

The short study funding has been awarded to:

**e2E Services Ltd – Virtual Doctors Over Satcom (ViDOS)**

Location: Zambia & Malawi

Cost: £47,210

The theme of the proposal addresses the use of satellite communications to provide telemedicine services in sub Saharan Africa. E2E plan to work with The Virtual Doctors to use satellite communications to extend the range of their current mobile phone based telemedicine System.

**Vivid Economics - Tools for the assessment of risk and prioritisation of action to reduce ill health from zoonotic diseases**

Location: West Africa, focus on Nigeria and Sierra Leone

Cost: £43,750

This short study will develop a design for a tool to assess the risk of the transmission of zoonotic diseases and the prioritisation of prevention and control measures in West Africa. National and regional policy-makers would use the tool to direct activities such as immunisation, monitoring, and information campaigns.

**Geocento Ltd – Development of a sustainable environment for Ogoniland and the Niger delta through satellite and airborne monitoring**

Location: Nigeria

Cost: £5,746

The theme of this grant is earth observation, they plan to implement a satellite and airborne monitoring programme for the Niger delta that is owned and operated in-country, providing the Nigerian authorities with the long needed ability to reclaim the delta region from environmental pollution. The UN has identified the Niger delta region as a crisis region.

**Geomatic Ventures Ltd – Peatland Assessment in SE Asia by Satellite (PASSES)**

Location: Malaysia & Indonesia

Cost: £15,260

The PASSES project focusses on a problem in the developing countries of Malaysia and Indonesia, both of which have extensive areas of tropical rainforest and peatland which are subject to fires.

Geomatic Ventures plan to combine the processing of satellite InSAR data by the university of Nottingham showing a remarkable capability to map peat condition when under a forest canopy. Combining this capability with conventional satellite measurement techniques and the free continuous monitoring activities of satellites under the EU Copernicus programme, it is now possible to comprehensively assess peat condition at low costs and the likelihood of fires in these areas.

**HR Wallingford – Multiple stress impact on water resources and diseases in Vietnam (MOVIE)**

Location: Vietnam

Cost: £34,892

This short study will form partnerships in order to define the requirements for the first investigation of the water resource, land cover, climate and health nexus in Vietnam. The project will develop an innovative Earth-Observation-based tool that will allow beneficiaries in Vietnam to issue alerts of dengue epidemics and to carry out assessments of the water availability and will set out the framework for MOVIE, a new integrated modelling system that will link earth observations, weather forecasting, and a land-surface model to understand and predict for the first time the impacts of our 4 primary stressors on water resources and dengue epidemics in Vietnam.

**Assimila Ltd – Requirements analysis for the fire info system**

Location: Argentina, Brazil, Colombia, Indonesia and Vietnam

Cost: £39,347.50

Burning of agricultural residues and landscape burning of forests and peatlands impact on public health, threaten homes and livelihoods, result in biodiversity loss and contribute to climate change. The study will identify requirements for an operational probabilistic fire danger rating and early warning fire alert system for South America and Southeast Asia, based on Earth Observation (EO) data and ensemble forecast meteorological data.

**Barefoot Lightning Ltd - Harnessing Convergent Technologies for Sustainable Smallholder Rice Farming**

Location: Thailand, Cambodia, & Vietnam

Cost: £41,707

The project's aim is to establish, monitor and improve sustainable rice production in Southeast Asia. The project will help farmers in rice exporting countries (targeted are Thailand, Cambodia and Vietnam) to establish sustainable rice farming and provide traders and consumers with a product of certified sustainability and quality. The project will use satellite data for large scale crop and management monitoring and link ground-based management tools to help farmers improve their technical and economic performance, and minimize the environmental footprint of rice farming.

**Rothamsted Research - RiceSMT: Rice Soil Monitoring Technology**

Location: Philippines

Cost: £48,828

The sustainable use of freshwater in agriculture is of growing concern as climate change, pollution, and increasing populations endanger resources worldwide. 70% of water usage in irrigated agriculture goes into the production of rice, a staple crop to more than 50% of the world's population. RiceSMT aims to develop a network of low power, low cost soil sensors coupled with earth observation (EO) and GPS data. Combining these technologies provides information on water level, soil moisture, soil health, and pollutants in irrigated and rainfed rice over vastly different geographic scales.



**eOsphere Ltd – MOCCA: Monitoring Centre for Cuban Agriculture**

Location: Cuba

Cost: £21,238

The MOCCA concept was proposed by the Cuban Meteorology Institute, an eOsphere customer, in response to an urgent national requirement to facilitate the efficient management of scarce water resources supporting irrigation for agriculture and meeting UN Sustainable Development goals.

**Barefoot lightning Ltd - Pasture for Africa: Earth Observation to deliver solutions for African livestock farmers**

Location: Malawi & Ethiopia

Cost: £40,619

The widespread pastoral system where herders leave their homesteads to drive their herds to greener pastures has come under significant pressure in recent years during a number of severe droughts which reduce the availability of good common grazing land and water supplies. This results in serious conflicts as pastoralists infringe on private farms and ranches and cross into neighbouring territories where they're not seen as having traditional grazing rights. To help prevent conflict and also enhance sustainable intensification of production in the target regions Barefoot are looking at an integrated solution with ILRI which incorporates the three main ruminant production systems and connects them through common requirements for animal health, feed/fodder/water supply, herd replenishment/improvement and market access.