

## Template for

### Summary Description of 2017-2019 GEO Work Programme Activities

Applicable to Community Activities, GEO Initiatives and GEO Flagships

*The text provided will be used in the body of the GEO 2017-2019 Work Programme Document*

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#### **1. 2017-2019 Overview**

##### Objectives

The Geodata for Agriculture and Water (G4AW) Facility promotes and supports private investments for large scale, demand driven and satellite based information services. It provides a platform for partnerships of public organisations, research institutes, private sector operators, NGO's, farmer cooperatives, satellite data/service operators, businesses and transmission operators, developing space for food security.

The G4AW goals are:

- Reaching over 3 million smallholders;
- Providing them with useful and timely (agrometeorological) and/or financial/insurance) products;
- Improving sustainable food production, increase the effective use of inputs (water, nutrients, seeds, pesticides);
- Economic development in participating countries;
- Stimulating private investments;
- Financially sustainable services after 3 years;
- Improved food security and income.

Although there is no restriction on the type of satellite information used, virtually all of the project benefit from imagery and data that have become freely available thanks to the efforts of GEO. The G4AW Facility is complementary to global and regional initiatives on earth observation for food security, such as GEOGLAM.

##### Overall plans

The G4AW Facility support projects through three calls for proposal. The first call for proposals, in 2013, resulted in four selected projects. As outcome of the second call in 2015, 13 more projects were approved. The third call is currently closed. The expectation is that a grant will be awarded to approximately eight projects that will start in 2018.

The projects receive a grant of 60 to 70 % of the total project budget. The grant is for a period of three years. This is the estimated time in which the information service should be financially sustainable.

Supported initiatives focus on topics, such as index insurance, localised weather information, agronomic advice, sustainable water use, climate adaptation and facilitation of microfinance credits. The Facility focuses on the following countries: Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Colombia, Ethiopia, Ghana, Indonesia, Kenya, Laos, Malawi, Mali, Mozambique, Myanmar, Niger, Rwanda, Senegal, South Africa, South Sudan, Tanzania, Uganda, Vietnam, Zambia and Zimbabwe.

Over 90 organisations across 10 partner countries have initiated a total of 17 G4AW projects. They are building business models for public/private partnerships to deliver financially sustainable services. Involved organisations are using existing technology and services, empowering the most important actors in the food production chain: farmers, fishermen and pastoralists.

All projects have the following in common:

- Market: Tackling a well-defined and specific problem.
- Business case: Providing financial sustainability in the long term, supported by investments done by project partners.
- Solution: Part of a portfolio of services, focused on a core offer with added value for clients, well-elaborated use of satellite information and other data.
- Affordability: Services are provided at low cost or free of charge.
- License to operate: The project results will be embedded in the local context.
- Channel: Building on existing delivery mechanism(s), bridging the last mile.
- Maturity: The projects strive to reproduce services already validated elsewhere.
- Education: Empowering users by training and appropriate transfer of knowledge.
- Cooperation: Partnerships of public organisations, research institutes, private sector operators, NGO's, farmer cooperatives, satellite data/service operators, the private (agricultural) sector and transmission operators, bridging the entire information chain.

## **2. Summary Plans for 2017**

### Activities, milestones and outputs

In 2017 a total number of 17 projects are under implementation:

GIACIS (Ethiopia), G4INDO (Indonesia) and SUM-Africa (Mali, Uganda) aim to guarantee income of and investments by small holder food producers. CommonSense supports sesame producers in Ethiopia by providing weather and agro-advisory services.

CROPMON in Kenya builds a crop monitoring system to alert farmers about non optimal growth conditions. Smallholder farmers in Bangladesh will benefit from GEOBIS' as well as IDSS' agricultural advice, and GEOPOTATO to prevent potato disease. In Vietnam, resilience of rice and coffee producing communities will be improved by Sat4Rice and GREENcoffee. In Indonesia, SMARTbeans will support farmers growing chilli, tomato and cucumber. MUIIS will help increase crops of maize, soy bean and sesame in Uganda, combined with insurance for farmers.

MODHEM improves moving herd management and incomes for Burkina Faso's pastoralists. In Mali, STAMP aims to improve resilience among climate affected pastoralists. Ensuring local food security is R4A's goal (in South Africa), through activation of a digital information portal supported by a participatory model. Geodatics and SIKIA help farmers and agribusiness clients to optimise their business activities in Kenya and Tanzania.

A mid-term review was carried out at the end of 2016. Although it is too early to show financially sustainable results, the review concluded that the potential to impact the lives of smallholders positively with satellite information is very promising. The lessons learned were shared publicly and made available to all stakeholders. A conference was organised with the Netherlands platform for microfinance (NpM) to stimulate cooperation between the earth observation and microfinance communities.

### Resource Summary

The total budget of the G4AW Facility is in the order of magnitude of 100 million euro, of which approximately 70 million euro is support from the Netherlands Government. The running period of the Facility is from 2013 to 2020. Allowing for preparation time, this translates to an annual budget of approximately 14 million euro.

### **3. Leaders and Contributors**

The Netherlands Space Office (NSO) is responsible for executing the Facility on behalf of the Netherlands Ministry of Foreign Affairs and the Ministry of Economic Affairs. The principle contact person for the initiative is Dr. Ruud Grim ([r.grim@spaceoffice.nl](mailto:r.grim@spaceoffice.nl)). The complete list of partners is available at

<http://g4aw.spaceoffice.nl/files/files/G4AW/G4AW%20Details%20of%20projects%20LR%2024082016.pdf>.

Of the countries, where projects are currently implemented, Ethiopia, Kenya, Uganda, Mali, Burkina Faso, South Africa, Bangladesh, Vietnam and Indonesia are GEO members. From the GEO participating organisations, ITC (the Faculty of Geo-Information Science and Earth Observation of the University of Twente) and Agrhymet are partners in one or more G4AW-projects.