activities: (i) the mobilisation and sensitization of the communities to aquaculture-related opportunities through different measures, including formation of Smallholders Aquaculture Groups (SAGs), in order to ensure inter alia the inclusion of women and youth (ii) aquaculture infrastructure development (iii) the support of small-scale producers by reviving small-scale aquaculture input industry development to establish robust links to existing accessible value chain operators or to produce their own supplies and, (iv) training and capacity building tailored to the specific needs of beneficiaries by county and sub-county in order to improve aquaculture productivity.
  - Subcomponent 1.2: Development of enterprises in support of smallholder aquaculture production. This subcomponent aims at promoting the establishment/strengthening of youth dedicated Aquaculture Support Enterprises (ASEs), to be engaged in any business activities related to the aquaculture value chain, as a means of income generation and empowerment for non-producers of fish, in order to improve their access to resources and productive assets.

• Subcomponent 1.3: Community nutrition initiatives. This subcomponent aims at contributing to good nutrition using fish as the food vehicle to improve diet quality in the targeted counties through (i) the funding of nutrition surveys and studies, curriculum and training materials development, and also (ii) a support to community nutrition actions to demonstrate the benefits of fish farming and fish utilization for sustainability.

- 5.2 Component 2: Aquaculture value chain development. This Component aims at improving the efficiency of the whole aquaculture value chain with a concentration of programme efforts and resources on operations including smallholders through the following activities:
- Subcomponent 2.1: Smallholder-based aquaculture value chain development. This subcomponent will focus on contributing to the establishment of a commercially viable aquaculture value chain in Kenya, with a focus on small- and medium-sized aquaculture producers by promoting (i) public private producer partnerships (PPPPs) based on mutually beneficial contractual obligations among the Programme under the form of Independent Aquaculture Aggregators (IAAs) or Lease contracts, and also (ii) investments for ASEs and SAGs through a business plan competition window allowing the identification of business opportunities on specific segments of the value chain.
- Subcomponent 2.2: Aquaculture sector enabling environment and support services. This subcomponent aims at supporting the strengthening of the overall enabling environment needed for the sustained development of the sector through: (i) policy engagement, support and technical advice to Government (ii) upgrading of public infrastructure, (iii) support to extension services, (iv) support for establishing/strengthening of aquaculture training centres for extension staff, (v) support to research activities linked to the Programme objectives, (vi) support of fish health and surveillance services, (vii) support for quality assurance services and (viii) strengthening financial services for the aquaculture value chain to allow the actors access to finance.

#### II. Implementation Arrangements

- A. Organisation and Management
- 6. Lead Programme Agency (LPA). The LPA will be the SDF&BE within MOALF.
- 7. Programme Steering Committee (PSC).
- 7.1 Establishment and Composition: A PSC under the chairmanship of the Principal Secretary SDF&BE will be set up to provide overall policy guidance to the Programme. The other members will be drawn from National Treasury, the State Departments of Devolution, Cooperatives, Water, Labour and Social Services, Health and two County Executive Committee Members (CEC). The PSC will meet quarterly.
- 7.2 Responsibilities. The main responsibility of the PSC will be to ensure successful implementation of the Programme. The PSC tasks include inter alia: reviewing Programme progress against targets, assessing management effectiveness, deciding on corrective measures where appropriate, identifying lessons learned and good practices, approving AWPBs and reviewing progress and achievements.

- 8. Programme Coordination Unit (PCU).
- 8.1 Composition. The PCU will be established comprising a team of officers with appropriate programme management skills that will be recruited through a competitive process led by the State Department of Fisheries with whom the PCU will interact directly on administrative matters.
- 8.2 Responsibilities. For the day-to-day coordination and management of the Programme, the LPA will set up and delegate oversight and supervision responsibilities to PCU. In addition, the PCU responsibilities will include inter alia: (i) the facilitation of a conducive environment for Programme activities, including the multiple partnerships required for effective implementation, (ii) the implementation of the Programme activities in line with the AWPBs approved by the PSC and IFAD, (iii) the development of operational strategies and establishment of effective tools for Programme implementation, (iv) the financial and administrative management of Programme resources, preparation of AWPBs, mobilisation and coordination of implementation partners, (v) the monitoring and recording progress and (vi) the procurement of services and supplies.

#### B. Programme Implementation

The implementation of the programme will be mainstreamed into the Government of Kenya (GoK) system, both at national and county level.

- 9. At National Level. The LPA will collaborate and enter into Memorandum of Understanding (MoUs) with Programme partners such as Governments of each targeted county as well as with service providers for the Technical Assistance (TA) in order to inter alia, support the implementation of the programme components and any other relevant activities; such as policy dialogue, implementation of Environmental and Social Management Plans, Knowledge Management, and M&E (Baseline and impact studies). In this regard, the LPA will enter into contractual agreements with service providers/partners, inter alia to carry out the following activities (i) support to PCU for the implementation of component 1 and overall support to the County teams, (ii) support to the implementation of Farmers Field Schools, (iii) support to training of the key youth groups on entrepreneurial skills, and (iv) support the implementation of PPPP/business plan activities.
- 10. Among other things, each MoU/contractual agreement shall clearly specify, the scope of the work to be undertaken, staffing and institutional arrangements, budget, reporting and fiduciary requirements, implementation records, performance evaluation criteria where relevant, and it will indicate clearly that a register of assets acquired by the financing will be maintained. The MoUs shall be submitted to the Fund for its prior approval and shall not be modified without the prior consent of the Fund.
- 11. At County level. A County Programme Implementation Team (CPIT), headed by the County programme coordinator from the Fisheries Department, will be established and will be responsible for implementation of programme activities. The team will comprise mainly staff from the County Departments of Fisheries with participation of county staff from other relevant Departments. The team will be responsible for mobilization and awareness creation about the programme, monitoring and technical backstopping, and extension and advisory services. It will work directly with programme beneficiaries and will report to the CEC in charge of fisheries.

- C. Knowledge management (KM) and Monitoring and Evaluation (M&E)
- 12. The Programme KM/M&E system managed by the PCU shall be set up within six months of programme implementation and shall be deployed at two levels of programme management, at PCU and County level. KM/M&E system shall be based on the quantitative and qualitative indicators provided in the Logical Framework and aligned to IFAD's recommended analytical structure, the Results and Impact Management System (RIMS). These indicators will be reviewed and finalised during Programme start-up with gender-sensitive indicators included as required. In addition, since some of the activities will be contracted out to service providers and private sector partners, explicit monitoring requirements will be included in all agreements as part of their contractual obligations and the M&E system will provide an effective tool for the PCU to monitor the performance of service providers.
- D. Programme Implementation Manual (PIM)
- 13. Preparation. The LPA shall prepare a consolidated draft PIM acceptable to the Fund. The PIM shall include among other arrangements: (i) institutional coordination and day-to-day execution of the Programme; (ii) Programme budgeting, disbursement, financial management, procurement, monitoring and evaluation, reporting and related procedures; (iii) detailed description of implementation arrangements for each Programme component; and (iv) such other administrative, financial, technical and organizational arrangements and procedures as shall be required for the Programme.
- 14. Approval and Adoption. The LPA shall forward the draft PIM to the Fund for no objection. The LPA shall adopt the PIM, substantially in the form approved by the Fund, and the LPA shall promptly provide copies thereof to the Fund. The Borrower shall carry out the Programme in accordance with the PIM and shall not amend, abrogate, waive or permit to be amended, abrogated, or waived, the aforementioned manual, or any provision thereof, without the prior written consent of the Fund.

#### Schedule 2

#### Allocation Table

1. Allocation of Loan Proceeds. 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	IFAD Loan Amount Allocated (expressed in USD)	Percentage (net of taxes)
I. Goods, Services a Inputs	nd 10 700 000	100%
II. Grants and Subsidies	6 600 000	100%
III. Consultancies	9 100 000	100%
IV. Operating costs	4 500 000	100%
V. Salaries and Allowance	es 5 100 000	100%
Unallocated	4 000 000	
TOTAL	40 000 000	

The category "Goods, Services and Inputs" includes inter alia civil works for improvement of public infrastructure under sub-component 2.2. and preparation of the PCU offices and training facilities for aquaculture. It also covers water supply and fences for new and rehabilitated smallholder aquaculture production facilities and equipment for aquaculture inputs under component 1, costs for strengthening research institutions, programme vehicles and office equipment. The category also includes the meeting costs, training and workshops for preparing SAGs, youth ASEs, training of trainers, programme dissemination and extension activities.

The category for "Consultancies" includes inter alia the Programme's technical assistance under component 1, the FFS, back-stopping the youth ASEs and surveys and studies under component 1. Under component 2, the category includes inter alia the costs for the advisors, the costs of the transaction advisers' technical assistance, support for the PPPP and Business Plan (preparation and evaluation) activities as well as other required technical assistance under sub-component 2.2.

"Grants and Subsidies" includes inter alia the costs for supporting the business plan implementation under the ASEs, the SAGs, the aggregators and the PPPPs.

"Operating Costs" includes inter alia extension costs, office and vehicle running costs for the National and Regional PCUs, and operating costs for the technical assistance.

"Salaries and Allowances" cover inter alia the National and Regional PCU costs as well as field allowances for extension agents.

2. Start-up Costs. Withdrawals in respect of expenditures for start-up costs incurred before the satisfaction of the general conditions precedent to withdrawal shall not exceed an aggregate amount of USD 550 000.

3. Retroactive financing. As an exception to Section 4.08(a)(ii) of the General Conditions, specific eligible expenditures up to the equivalent of three hundred and sixty thousand United States dollars (USD 360 000) incurred from 1 October 2017 to the date of entry into force of the Financing Agreement may be pre-financed by the Government and reimbursed from the Financing after the Financing Agreement has entered into force and the conditions precedent to withdrawal have been met. They will be included in the first AWPB, and any purchases of goods and services disclosed in the Procurement Plan.

#### Schedule 3

#### **Special Covenants**

In accordance with Section 12.01(a)(xxiii) of the General Conditions, the Fund may suspend, in whole or in part, the right of the Borrower to request withdrawals from the Loan Account if the Borrower has defaulted in the performance of any covenant set forth below, and the Fund has determined that such default has had, or is likely to have, a material adverse effect on the Programme:

- 1. Anticorruption. The Borrower ensure that the systems governing the expenditure from the Programme funds will be subject to national and IFAD anti-corruption practices and in this regard, IFAD's anti-corruption policy shall be communicated as appropriate, including its concept of zero tolerance and the mechanisms for reporting suspected irregular practices.
- 2. SECAP Procedures. The Borrower shall ensure, as a key focus of the Programme, that water quality and quantity as well as appropriate agro-ecological zones for aquaculture development are given sufficient attention during the programme implementation.
- 3. Gender strategy. The Borrower shall ensure that a strategy for gender has been designed to contribute to the social and economic inclusion of youth, women and other vulnerable and marginalised groups and offer them an equal opportunity to participate and benefit from the programme activities.
- 4. Internal audit. The MoALF shall designate one of the internal auditors on secondment from National Treasury to audit the PCU and periodically visit and review the internal audit processes performed by internal auditors at Programme Counties. Internal audit reports may be requested by IFAD in a mutually acceptable manner.
- 5. Audit Committee. A MoALF Audit Committee shall be formed to review and ensure action is taken on internal and external audit findings and to review regular reports on budget execution.

## Logical framework

Results Hierarchy	Indicators				Means of verification			Assumptions (A) and Risks (R)
Results merarchy	Name	Base- line <sup>1</sup>	Mid- Term	End Target	Source	Frequency	Responsible	
Outreach:	# of persons receiving technical and/or financial services promoted or supported by the Programme. <sup>2</sup>	0	150,00 0 (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:	# households have improved asset ownership index compared to baseline.*	0	17,750	35,500	RIMS baseline and impact surveys, household survey.	Year 1, MTR & Year 8.	PCU.	A: Favourable conditions for domestic fish trade.
Reduced poverty and increased food security and nutrition in rural communities.	% good dietary diversity (data for households and women).*3	0	30% increas e	60% increase	RIMS baseline and impact surveys, household survey.	Year 1, MTR & Year 8.	PCU.	A: Favourable conditions for domestic fish trade.
Development Objective:  To increase the incomes, food security and nutritional status of the	% of target households reporting increased annual net income from baseline, disaggregated by fish farmers, processors and traders.*	0	30%	50%	Fisheries enterprise records, Economic Surveys, Programme reports, baseline and impact studies	Annual.	PCU.	A: Favourable conditions for aquaculture farming.
wider communities of poor rural households involved in aquaculture in the targeted Counties.	% increase in national annual fish consumption, (current national average 3.6 kg/capita).	0	10%	25%	Household Food Survey.	Year 1, MTR & 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	# households reporting an increase in production and graduated from level 1 (subsistence) to level 2 (semi-commercial).*	0	11,700	16,400	Economic Surveys, Programme reports (baseline and impact studies), specific survey to monitor performance of C1 farmers.	Six-monthly.	PCU, service provider	
of smallholder farmers.	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.*	0	15,000	24,800	Programme reports (baseline and impact studies).	Annual.	PCU.	
	# persons reporting an increase in consumption of fish.*	0	120,00 0	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.*	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.

<sup>&</sup>lt;sup>1</sup> All without-Programme data to be determined in baseline survey and verified/updated at Programme start.

<sup>2</sup> All target groups are disaggregated by gender and age. Each farmer or non-producing value chain actor represents an average household of six persons.

3 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.

Results Hierarchy	Indicators				Means of verification			Assumptions (A) and Risks (R)
Results meralthy	Name	Base- line <sup>1</sup>	Mid- Term	End Target	Source	Frequency	Responsible	
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.	R: Availability of land and water for construction of new facilities. R: High cost of rehabilitation.
	# persons trained in business management. 4*	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.*	0	25,000	35,400	PCU M&E surveys and reports.	Six-monthly.	PCU	
Outcome 2:	value of fish products marketed by Programme beneficiaries. <sup>5</sup>	0			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
To improve the efficiency of the value chain in fish and fish products								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	# 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.
value chain development.	# smallholder households included in outgrower or aquahub schemes and linked to the market.*	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.*	0	170	170 <sup>6</sup>	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.

<sup>&</sup>lt;sup>4</sup> 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.
<sup>5</sup> The baseline value for different fish products will be estimated during baseline survey.
<sup>6</sup> Exact number to be defined during needs assessment.