# Planning 2021 Innovation #93

## 1 farmer, 1 loan, 1 IoT raingauge: piloting the industrialization of recyclable, $50 connected rain gauges in Africa

**Project Title:** P46 - CASCAID - Capacitating African Smallholders with Climate Advisories and Insurance Development

**Description of the innovation:** Spatio-temporal fragmentation of tropical rainfall severely constrains the local relevance of low-density AWS network and satellite RFE data for climate risk management in smallholder agriculture, including for insurance. NADiRA helps industrialize production of cheap, recyclable connected raingauges in Africa, affordably streaming daily rainfall through GSM and NB-IoT. Target capex: $50/unit.

**New Innovation:** No

**Stage of innovation:** Stage 1: discovery/proof of concept (PC - end of research phase)  
**Innovation type:** Research and Communication Methodologies and Tools

**Geographic Scope:** <Not Defined>  
**Number of individual improved lines/varieties:** <Not Applicable>

**Description of Stage reached:** Specs developed, 20 prototypes built ready for 2018 field testing of equipment robustness and data quality in Senegal (10), Nigeria (10). Prototype cost achieved: EUR 110/unit from COTS components. Budget secure for est. 1,000 v2 prototypes in 2019. Financing, industrial partnerships in discussion with cost encapsulation in agricultural credit/insurance.

**Name of lead organization/entity to take innovation to this stage:** MANOBI AFRICA PLC

**Names of top five contributing organizations/entities to this stage:**
- ICRISAT - International Crops Research Institute for the Semi-Arid Tropics
- Viveris - Groupe Viveris
- Spacebel
- ULiège - University of Liège

**Milestones:** No milestones associated

**Sub-IDOs:**

**Contributing Centers/PPA partners:**

**Evidence link:** http://nadira-project.eu
**Deliverables associated:** <Not Defined>

**Contributing CRPs/Platforms:**
- CCAFS - Climate Change, Agriculture and Food Security