Concept Note for Grant Proposals (Max 2000 words)

1. Grant Sponsoring Division: PMI	2. Co-sponsoring Division(s) ¹ : ESA, ECG			
3. Title of the grant: Promoting sustainable technologies and marketing strategies to increase incomes and				
reduce food losses in small fish systems				
4. Value of IFAD grant: (in US\$) 2 million	5. Co-financing: (in US\$) 0.5 million			
6. Implementation period: (<i>Months</i>): 36 months 7. GRIPS ID : 2000002827				
8. Selected Strategic Priority ² : 1. Production for food security, nutrition and income generation				
9. Window: Indicate Global/Regional ⊠Country □ 10. Countries: <i>Tanzania and Uganda</i>				
11. Recipient: Select <u>one</u> of the following options				
 Competitive selection at CN stage □ and name of recipient 				
 To be selected competitively at design stage ☒ 				
 Direct selection □ and name of recipient 				

12. Rationale for recipient selection and recipient capacity

The Recipient will be selected through a competitive bidding process supported with an open Call for Proposals. Eligible applicants will include multinational, regional, inter-governmental or national institution, with a presence and relevant experience in the countries targeted by this grant. This includes Regional Fisheries Bodies, UN agencies, CGIAR centres, CSOs/NGOs/CBOs, academic/ research institution or private sector. A key intention of the grant is to build local capacities to strengthen sustainability of interventions, therefore, a recipient which is a multinational or regional body needs to demonstrate linkages (expression to partner) with local institutions (NGOs, NARIs etc.), and that a significant share of the grant funds is to be channelled through these local institutions. An organization may apply as single entity or form a consortium with other organizations to expand their capacities, capabilities and outreach. Applicants must demonstrate a strong focus, expertise and significant working experience in the promotion of technological solutions, research, resource management and business development in fisheries, aquaculture and related food systems. The criteria for recipient selection will include: (a) experience with similar projects and the particular sector (b) demonstrated expertise in the intervention areas (c) presence in the targeted region and demonstrated linkages with local institutions (d) contribution to the cost of project of at least 25% (e) Commitment to facilitate scaling up of promising technologies.

13. Background/relevance

a) Background: This project aims to develop, pilot, transfer and promote viable sustainable technologies, principally solar-based, and marketing strategies to improve incomes and reduce food losses in the "small fish" systems. It targets two countries - Uganda and Tanzania, with a focus on Lake Victoria. "Small Fish" refers to a diverse group of fish species, typically tiny in size (generally around 10 cm long at mature size) which are produced in large quantities in inland and marine water systems. These types of fish contribute immensely in the livelihoods of many rural communities in Africa for nutrition, employment, income and other benefits. Small fish are especially rich in Calcium, Zinc, Iron, Vitamin A, Omega-3 fatty acids and other nutritional benefits. In Lake Victoria, which will be a major focus of this project, small fish account for nearly 60% of total fisheries production, representing about 700,000 tonnes valued at nearly USD 230 million. About 400,000 people (including nearly 300,000 women) earn their livelihood from small fish in the targeted countries. However, this fishery suffers from high post-harvest losses, estimated variously at 30-50% of the production, poor handling and other constraints. Up to 70% of small fish is sold in the market as animal feed, which fetches a lower price than for direct human consumption, therefore a loss in potential income.

These constraints can be addressed through technological improvements combined with better organization and marketing strategies. Potential areas of interventions that the grant will aim to tackle include;

- Harvesting small fish with the use of artificial attraction light fuelled with kerosene (a hydrocarbon fuel) which is energy inefficient, costly, and risky to human and environmental health.
- Poor handling and processing techniques based on basic traditional methods of sun-drying fish, with risk of contamination and high losses in food and nutritional value.
- Under-developed capacity for value addition and preservation, leading to low product quality, shorter shelf life and reduced nutritional benefits.
- · Poor marketing strategies, in particular small fish producers lack of access to higher value markets

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¹ Interdivisional and interdepartmental collaboration is strongly encouraged.

² The indication of a strategic priority **only applies to Global/Regional grants**.

The intervention focuses on technological improvements and marketing strategies to reduce food losses, raise product quality, access higher value outlets, increase consumption and incomes from small fish. The project contributes to the goals of IFAD's Strategic Framework 2016-2025 by increasing rural people's productive capacities, market participation and strengthening sustainability and to IFAD11 Commitments (e.g. no. 2.2). It contributes on some of the SDGs linked to IFAD results (e.g. SDG1 on poverty, SDG2 on hunger and food, SDG5 on gender inequality and SDG14 on sustainable use of aquatic resources. The project responds to objective no. 1 of IFAD Policy for Grant Financing (2019-2021), to promote innovative, pro-poor approaches and technologies with the potential to be scaled up for greater impact. Specifically the grant answers on the key corporate priorities, namely; (i) Sustainable Environment – Promoting green energy for fish harvesting and preservation; (ii) Gender empowerment – Women dominate the small fish value chain and will be highly targeted (iii) Nutrition – Small fish have high nutrition benefits, which will be enhanced through food loss-reducing technologies and innovative value-added products; (iv) Poverty focus – increased incomes for fishers and post-harvest actors. Fisheries is a key sector for rural economic growth and food security in the targeted countries, hence the grant is aligned with the national development priorities.

14. Direct and indirect target group

Interventions at the small fish production and post-harvest levels ensure that both men and women are included, considering the highly gender disaggregated roles. Working with the local organizations, the grant targets a total of 5,000 direct beneficiaries. At the fishing level the main intervention will be to promote access to effective solar lighting technologies, which will benefit 2,000 mostly fishers, at least 50% youth. At the post-harvest level, it will target 3,000 mostly female fish processors and traders with improved technologies for fish preservation, value addition and marketing strategies and access to higher value markets. There will be at least 5,000 indirect beneficiaries, including fish consumers of better quality fish and various providers of technologies and services.

15. Goal, objectives and expected outcomes:

Objectives and expected outcomes/results

Goal: Improved, inclusive, nutritious and sustainable livelihoods from small fish systems

Development Objective:

To reduce food losses, improve incomes and nutrition from small fish systems

Specific Objectives:

- i) To promote sustainable technologies in fishing and processing/preservation of small fish species and reduce food losses
- ii) To improve marketing strategies, enhance incomes and nutrition from small fish species

16. Key Result areas/outcomes and activities by component:

The project will have three components with corresponding outcomes /result areas and activities as outlined below;

Component 1: Promoting sustainable technologies and marketing strategies for small fish

Result Area 1.1: Solar technologies developed and promoted for fishing, processing/preserving small fish species

- Activity 1: With the private sector, develop and promote improved solar models for processing and preservation of small fish species
- Activity 2: With the private sector, promote adoption of solar technology in harvesting small fish species

Result Area 1.2: Improved marketing strategies and nutrition benefits from small fish

- Activity 1: Capacity building on innovative high quality small fish-based products (including small-fish enriched products; labelling and packaging; develop quality standards)
- Activity 2: Promote consumption of small fish products targeting different income groups and ensuring linkages to government programmes e.g. school food programmes
- Activity 3: Promote innovative marketing approaches for high quality products (e.g. market linkages for producers of high quality small fish products with higher-end market outlets/ supermarkets)

Component 2: Knowledge management on small fish systems

Result Area 2.1: Knowledge basis developed and disseminated for sustainable small fish system

- Activity 1: Conduct studies (Desk reviews and short surveys) on the context and status of post-harvest losses in the small fish system etc.
- Activity 2: Disseminate information, knowledge and lessons from the project results
- Activity 3: Based on the results of this grant and consultation with key stakeholders, prepare a draft concept note of potential fisheries sector investment programme for the targeted countries

Component 3: Project Management and M&E

Result area 3.1: Project effectively managed, monitored and evaluated

- Activity 1: Project management
- Activity 2: Procurements
- Activity 3: Monitoring and evaluation

17. Project cost: The total project budget is USD 2,500,000, of which IFAD contribution is USD 2,000,000 and partner contribution is at least USD 500,000

18. Risks:

The policies in respective targeted countries favour fisheries sector development, however, government capacity to promote sustainable fisheries management remains uncertain. Therefore a key risk is the likely unsustainable extraction of fisheries resources, which can be mitigated by greater participation of community institutions in resource management. Climate change is another risk on fisheries ecosystems and fish stocks, which will be mitigated with closer monitoring of climate events and identifying actions that can be included in the AWPB. Furthermore, this project will promote solar technologies which will strengthen the resilience of targeted communities. Climate risk screening will be included in the project design, taking into account IFAD technical guidelines on climate change adaptation into fisheries and aquaculture projects. Low technical and human capacities in the selected countries also pose risks, which will be addressed through effective training. Changes in the policy and investment environment can pose some risks too, which can be mitigated through involving a broad range of partners and effective communication.

19. Monitoring & Evaluation, KM and Learning:

The M&E approach of the recipient institution can be adopted if it is sufficiently robust, otherwise it will be done in accordance with IFAD Practical Guide for M&E. Ensure the log frame is fully developed with indicators for outputs, outcomes, impacts and outreach, supported by theory of change. Baseline study will be done to determine the indicators at the start of project and tracked during implementation. M&E will be conducted by the Project Management Team and results reviewed at regular meetings and annual workshops. The Recipient will submit progress reports every 12 months to IFAD, covering both technical and financial aspects, which should highlight implementation issues and follow-up actions to be taken. Knowledge products will be produced and disseminated accordingly.

20. Supervision modalities:

IFAD has the responsibility for project supervision, and this should be specified in the Grant Agreement between IFAD and the Recipient. IFAD will undertake one supervision mission during the implementation phase of the project and supervision costs will be earmarked by the Sponsoring division (PMI).

21. Linkages:

The countries targeted have identified fisheries and aquaculture in their COSOPs as priority economic sectors to contribute in their food security and socio-economic development. However, none of these countries currently has a stand-alone IFAD fisheries/aquaculture investment programmes. In a way, this grant will act to stimulate IFAD's potential entry with investment programmes to scale up the technologies that will be piloted. Nonetheless there are IFAD technology oriented fisheries/aquaculture interventions in the region that will be relevant for linkages to draw/share lessons and results; for instance the *Aquaculture Business Development Programme* in Kenya, *Fisheries Resources Management Programme* in Eritrea and *Strengthening Capacity of Local Actors in Nutrition-Sensitive Agrifood Value Chains* in Zambia and Malawi. The project will explore SSTC with the Indian Council of Agricultural Research (ICAR), which comprises of 100+ research institutes in the areas of renewable energy, agricultural mechanization and post-harvest machinery (including fisheries). Design models and technical specification sheets could be shared for their validation etc. Also with Cambodia company, Kamworks, who have developed a solar-powered lantern ("Moonlight") used cost-effectively for fishing. Attention will be given to opportunities for knowledge and technology transfer from projects and private-sector companies.

22. Scaling up:

The project is built around piloting sustainable technologies combined with effective marketing strategies that can be scaled up for increased incomes for operators in small fish systems. The project will facilitate studies and demonstrating the technologies, at the same time creating linkages for fishers/ processors/traders with private sector (e.g. technology providers and high value markets, supermarkets etc.) as a way to sustain access to the technologies and markets beyond the project life. The dissemination of appropriate technologies will require training and a period of coaching in the adoption of more energy-efficient technologies to reduce post-harvest losses. Some of the technologies from this project can be scaled up by future IFAD investment programmes or other government and private sector interventions.

23. Sustainability:

Sustainability will be ensured by establishing strong partnerships and networks with private sector and public institutions. Attention is given to building the capacity of key value chain actors and national institutions to prolong

their services to the project beneficiaries. Strong linkages between targeted communities and both public and private sector agencies should ensure that necessary support is available to the beneficiaries beyond the project. Effective business systems also will be established at a collective or cooperative level.

24. Other aspects:

Innovation is at the key front of this project, with emphasis on technologies to be developed and piloted combined with marketing strategies, with potential for scaling up through IFAD investment programmes or other interventions.