**Terms of Reference**

**Scaling Up Renewable Energy Technologies in Agriculture**

***Background***

The International Fund for Agricultural Development (IFAD) is financing the grant project titled “Scaling up Renewable Energy Technologies in Agriculture”, in alignment with IFAD’s Renewable Energy for Smallholder Agriculture (RESA) approach. The project aims to promote the inclusion of Renewable Energy Technologies (RETs) in existing IFAD projects/programmes in the Latin American and Caribbean (LAC) region by successfully supporting the implementation of RETs in benefit of smallholder farmers, producers, associations and members of medium enterprises. The purpose of these Terms of Reference (TORs) is to establish the scope, details and conditions for the implementation and evaluation of the project.

In alignment with IFAD’s Renewable Energy for Smallholder Agriculture (RESA) approach, the RETs grant strives to create new opportunities for IFAD to promote sustainable production with increased efficiency and reduced energy costs, resulting in lower environmental impacts of agricultural practices and enhancing community resilience. Limited access to affordable energy represents a critical barrier to the sustainable development of smallholder agricultural production and related value chains (RESA, 2018). Many rural areas in the LAC region have limited energy sources, which are costly and/or powered by fossil fuels, causing target groups to rely on diesel, kerosene or biomass for production processes and household use. This dependence on fossil fuels not only harms the environment, but it also affects users’ economy and health. Moreover, farmers in the region tend to be risk averse towards new technologies, especially those that have a higher up-front cost, creating an additional challenge for a sustainable transition towards cost-effective renewable energies.

Access to RETs offers an unprecedented opportunity to accelerate the transition to clean energy and to provide multiple benefits for rural households, communities and the environment (RESA, 2018). RETs can provide clean energy at a competitive price, whilst being a reliable source. The implementation of RETs in agriculture has the potential of improving production and post-production activities, promoting clean energy that in turn benefits the environment, and increases resilience of the benefiting target groups.

In this regard, RETs provide new opportunities for IFAD to promote sustainable production with increased efficiency and reduced energy costs, resulting in lower environmental impacts of agricultural practices and enhanced community resilience. The grant will promote and accelerate the transition to clean energy in IFAD’s portfolio in the LAC region and will support IFAD in terms of complying with the IFAD11 commitments to mainstream climate and environmental sustainability. It will also provide a window to further support member states with their Nationally Determined Contributions (NDCs).

***Countries and Regions***

The grant project will focus on at least three existing IFAD projects/programmes within the LAC region[[1]](#footnote-1) to be proposed by the applicant based on: applicants’ presence in the region, experience and optimal linkages with the selected IFAD operations and highest potential for efficient and effective implementation.

The implementing institution/consortium must have presence in the selected locations, specifically in regards with the implementation of RETs in agriculture, and where it is possible to incorporate and assess the benefits.

***Beneficiaries***

The direct target group will be of 2800 beneficiaries, inclusive of smallholder farmers, producers, associations and members of medium to large enterprises, receiving finance, TA and training to incorporate RETs in their agricultural operations. This is based on the expected minimum investment in RETs installations.

***Rationale***

The proposal seeks to effectively scale up RETs in agriculture addressing climate change and improving the lives of the beneficiaries. The grant objectives are well aligned with the IFAD’s Grant Policy and with IFAD Strategic Framework (2016-2025) Strategic Objective 3 (*Strengthen the environmental sustainability and climate resilience of poor rural people’s economic activities).* The project seeks to develop and implement innovative mechanisms to promote and stimulate investment in RETs in IFAD operations, with a focus on productive uses of renewable energy in producers’ organizations, cooperatives, and/or enterprises. The project will seek to maximize the linkages between clean energy and human development, including gender, youth, and nutrition elements as relevant.

***Goal and objectives***

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| **Goal**:To sustainably incorporate renewable energy technologies in at least three IFAD projects in the LAC region to be proposed by the recipient, and demonstrate the added value of renewable energy technologies for climate resilient value chains.**Objectives**: 1. Assess the potential economic enhancement and improved climate resilience within smallholder farmers, cooperatives, producer’s associations, and/or medium enterprises, as a result of RETs project implementation.
2. Develop innovative schemes to finance, implement, and maintain RETs schemes for rural cooperatives, producer’s associations, and/or medium enterprises
3. Build up knowledge on procedures, possible barriers encountered, and benefits obtained through the implementation of RETs in IFAD projects in the LAC region.
4. Develop a scaling-up plan, including training material, partnership building and strategies to support the adoption of RETs across the LAC portfolio.

**Expected Outcomes:**1. Gained and documented knowledge on the economic enhancement and improved climate resilience within smallholder farmers and medium-large enterprises, as a result of RETs project implementation.
2. Implemented RETs installations in at least three IFAD projects/programmes proposed by the applicant, benefitting approximately 2800 stakeholders, preferably implemented through replicable financing schemes.
3. Gained and documented knowledge on the procedures, possible barriers encountered, and benefits obtained through the implementation of RETs in IFAD projects/programmes in the LAC region.
4. Mechanism for scaling-up investments in RETs in smallholder cooperatives, producer’s associations, and/or medium enterprises.
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***Components and key activities***

The project activities will be organized under three components:

**Component 1: PPPs for a Sustainable Switch to RETs**

The objective of this component is to build successful partnerships that foster experiences in the incorporation of RETs for agricultural processes through the following windows:

1. Development and implementation of financing schemes for RETs investment by smallholder farmers.
2. Technical assistance for design and establishment of mini/off grid RETs systems for medium-scale agricultural producer organizations, cooperatives, and/or enterprises.

Through this component, investments in RETs will be secured for at least three locations in IFAD projects/programmes in the LAC region proposed by the recipient (see *Countries and Regions*). The project will evaluate opportunities of incorporating RETs into IFAD projects/programmes through technical, economic and financial assessments along the value chain, including a sensitivity analysis identifying those features that facilitate or hamper the adoption of specific technologies in a given location. The project will propose a suitable financing scheme for implementation of RETs, leveraging the IFAD grant funding to reduce barriers preventing the adoption of RETs by smallholders and catalyzing additional sources of private funding.

**Component 2: Capacity Development and Scale-Up**

This component aims to generate and improve regional capacities and know-how by showcasing the investments triggered by this grant, disseminating best practices of renewable energy utilization in agricultural value chains based on regional experiences, and stimulating the replication of the financing scheme implemented by the project.

The project puts particular emphasis on expanding knowledge on lessons and best practices on the integration of RETs in agricultural processes, enhancing capacity and implementing a successful financing scheme that can be replicated in other IFAD projects/programmes. It will focus on delivering tools and improving capacity at local and regional level based on the information and results gathered from the project. This will in turn inform IFAD’s future and ongoing investments enabling the scaling-up of the use of RETs in agriculture.

The project is linked to a number of strategies and action plans that have a knowledge management dimension. Each strategy and action plan articulates how IFAD aims to innovate, learn, and develop knowledge in the priority thematic areas and includes a theory of change with a strong focus on knowledge, communication and learning. They all interlink with IFAD’s knowledge management strategy, thus providing ongoing inputs into IFAD’s knowledge management and mainstreaming efforts.

**Component 3: Monitoring and Evaluation, Knowledge Management**

Through this component, the selected institution will administer and manage the project and monitor key indicators and targets. A series of Knowledge Management (KM) materials will be produced and promoted highlighting the mitigation, adaptation and economic benefits of RETs integration into agricultural processes. A two-fold communication strategy and scaling plan will be developed for internal and external parties to further disseminate the successful experiences, validate the results of the project, and promote the inclusion of RETs in the region.

The project proponent will propose a financing scheme that ensures the project reaches its direct investment targets (at least three interventions in IFAD projects/programmes, reaching a minimum of 2,800 beneficiaries), and supports replication and scaling up of the initiative. To that effect, while direct investment by the grant in RET installations will be accepted, the project proponents are encouraged to propose alternative financing solutions, including but not limited to, revolving funds, guarantee mechanisms, micro credit lines, or any other suitable option. Proposals will be evaluated by the feasibility of the financing mechanism, the replication potential, and the potential amount of additional financing catalyzed.

***Linkages with IFAD investment programmes***

The proposal will deliver actionable evidence and tools for design and implementation of projects/programmes incorporating RETs in agriculture. Being directly linked with IFAD investment projects/programmes, the proposal will strengthen individual and organizational capacities of the national partners involved in the implementation of the selected IFAD investments for mainstreaming climate change. It will also inform national policy processes.

***Monitoring & Evaluation, Knowledge Management and Learning***

The recipient will be responsible for M&E and reporting to IFAD, including annual reporting of activities, outcomes and financial performance, including on indicators shown in the logical framework in this grant design document. For monitoring, an Annual Work Plan and Budget (AWPB) will be updated/developed at the beginning of each year. An activity-based monitoring system will be adopted to ensure that all first-level results (outputs) are reported and evaluated. A systematic approach to capture how the knowledge products and tools as well as capacity development activities inform national and global processes will be undertaken at the end of the project through an outcome harvesting study. Collaboration with the IFAD In-country Offices in the selected countries will be essential. Strong linkages will also be established with IFAD Research and Impact Assessment Division and with the Communications Division (COM).

In accordance with IFAD’s grant procedures, the grant sponsor in ECG will be responsible for supervision as part of their work plan, including ensuring the adequate efforts are undertaken to achieve intended results, providing support to resolve challenges as they arise, reviewing financial and technical reports. The division will release budget for supervision, although the main type of supervision needed for this global project is not presence in the field (country supervision missions), but relates to ongoing review of outputs and monitoring. Annual grant status reports will capture progress at the country and global levels. In addition to the grant sponsors, the Regional Climate and Environment Specialists and CPMs will provide oversight to country selection and in-country activities, ensuring coherence and value added with ongoing efforts of IFAD. ECG KM officer will ensure that findings from this grant will feed into the overall IFAD KM Strategy. IFAD’s finance officers will also provide oversight on financial matters associated with the project.

1. LAC country operations can be found at following link: <https://www.ifad.org/en/web/operations/regions/lac> Applicants may also request additional information on the projects by sending their inquiries during the period designated for submission of questions (by March 23, 2020). [↑](#footnote-ref-1)