Early Warning System

IFC-601838

Rain Sensors



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Quick Facts

Financial Institutions International Finance Corporation (IFC)

StatusActiveBank Risk RatingUVoting Date2017-05-21

Borrower *Borrower information not provided at the time of disclosure*

 Sectors
 Technical Cooperation

 Investment Type(s)
 Advisory Services

 Project Cost (USD)
 \$ 0.13 million

Early Warning System Rain Sensors

Project Description

The objective of this proposed Research & Development (R&D) is to test and ultimately implement a practical & cost effective way to integrate rain-sensors, to measure rainfall/precipitation, currently available in the market to the roof-top solar energy panel systems that are being rolled out in many countries and regions globally including the Lighting Africa project (LA project).

With this enhanced rainfall data, we can address one of the prevailing challenges identified by the financial and insurance market in fostering and enhancing the development of sustainable parametric (weather index) insurance products through the provision of this required data.

The proposed R&D would benefit from the established infrastructure of the LA project by enhancing this systems monitoring capability with sensors to monitor and capture rainfall data (in addition to the radiation and temperature data already being collected on a real time basis).

To achieve this objective the project structured into 2 phases:

Phase 1: Technical development of Monitoring devices connected to the solar panels

Traditional rain gauges are expensive and due to their design not fraud free. It is therefore interesting to develop a simple rain monitoring system that is less fraud prone and can be incorporated into PV modules.

To develop the rainfall sensor system on PV modules, the project (R&D) will test the different available sensors and install them on a test PV panel, and compared with measurements achieved using a standard rain-gauge. This will enable the project to correlate the new measurement system with standard systems in order to assess the quality of data that can be obtained.

Phase 2: Business model and Data dissemination

- a. larger pilot test roll out in multiple locations & countries;
- b. developing a business plan for commercialization of Rain Sensors to be installed with PV Panels;
- c. formalizing a partnership with the LA project and its suppliers (of PV Solar Panels) for installation of Rain Sensors;
- d. finalizing the data collection and data sharing protocols in consultation with the LA Project, which is currently collecting data on temperature and radiation from sensors installed on the PV Solar panels;
- e. Develop a portal dedicated for weather (rainfall and temperature) data sharing.

Investment Description

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Contact Information

Contact information not provided at the time of disclosure

ACCOUNTABILITY MECHANISM OF IFC

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