

Commission on Science and Technology for Development (CSTD)

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Geneva

The role of science, technology and innovation in ensuring food security by 2030

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- On 24 December 1968 whilst orbiting the moon, the crew of Apollo 8 took this iconic photograph the whole Earth. There were 3.5 billion people living on Earth that time and sharing its resources.
- In May 2017, nearly 7.5 billion people live on the planet, and they all deserve to drink clean water, have enough to eat, have access to healthcare... to a life worth living!
- In May 2017, nearly 800 million people struggle with debilitating hunger and malnutrition
 Photograph Courtesy of NASA





Hunger

- For the first time in human history, the knowledge to end hunger exists on Earth
- 800 million people struggle with debilitating hunger and malnutrition
- We need to find solutions beyond MORE food. Nutritionally sensitive agriculture is essential for global public health and wellbeing
- We are convinced that the solution to closing this unacceptable hunger gap lies within harnessing and opening agriculture and nutrition data

Open principles in Education are key for Capacity development and empowerment of all

- Open data
- Open standards
- Open access to research publications
- Open education resources
- Open Software



Posted: October 22, 2016

AgriGIS Workshop and Think Tank Meeting

Location: Regional Centre for Mapping of Resources for Development (RCMRD), Nairobi, Kenya.

Date: 27th to 28th October, 2016

The University of Nottingham, the Regional Centre for Mapping of Resources for Development (RCMRD), the Global Open Data for Agriculture and Nutrition (GODAN) and Crops for the Future (CFF) have organized a two-day AgriGIS Workshop and Think Tank meeting to be held at RCMRD, Nairobi, Kenya from 27-28th October, 2016.

Geospatial science has a major role to play in securing both food and nutritional security in agricultural systems, particularly to address the UN Sustainable Development Goal (SDG) 2 to 'End hunger, achieve food security and improved nutrition and promote



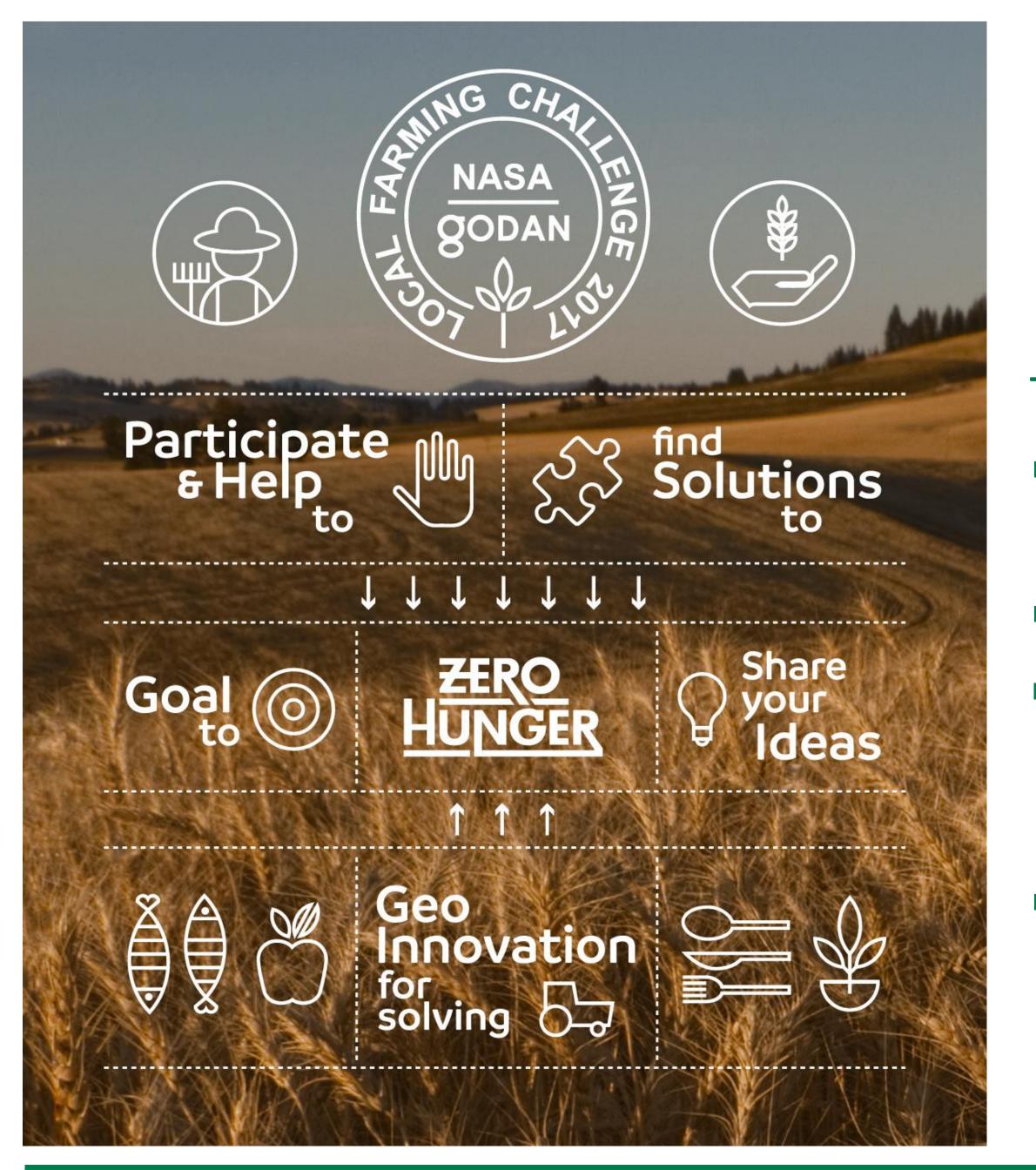














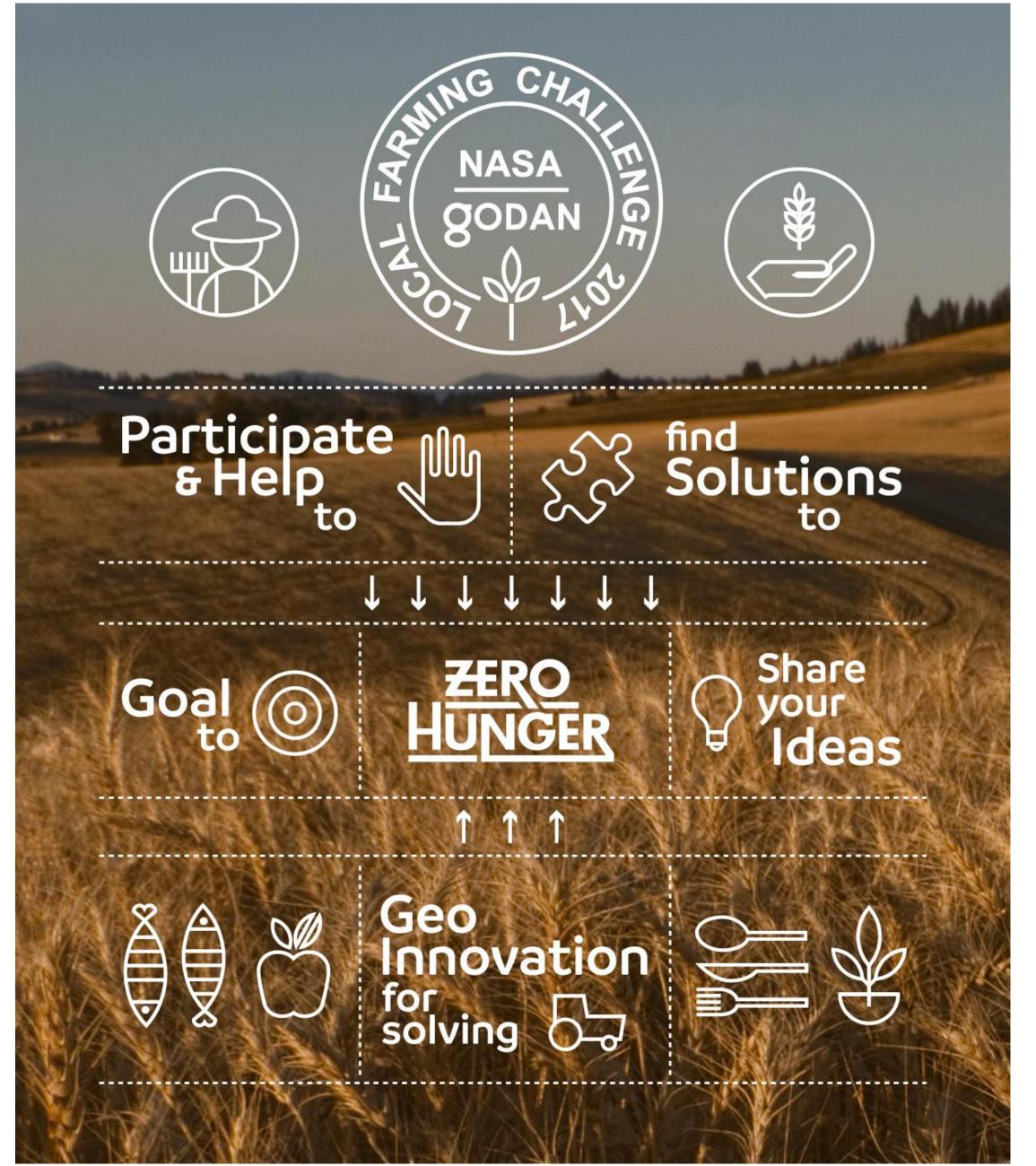
Introducing the GODAN Local Farming Challenge 2017

The Challenge is important because:

- 800,000,000 people one in nine of the world's population are hungry and malnourished.
- The challenge is to identify solutions.
- GODAN believes that the information already exists for change to be **possible**, but it needs to be **shared** by all rich and poor.
- Sharing through Open Data could lead to ZERO HUNGER.









Develop an innovative solution to reduce waste and achieve ZERO HUNGER

By bringing together teams of students and researchers to find solutions for local farming in growing cities, using open agriculture and nutrition data.

Teams should use:

- some aspect of the OpenCitySmart Design and
- NASA's open source virtual globe technology,
 WebWorldWind as a source of open data.

Details of the open data tools can be accessed through:

http://eurochallenge.como.polimi.it







An example of a Food Security Application

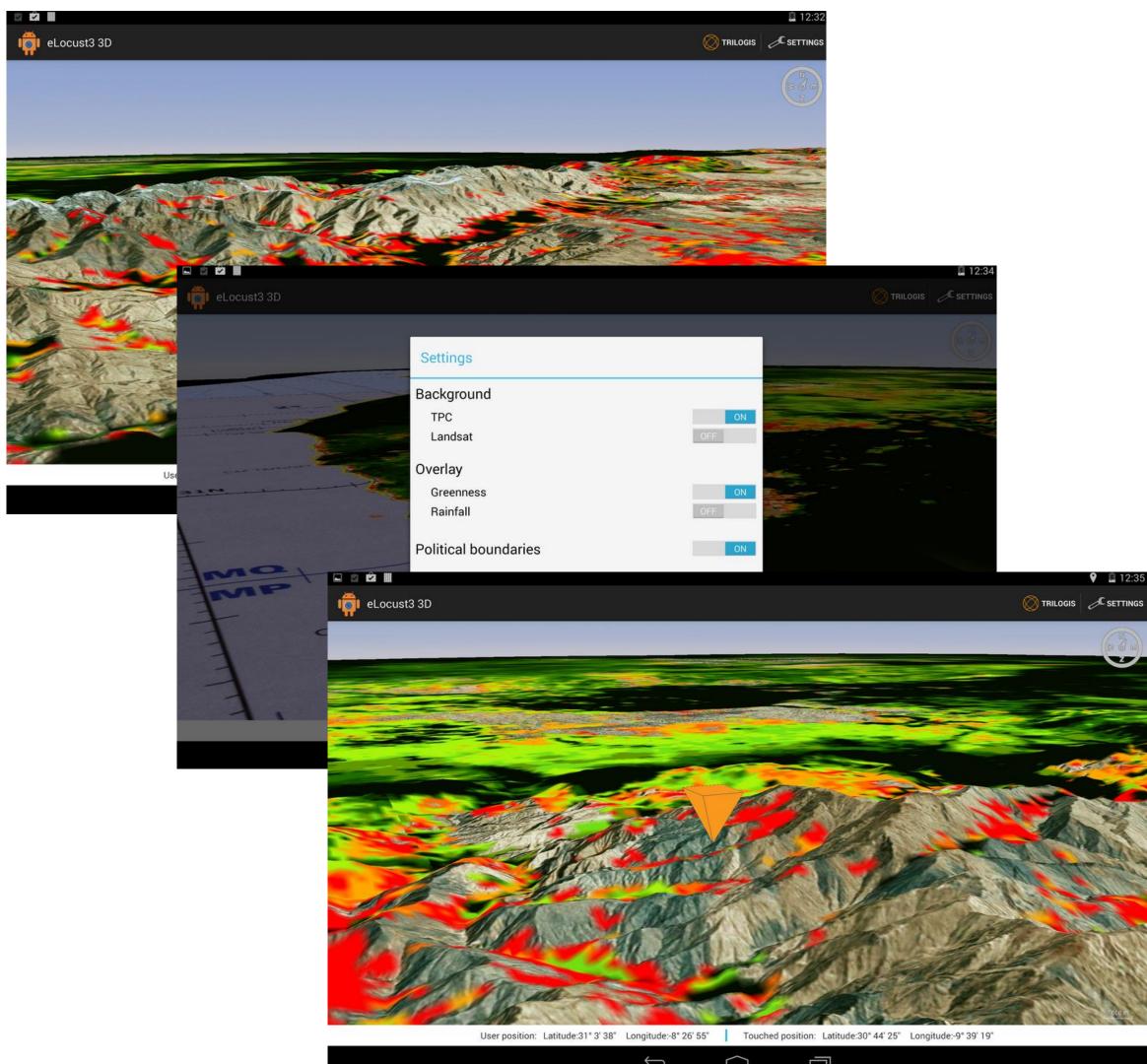
The goal of this application is to help FAO (Food and Agriculture) Organisation of the United Nations) providing support to national locust operators in Africa and Middle East.

Desert locusts are a huge problem for the population and due to their ability to change their behaviours and habits. These locusts are hard to limit as they form swarms and move rapidly (about 20km/h). Moreover, they can consume (in 1km² swarm) as much food as 35,000 people eat in a single day.

Nicola Dorigatti, Nicola Meneghinii

http://www.trilogis.it/eLocust3D/











Geo For All – Making education and opportunities accessible to all



