

# African Aquaculture Microfinance Facility

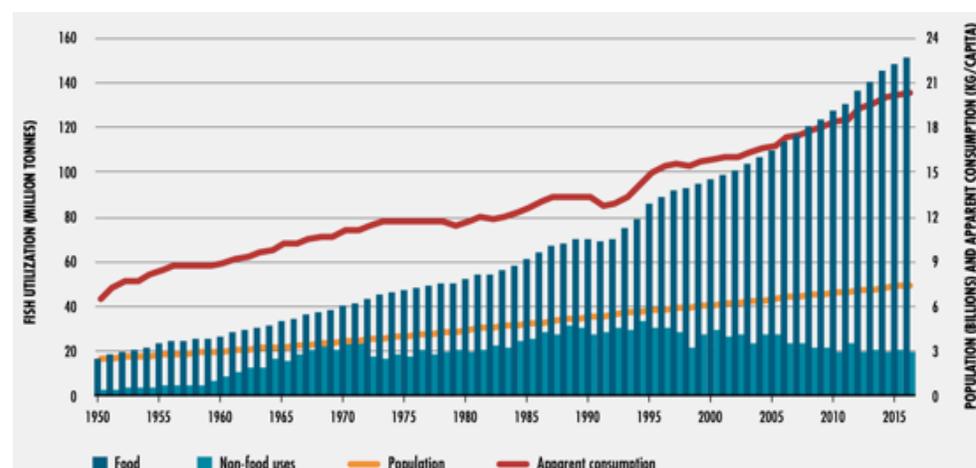
Promote the adoption of sustainable, environmentally friendly aquaculture practices



## The case for aquaculture

Over the past 50 years, global food fish consumption has outpaced population growth and the sector is growing faster than all terrestrial animal meat. However, depending on the estimate, approximately 30-40% of the world's fisheries are exploited or fully depleted (versus 10% in 1974), and only approximately 20% of the world's stocks have been assessed. **The aquaculture sector is growing to meet this demand but very little of this production is done in an environmentally-sustainable manner.** Sub-Saharan Africa is seeing strong aquaculture growth rates, which, while positive for fish stocks, could have long-term negative environmental implications if an industry-wide adoption of environmental sustainability principles (and the tools to implement them) is not made.

## Fish consumption on the rise



World fish utilization and apparent consumption.

Source: FAO (2018): The State of the World's Fisheries and Aquaculture

**Approximately 50% of global fish production is done by the world's 59 million small-scale fishers and fish farmers, 90% of which goes to local consumption.** In Africa, the estimate of the proportion of fish farmers that are small-scale is 90%, and— like small-holder farmers — they have limited access to finance, inputs, and the technical expertise needed to grow their enterprises in an environmentally friendly and energy efficient way.

## Introducing the African Aquaculture Microfinance Facility

### Goals



The Facility would serve as a microfinance investment fund to make loans directly to local microfinance institutions (MFIs) for the capitalization of a sustainable aquaculture-focused loan portfolio, as well as provide technical assistance (TA) to the MFI to enhance ecological and responsible fish farming, including developing products for aquaculture, loan covenants that involve environmental protection, and portfolio monitoring tools to monitor the environmental impact of its aquaculture portfolio.

### Set-up



Like other major microfinance investment funds, the Facility would:

- Be supported by a first-loss pool or guarantee provided by DFIs and multi-lateral banks
- Be capitalized by impact investors that are seeking returns for sustainable agriculture in line with those generated through microfinance (i.e. 3-4% per annum)
- Provide grant capital for TA that would be financed by philanthropic donors, to be delivered by leading NGOs with subject matter expertise that can provide guidance on environmental best practices

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## Impact Focus

The Facility seeks to address SDGs 1 (No Poverty), 2 (Zero Hunger), 12 (Responsible Consumption and Production), 13 (Climate Action), and 14 (Life Below Water). The major development impacts of the Facility would be: **(1) more environmentally sustainable food production and reduced stress on local fisheries and fish stocks (which would also improve biodiversity), (2) poverty alleviation through sustainable livelihoods, (3) reduced GHG emissions due to a shift to a lower-emission food source, and (4) improved nutrition for surrounding communities.**

Enhancing food security is especially critical in Sub-Saharan Africa, noting that 22 African countries experience chronic food shortages and fish as a protein source is especially scarce for Africans, whose per capita fish consumption is about one half of the rest of the world. Per the FAO, if aquaculture is adopted on only 1% of the 250 million hectares of the suitable land identified, then the continent could produce 3.5 million more tons of fish per year. However, it is important that this growth be accompanied with ecologically minded practices to ensure the long-term sustainability of this protein source.

## Next steps: Feasibility Study

In order to validate the investment strategy of the African Aquaculture Microfinance facility, a feasibility study is needed. Such a study would be undertaken in the **three pilot markets for the facility – Uganda, Kenya, and Tanzania** – to:

- Identify target MFI partners;
- Identify potential end-borrowers, including individual fish farmers, cooperatives, and other SMEs involved in the local value chain;
- Assess market demand and absorptive capacity (both on the MFI and end-borrower side);
- Determine loan size and potential pricing (both on the MFI and end-borrower side): for fish farmers, this includes assessing a variety of factors, including pond type, intensity level, land ownership, fish feed type, equipment and working capital needs;
- Assess credit quality and credit risks (both on the MFI and end-borrower side) and determine fund currency;
- Consideration of options for tailoring loan terms to aquaculture, including collateral and land ownership requirements, matching loan repayments to breeding cycles, etc.;
- Assess potential use of remote monitoring technologies to lower monitoring costs;
- Map the competitive environment and identify the UVP of the Facility for MFI partners;
- Identification key social impacts of Facility, with special emphasis on contributions to local food security & gender empowerment;
- Determine the cost efficiency of different sustainable aquaculture approaches for different target markets (such as change of fish species, change of feed source, reduction in feed ratio, protection of wild fish stocks, creation of new waste disposal methods, reduced use of antibiotics, etc.), including which have the biggest impact on local environmental concerns;
- Determine the TA needs per market, including whether an ad hoc or packaged service approach is better;
- Identify potential technical assistance service providers, including intl' NGOs such as WorldFish or the Aquaculture Stewardship Council;
- Determine overall capital requirements for the Facility; and
- Assess the TA to investment capital ratio.

It is estimated that the feasibility study for the three markets will take 6 months to complete at an estimated cost of CHF 150'000. Based on the findings, the next step would be to complete the structure and design of the Facility. **Currently, a regionally-focused pilot-to-scale approach is being considered for the Facility, meaning that the Facility would first make investments in MFIs in the target markets and – if proved successful from an impact and financial sustainability perspective – continue to expand throughout Sub-Saharan Africa.** The current estimate of the size of the Facility is CHF 4-6m per country, resulting in an initial capital requirement of CHF 12-18m for the pilot stage. These figures will be further validated during the feasibility study.

## About iGravity

iGravity is an advisory firm specialized in impact investment and innovative finance solutions established in March 2017 with the mission of connecting disruptive ideas, visionary people, institutions and capital to address some of the most pressing social issues. Most of iGravity's *Research & Advisory Services* center around the design and development of financing structures and partnerships that mobilize resources to achieve the SDGs. Under *Investment Solutions*, iGravity offers access to diversified impact investment strategies like for example the proprietary Impact Investment Index. Through its *Impact Venture Investments*, iGravity identifies, supports and invests in businesses that solve social issues with a disruptive and scalable model.