

## **Add-Value Management**

### **Small Farmers Climate Adaptation Fund (SMAF)**

#### **Preliminary Assessment and Field Technical Work of a Sample of Rural Financial Organizations and their Small Farmer Clients**

#### **TORs for Climate Change Adaptation Specialist**

### **Background**

Add-Value Management (“Add-Value”), an impact fund management firm based in San José, Costa Rica, is working on structuring the Small Farmers Climate Adaptation Fund (“SMAF”), an impact investment fund aimed at introducing climate adaptation measures with smallholder farmers in seven countries of Latin America through a group of established rural financial organizations (“RFOs”). The SMAF involves a lending facility of US\$30 million that would provide financing in the form of medium-term loans to participant RFOs so they can on-lend to smallholder farmers and fund the incorporation of climate adaptation measures (climate smart techniques), into their productive process. The SMAF also involves a US\$2 to 3 million technical support facility (“TA Facility”), aimed at designing and transferring small farmers climate change adaptation techniques to participant RFOs, help them develop agriculture financial products that incorporate those climate adaptation measures, build the extension services required to deliver those techniques to small farmers, and support these financial organizations in identifying and building the necessary partnerships with technology suppliers. The TA facility would also provide participant financial organizations with climate smart agriculture credit methodologies and climate risk assessment guidelines to help manage their agriculture credit risk and expand its financial services to smallholder farmers.

Through its work in developing the SMAF, Add-Value has already identified a group of RFOs in the seven selected countries that actively work with small farmers delivering credit for working capital needs and in some cases for infrastructure improvements, tools, and equipment, and who have detected diminishing productivity/income and crop/livestock losses due to increasing temperature levels and unstable weather patterns associated with climate change. Part of the work done so far by Add-Value in designing the SMAF has been the identification of climate change adaptation measures that have proven to be effective in dealing with the consequences of climate change in small farmers, mainly in preventing and mitigating the effects of intensifying pests and diseases, as well as intermittent and unpredictable periods of torrential rains, dry spells, and droughts.

The next step in the SMAF structuring process is to conduct a preliminary assessment with a sample of these RFOs and its small farmer clients that will identify the specific climate change threats/hazards and vulnerabilities present in these sample of clients, select those adaptation measures that are best positioned to deal with these factors and increase the small farmers productivity and climate resilience, assess the RFOs current capabilities in assessing climate risk and delivering these measures, and using the Theory of Change framework, propose appropriate metrics and a methodology for measuring outputs, outcomes/impacts, linking these with UN Sustainable Development Goals (SDGs), as well as proposing the tools needed to apply this measuring methodology. This assessment would also be a primary input in the later designing the scope of work of the SMAF’s TA Facility in terms of strengthening the RFOs capabilities to assess climate

risk, bundle climate adaptation solutions with traditional credit products, work with their clients in implementing climate adaptation solutions, monitoring, as well as measuring outputs and outcomes from interventions.

## **Scope**

The purpose of the proposed technical work to be conducted by the Climate Change Adaptation Specialist (the “Consultant”), is to help Add-Value Management perform a preliminary assessment of a sample four RFOs and some of their small farmers clients conducting business in rural areas of the following countries: Guatemala, Honduras, El Salvador, and Ecuador.

In measuring resilience of small farmers to climate change, the following definition must be taken into consideration: “the small farmers capacity to recover, adapt to, and cope with the consequences of changes in weather patterns, proliferation of pests and diseases, and loss in productivity brought about by climate change”. The proposed methodology for measuring resilience of small farmers must be capable of making effective comparisons between the farm’s productive conditions before and after the implementation of climate adaptation solutions.

The proposed methodology must use the Theory of Change approach and a logic frame process in linking the: i) inputs/interventions (financial support, adaptation measures, technology, and TA provide by RFO’s to small farmers, ii) outputs (tangible short term results from the intervention, e.g. improvement in soil quality, reduced losses, increase in availability of water for irrigation, surface runoff absorption and drainage capacity, increase in yields, increase in income, etc.), and iii) short and medium term outcomes/impacts (increased resilience, improved livelihoods, SDGs)

In defining metrics, the Consultant shall evaluate variables that could be easily measured by the RFOs field staff using their own observations and information provided by the small farmer, locally available laboratories, and/or market available tools. The resilience metrics should be limited to a handful of variables that are common to as many of the climate adaptation solutions proposed by SMAF to help small farmers cope with the effects of climate change and increase their resilience and productivity.

## **Activities**

The following activities are required:

- 1) In coordination with the Climate and Rural Finance Specialist and Add-Value’s staff, visit the four selected RFOs for a period of one week and together with Add-Value’s staff and the RFO’s technical/field staff, select a sample of small farmers with different agricultural activities that are experiencing difficulties due to changing weather patterns. Visit this sample of clients and assess their farm conditions emphasizing their vulnerabilities and the most common threats they are facing in terms of climate change. Identify the most relevant climate smart techniques from the list proposed by the SMAF that could help overcome these conditions (additional techniques could be proposed by the Consultant based on their past experience). In the selection of these measures, the Consultant shall coordinate with the Climate and Rural Finance Specialist and Add-Value’s staff to ensure the feasibility of including these measures in a financial product to be offered by the RFO. Please refer to only those measures/techniques that are suitable for dealing with the vulnerabilities and threats identified for the small farmers visited.

- 2) Work in coordination and with the inputs provided by the Climate and Rural Finance Specialist in terms of the local technical providers of the selected climate adaptation solutions and due a preliminary analysis of the cost of adapting/installing the different solutions and the expected incremental income and payback period.
- 3) Link the proposed climate adaptation solutions with their expected outputs, e.g.: reduce losses, increase productivity and income, improve soil conditions/quality, reduce incidence of plagues and diseases, reduce carbon footprint; improve farm diversification, increase water harvest and storage capacity, increase area subject to crop irrigation and water availability for animals; availability of forage and pasture, etc.
- 4) Propose metrics for measuring the above results at the farm level. Please select a group of metrics that are common to as many adaptation solutions as possible. These metrics must measure socio-economic conditions of the farm (productivity, income, losses, etc.), as well as the farms resilience to climate change (soil quality, soil moisture, water availability, runoff absorption/discharge capacity, etc.).
- 5) In conjunction with the Climate and Rural Finance Specialist, propose a methodology for measuring these variables that is feasible to apply at the farm level and that could be implemented by the RFOs field staff using its own observations, and/or low cost, locally available instruments. Define those instruments and its cost. The methodology must allow for doing comparisons of metrics between the farm conditions prevailing before the climate adaptation was implemented, once it is fully in place and a complete productive cycle has occurred (outputs), and two/three years after implementation (outcomes).

## **Deliverables**

Once the above activities have been completed, the Consultant must write a report in English containing the findings arising from the above activities. The report shall contain, among other aspects:

- i) a description of the visits to the different RFOs and their sample agriculture clients,
- ii) a description of the size of the farm, characteristics of the small farmers and its household, productive activities, current yields, factors affecting its productivity and income generation capacity, and the conditions in terms of vulnerabilities and threats associated with climate change for each of the small farmers visited,
- iii) a description of the climate adaptation solution(s) recommended to each farmer in the sample and the expected results of its implementation (expected outputs, answer the question by how much?),
- iv) A preliminary cost estimate of the recommended climate adaptation solutions, as well as the incremental expected effects on yields/income generation capacity, and payback period,
- v) a description of a proposed set of metrics for the outputs and outcomes/impacts in resilience and livelihoods, as well as the corresponding measuring tools and procedures, cost of tools and procedures,

- vi) a methodological framework for the RFO to apply these metrics and compare results between different periods, and
- vii) a description of the positive impacts in the small farmer's resilience and livelihoods to climate change that could be achieved by the implementation of these measures/solutions, and an ESG framework to report on specific KPIs and links with SDGs.

**Schedule:**

The technical work is expected to be completed within a period of three calendar months starting in October of 2019. During this period, the Consultant is expected to conduct, in coordination with the Climate and Rural Finance Specialist and Add-Value's staff, four field visits with a duration of one week each to the four selected RFOs and their sample of small farmer clients.