Terms of Reference

Promoting sustainable technologies and marketing strategies to increase incomes and reduce food losses in small fish systems

Background

- 1. Close to 200 million people across the world depend on fisheries and aquaculture as their principle source of income and livelihood. This includes 60 million fishers and close to 140 million people in post-harvest activities fish traders and processors involved in activities such as drying, salting, icing, freezing, producing fish oil. Others are involved in ancillary services and in the supply chains of equipment and inputs, including boat builders, engine repairers, net menders, and suppliers of inputs into aquaculture. In Africa, about 27 million people earn their livelihood from fisheries and aquaculture, of which 6 million are in primary production and 21 million in post-harvest activities. Women form a large percentage of people engaged in fisheries and aquaculture value chain, responsible for nearly 90% of the sector's post-harvest activities. About 90% of fish workers are small-scale operators, often considered among the poorest population groups in most countries, with less access to social services and infrastructures and tend to be marginalized.
- 2. Over the past 25 years, freshwater capture fisheries and aquaculture have steadily expanded while marine capture fishery has been relatively static. Global fish production reached about 171 million tonnes in 2016, of which 53% was from capture fisheries and 47% aquaculture, with a combined first sale value of about USD 362 billion. Per capita fish consumption grew from 9.0 kg in 1961 to 20.5 kg in 2017, driven by increased production of diverse fisheries resources, reduced wastage and increased awareness of the nutritional benefits of eating fish. Currently fish contributes about 18 percent of animal protein consumed by the global population, providing 3.2 billion people with almost 20 percent of their animal protein intake. However, fish consumption remains low in Low Income Food Deficit countries, at an average of 8 kg per capita compared with 25 kg in developed countries.
- 3. Small (pelagic) fish species have played a big part in raising the economic importance of fisheries in nutrition, incomes and other benefits. Small fish species represent a group of naturally occurring fisheries that are abundant in nearly all African natural lakes and reservoirs and contribute immensely in the livelihoods of rural communities for nutrition, employment, income and other benefits. These small-bodied fish are short-lived with high reproductive cycles and can easily double or triple their biomass in a short time, which puts them less at risk of overfishing. Presently about one million tonnes of small fish species are produced annually from African inland lakes and reservoirs, representing about 40 percent of the total fish catches from these waters. With proper management it is estimated that African lakes and reservoirs have the potential to sustainably produce up to 6 8 million tonnes of small fish species annually. Small fish species are especially rich in Calcium, Zinc, Iron, Vitamin A and provide other nutritional benefits. Despite their importance, small fish species often are regarded as of low economic value (commonly called "trash fish" or "poor man's food") and consequently they are afforded low development priorities.
- 4. Lake Victoria is an important source of small fish species and will be the main focus of this project. Lake Victoria is Africa's largest and most productive fishery system,

producing about one million tonnes of fish per year in total, of which 700,000 tonnes valued at nearly USD 230 million are small fish species, mainly a fresh-water sardine fish locally called dagaa (or mukene/omena). The lake's small fish species directly support the livelihoods of about 380,000 people including 80,000 fishers and 300,000 women fish processors and traders. With proper management this fishery has the potential to provide employment and incomes to many thousands more, including the youth and women. There are opportunities in fish production, processing and in fish trade activities, which is fast expanding from national to regional markets and new opportunities to package and sell this fish in higher end markets. There are also entrepreneurial prospects especially for the youth in ancillary services supplying and maintaining boats, engines, nets and other fish production inputs.

5. Fisheries and aquaculture are an important sector in IFAD's programmes, contributing significantly to IFAD's mission to reduce rural poverty and increase food and nutrition security. Between 1979 and 2018 IFAD supported over 100 investment projects involving communities whose livelihoods depend on aquatic resources in small-scale fisheries, small-scale aquaculture and coastal zones, which were implemented in 36 IFAD Member States. The total cost of these programmes were US\$ 3,4 billion, of which IFAD contributed 46.2 per cent, representing 8.1 per cent of all IFAD's loans and grants approved during that period (IFAD, 2018). Since 2004, IFAD has also invested in 17 grants supporting research, innovations, capacity building, technology development and other interventions in fisheries and aquaculture. These projects have generated useful lessons, wealth of knowledge and positive outcomes in ecosystem management, nutrition, increased incomes, technical skills, policies and stronger fisheries and aquaculture value chains.

Rationale

6. 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 species. The project is aligned with the goals of IFAD's Strategic Framework 2016-2025 towards increasing rural people's productive capacities, market participation and strengthening sustainability, and to the IFAD Nutrition Action Plan. The project contributes to key IFAD11 Commitments e.g. no. 2.2 (focus on the poorest and most vulnerable) no. 3.3 (mainstreaming nutrition, gender, youth) and no. 3.6 (Pilot diversified products tailored to different country circumstances). It contributes on some of the SDGs linked to IFAD results e.g. SDG14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development), SDG1 on poverty, SDG2 on hunger and food, SDG5 on gender inequality etc. 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.

What problems does the project address?

- 7. This project aims to develop, pilot, transfer and promote viable sustainable technologies, principally solar-based, and innovative marketing strategies to improve incomes and reduce food losses in the small fish species system. It principally targets two countries - Uganda and Tanzania - and potentially some activities will spiral into Kenya, with a focus on Lake Victoria. Despite their importance, small fish species get low priority in development considerations and services, and suffer from high post-harvest losses, estimated variously at 30-50% of the production. Due to poor handling and low quality, up to 70% of small fish species produced is sold off as animal feed, which fetches a lower price than for direct human consumption. Besides, it denies especially the low-income consumers the nutritional benefits of these fisheries. Use of kerosene fuelled lamps in harvesting small fish species is environmentally unsustainable practice, contributing to carbon emission and risks of water pollution from spillages. This project will promote sustainable fishing methods and fish preservation, using solar technology to replace kerosene lamps and to improve drying of fish and reduce post-harvest losses. It will give attention to producing high quality value-added products from small fish species and incorporating marketing strategies to get such products into high-end markets.
- 8. Specifically the project interventions address the following key constraints in the value chain;
 - Harvesting technology of small fish species, which uses kerosene (a hydrocarbon fuel) fuelled lamps to attract fish. This method is unsustainable, costly and risky to human and environmental health.
 - Poor handling and processing techniques based on basic traditional methods of sundrying fish, with risk of contamination and high losses in physical 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 species producers lack collective approach and unable of access to higher value markets
 - Policy gaps in relation to competing uses of small fish species (e.g. for animal feed vis a vis human consumption)

The grant recipients should further articulate these issues and if there are additional value chain constraints that can be addressed by this grant.

Beneficiaries

9. Considering the highly gender disaggregated roles in fisheries value chain, interventions at the production and post-harvest levels ensure that both men and women are included as beneficiaries of this project. The grant targets a total of 5,000 direct beneficiaries, including fishers and post-harvest actors, ensuring a focus on poverty, vulnerability, gender and youth. At the fishing level the main intervention will be to promote access to sustainable fishing technologies, in particular it will enable at least 2,000 fishers currently using kerosene fuelled lamps for catching fish to adopt more sustainable practice using solar lighting to attract fish. The aim is not to increase fishing effort, but to ensure that fishers can increase their profit margins by using solar while maintaining a healthy environment. This intervention will be done with the participation of private sector to demonstrate an effective lighting model and a sustainable financing mechanism to enable small-scale fishers to access the technology. The solar model piloted should therefore ensure that

fishers increase their profit margins without necessarily increasing the fishing effort. At the post-harvest level, the project will target 3,000 mostly women fish processors and traders with improved technologies for fish preservation, value addition and marketing strategies to access higher value markets. At least 40% of beneficiaries at both production and post-harvest levels will be the youth. Indirect beneficiaries include fish consumers of better quality fish and various providers of technologies and services.

The grant applicants should clearly define how the beneficiaries will be selected within the two countries (and, if justified, could extend to Kenya) to meet the above targets. Ensure a clear focus on poverty and vulnerability in the beneficiary selection i.e. priority given to the poorest and most vulnerable.

Goal and objectives

10. Objectives and expected outcomes/results

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

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

11. Components and activities

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 species

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 increased use 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

Possible areas of interventions and approach

- 12. The project will intervene on technologies for harvesting and processing fish and improved marketing strategies. The aim is to ensure sustainable fishing practices, reduced post-harvest losses, more effective marketing approaches and increased nutritional outcomes from small fish species. The following are among the possible areas of intervention and approaches;
 - i) Harvesting small fish species through environmentally sustainable technologies: The present method for harvesting small fish species involves different types of net, often used in combination with bright light to attract fish into net enclosure. Traditionally this has involved the use of kerosene lamps (hydrocarbon fuels) which is a cause of concern due to the carbon emissions and the risks of spillage and water pollution. There have been pilots to replace kerosene lamps with solar lighting, however this has not gone far enough and kerosene lamps remain dominant in most places. More work is needed involving the private sector to provide suitable solar lighting solutions that fishers can readily adopt as replacement of kerosene lamps. Technology improvements should aim to produce lamps of suitable lighting intensity to attract fish, that are affordable, readily potable in the boats and capable of 6-8 hours continuous operation while afloat on water, and include a charger component to recharge lamps after use. The solar model should lead to increase in the profit margins for fishers without necessarily increasing the fishing effort. In addition, there is need of a micro-financing model for fishers to buy the solar technology.
- ii) Improved solar technologies for processing small fish species to reduce post-harvest losses: Small fish species are processed mostly by sun-drying, which is an environmentally friendly, simple and generally low investment approach to producing dried fish products. However, this method has high risks of post-harvest losses especially during rainy seasons when drying time is limited. In many cases, fish is handled with little attention to quality, usually processed under basic, open conditions on the landing beaches, with unhygienic facilities and little protection from contaminants, insect infestations and moisture. As a result, there are significant post-harvest losses during processing and marketing, contributing to a vicious cycle image of a "low-value" commodity. Due to low quality, about 60-70% of small fish species produced in Lake Victoria ends up in the animal feed industry to produce feed for livestock rather than for human consumption. This situation is not tenable in a region where millions continue to suffer from micronutrient deficiency and the focus should be to produce high quality sun-dried products for human consumption. The nutritional benefits and market value of this fish can be greatly improved through better food safety practices and efficient use of solar technology.
- iii)Improved marketing strategies for increased incomes and entrepreneurial opportunities: Once dried, small fish species can be easily distributed to local markets at low cost. They are sold in small portions, which are more affordable to low-income households, and if dried well, can be stored for over six months without the need for electricity, making them an important component of the household's food security. Improvement in marketing models, for instance through contract sales arrangements or

group-based bulking marketing approaches, can increase returns for the women involved in this trade. Marketing may also target special consumer groups and new opportunities, for instance boarding schools, hospitals as well as high-end markets such as supermarkets. Some small pilots have demonstrated that well dried, hygienically handled, packaged and attractively labelled small fish products can easily sell in supermarkets and other high value outlets. The market potential should also be tested for small fish species in the fresh form as a way of expanding the marketing opportunities.

- iv) Enhancing the nutritional outcomes from small fish species: Small fish species are among the most important sources of high-quality protein and micronutrients, which are vital in cerebral development, immune system functions and general health, including vitamins, calcium, iron, iodine and zinc. Generally small fish are consumed whole, with heads, bones and viscera intact, providing a concentrated source of multiple essential nutrients, which can improve the diets of vulnerable groups. Small fish can contribute significantly in combating the triple burden of hunger, micronutrient deficiency and noncommunicable diseases, and more importantly, among low-income rural communities. However, national food policies in most sub-Saharan countries do not fully recognize the role of small fish species in their strategies to combat malnutrition among disadvantaged groups. Small fish species are mostly consumed locally mainly by low-income groups in both rural and urban areas and usually go unrecorded in catch statistics, therefore their importance in healthy livelihoods is undervalued and little understood. This has prevented the necessary investments in facilities and services to improve the quality, shelf life and value of this important resource. Africa has very low per capita fish consumption at 8.8 Kg, which could greatly increase if more attention is given to production and quality management of small fish species.
- v) Addressing policy gaps to enhance the socio-economic benefits from small fish species: There is need to address the social, technical, economic, legal and policy barriers that inhibit the full potential of utilizing small fish to improve nutrition in low-income populations. These include lack of enabling fisheries management legislation and food safety challenges in processing and marketing. Due to lack of proper attention and the low value image, a lot of small fish species is used as animal feed, to support a growing aquaculture industry that are destined either for domestic middleclass segments of the population, or for export markets. This raises important food policy issues, particularly as it takes out a highly nutritious food that could help address malnutrition deficiencies in many low-income households. Interventions to improve fish quality, greater consumer awareness and promotion of small fish may help to address this matter. The role of small fish species in combating malnutrition is often overlooked in national food policies and there is need for more attention on the link between the production, distribution and consumption of small sun-dried fish and human health.

Project Management

13. A Grant Recipient will be competitively selected to receive and manage the funds of the project, deliver on the outputs and report to IFAD on financial and technical progress and achievements against the project log Frame. The Grant Recipient will be responsible for strategic orientation of the project, such as knowledge management, communication and visibility. The Grant Recipient will appoint a Project Coordinator (PC), whose qualifications and experience will be specified in the Detailed Grant Proposal. The PC will be responsible for overall coordination of project implementation, including the preparation

of annual activity and budget plans, procurement management, progress reporting, monitoring and evaluation, and financial management. The Grant Recipient will assign qualified personnel to the project to carry out key functions including; M&E Officer, Procurement Officer and an Accountant. IFAD will provide supervision and oversight functions, with the Senior Global Technical Specialist for Fisheries and Aquaculture as directly responsible for the project within IFAD.

Implementation Period

14. The grant will be implemented for a period of 36 months from the project's "effective date" which will be spelt out in the Financing Agreement to be signed by IFAD and the Grant Recipient.

Monitoring & Evaluation, Knowledge Management and Learning

15. The Project Management Team will be responsible for M&E, ensuring adequate tracking of indicators and that results are 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. Reporting guidelines and processes will be developed during the inception phase. The Recipient will be responsible for production and dissemination of knowledge materials; consolidating and sharing lessons from the project.

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. Knowledge products will be produced and disseminated accordingly. Collaboration with the IFAD Research and Impact Assessment Division (RIA), Operational Policy and Results Division (OPR) and with the communications division (COM) will be essential. The grant will be directly linked with IFAD investment projects, thus the project will strengthen individual and organizational capacities for rigorous, appropriate, useful M&E at country level. Knowledge management will be done in line with IFAD corporate Knowledge Management Strategy.

The Grant Applicant will elaborate an elaborate M&E approach, including a clear log frame with specific indicators for outputs, outcomes and impacts, which will be determined at baseline and tracked during implementation, supported by a theory of change. The Grant Applicant should also elaborate a strategy to facilitate South-South learning and technology transfer in line with IFAD's South-South Triangular Cooperation (SSTC) framework. Furthermore, indicate the type of knowledge products to be generated and strategy for their dissemination.

Supervision modalities:

16. 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).

Countries and regions

17. The grant targets principally two countries, Tanzania and Uganda, with a focus on Lake Victoria fisheries and fishing communities. These will be the focus of implementation; however, if sufficiently justified, some activities could extend to Kenya, which also shares Lake Victoria.

Linkages with IFAD investment programmes:

18. This grant will link up with IFAD loan projects, which will benefit from some of the technologies, innovations and knowledge products produced by the grant. The grant will in particular link up with a new IFAD project intervention in Tanzania's fisheries and aquaculture sector. In Kenya, the Aquaculture Business Development Programme could benefit from some of the post-harvest technologies from this grant. The grant could also provide learning opportunities for IFAD fisheries sector projects in other non-targeted countries e.g. in Angola, Mozambique and Eritrea, especially on post-harvest technologies.

Scaling-up, sustainability and innovation

Scaling

19. The project is built around piloting sustainable technologies combined with effective marketing strategies that can be scaled up for reduced food losses and 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. The Grant Applicants should demonstrate a clear strategy of scaling-up and sustaining the knowledge and technologies generated by the project. Future IFAD investment programmes or other government and private sector interventions can scale up some technologies from this project.

As an output of this project the grant recipients will prepare a draft project concept note of potential future investment programme in Lake Victoria fisheries, with a particular focus in Uganda. This will be done in close consultation with the Government of Uganda's Department of Fisheries, the private sector, fishing communities and other key stakeholders. Provision should be made in the budget for carrying out this activity.

Sustainability:

20. Sustainability will be ensured by establishing strong partnerships and networks of producer groups with private sector and public institutions. The project will work closely with national institutions and state fisheries agencies and advocate for activities to be carried forward in institutional work plans and budgets. Attention will be 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. The grant applicants will clearly explain the measures they will put in place to ensure the benefits of the project can continue to be received beyond the period of implementation.

Innovation

21. 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. The grant applicants will clearly indicate the specific innovations, including technologies and approaches that they can bring into this project.

Project risks

22. 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.

Project cost

23. The total project budget must not exceed USD 2,500,000, of which IFAD contribution is USD 2,000,000 and partner contribution is at least USD 500,000 either in cash and/or in kind. The recipient will prepare a detailed budget according to IFAD's budget template and expenditure categories.

Grant Recipient selection

24. The Recipient will be selected through a competitive bidding process supported with an open Call for Proposals. Eligible applicants will include multinational, regional, intergovernmental 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 in cash and/or kind of at least 25% (e) Commitment to facilitate scaling up of promising technologies.

- 25. To the extent eligible institutions deem it appropriate to partner with other institutions, they can do so. In this case, only the applicant institution shall be responsible for achieving the project objectives and outcomes, producing the expected outputs, the overall project management, financial and technical reporting to IFAD, while the partner institution(s) will be sub-contracted by the proponent. In case of applicants partnering with other organizations, a single application must be submitted to IFAD for consideration, clearly indicating the lead agency and the names of all collaborating partners. The recipient may choose to sub-contract any part of the services under this agreement to a person or entity. The lead recipient shall be fully responsible and liable for the delivery of the services performed by them or on their behalf.
- 26. The preparation of the proposal shall be by, and at the expense of, your organization. IFAD shall not reimburse any costs incurred by you in the preparation of the proposal, site visit, collection of information, oral presentation, or for any subsequent discussions, clarifications, and negotiations related to this Invitation to Submit Bids, whatever the outcome of the Invitation may be, including the case of no award. IFAD reserves the right to annul the selection process at any time without thereby incurring any liability to the applicant. This Invitation does not commit or obligate IFAD to award a grant. In addition, please be advised that should your proposal be accepted, this does not guarantee IFAD support. The proposal would then need to be further developed and it will subsequently undergo rigorous approval processes, which closely examine technical, financial and legal aspects.

Submission in pdf format should include:

- i) Project proposal, submitted using the grant Design Document Template. The proposal must be aligned with the Concept Note and Additional Information provided. It should also include a detailed budget using the activity based budget table.
- ii) Applicants' self-certification of eligibility for IFAD grant financing and Financial Management Self-Assessment Questionnaire, duly filled, and;
- iii) A brief institutional profile, detailing experience in the priority area and specific theme outlined in the Grant Concept Note and Terms of Reference of the project, as well as the region/country(ies) where the grant would be implemented.

By submitting a proposal, applicants agree to abide to all conditions set forth by IFAD.

Deadline to receive proposals is Monday 16 December 2019, 23:00 CEST. Proposals submitted after this deadline will be considered ineligible.

Interested institutions should confirm by e-mail their intention to submit a proposal by Friday, 22 November 2019, 23:00 hours CEST.

Requests for clarifications may be submitted before Friday 29 November 2019, 23:00 CEST. Queries will be addressed on a case-by-case basis in the shortest time possible.

Please send queries and final proposals to:

Natalia Espinel, <u>n.espinel@ifad.org</u>
Giulia Di Sandro, <u>g.disandro@ifad.org</u>
Nelly Muriuki, <u>n.muriuki@ifad.org</u>
Richard Abila r.abila@ifad.org

References

FAO (2018) The State of World Fisheries and Aquaculture 2018 - Meeting the sustainable development goals. Rome. Licence: CC BY-NC-SA 3.0 IGO.

FAO (2019) Freshwater small pelagic fish and their fisheries in major African lakes and reservoirs in relation to food security and nutrition. FAO Report no. 642

IFAD (2018) IFAD's Support to Livelihoods Involving Aquatic Resources from Small-scale Fisheries, Small-scale Aquaculture and Coastal Zones Evaluation Synthesis. IOE Synthesis Evaluation Report No.4922

IFAD (2019). The Fisheries and Aquaculture Advantage: Fostering food security and nutrition, increasing incomes and empowerment. IFAD Technical Report

IFAD. 2014. Guidelines for Integrating Climate Change Adaptation into Fisheries and Aquaculture Projects.

IFAD. 2015. How to do fisheries, aquaculture and climate change. Guidance for adaptation and mitigation.

IFAD. 2016. IFAD Strategic Framework 2016-2025. Enabling inclusive and sustainable rural transformation.

IFAD. 2017. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP).

Kolding, J., van Zwieten, P., Marttin, F., Funge-Smith, S., & Poulain, F. (2019). Freshwater small pelagic fish and fisheries in major African lakes and reservoirs in relation to food security and nutrition. FAO Fisheries and Aquaculture Technical Paper No. 642. Rome, FAO. 124 pp. FAO

LVFO (2016). State of Lake Victoria dagaa (Rastrineobola argentea): quantity, quality, value addition, utilization and trade in the East African region for improved nutrition, food security and income

.