

# **The role of open data and innovation in ensuring global food security**

Suchith Anand

14<sup>th</sup> International gvSIG Conference

24<sup>th</sup> Oct 2018  
Valencia, Spain

# Hunger Poverty Innovation

[www.godan.info](http://www.godan.info)



# Big picture – Enabling innovation opportunities for All

- Inclusive – for all levels
- Empowerment
- Lowering the barriers
- Spread Awareness on available resources
- Building partnerships and synergies with like minded organisations

We welcome ideas from all on how to make this possible

A woman with a pink headscarf and a patterned dress stands in the foreground, looking towards the camera. Behind her is a market stall with various goods, including bags of flour and other food items. In the background, another person is visible, and the setting appears to be an outdoor market area with a corrugated metal wall.

**Providing answers to:**

- **How can we ensure zero hunger for all?**
- **How can we use open data to help small farmers?**

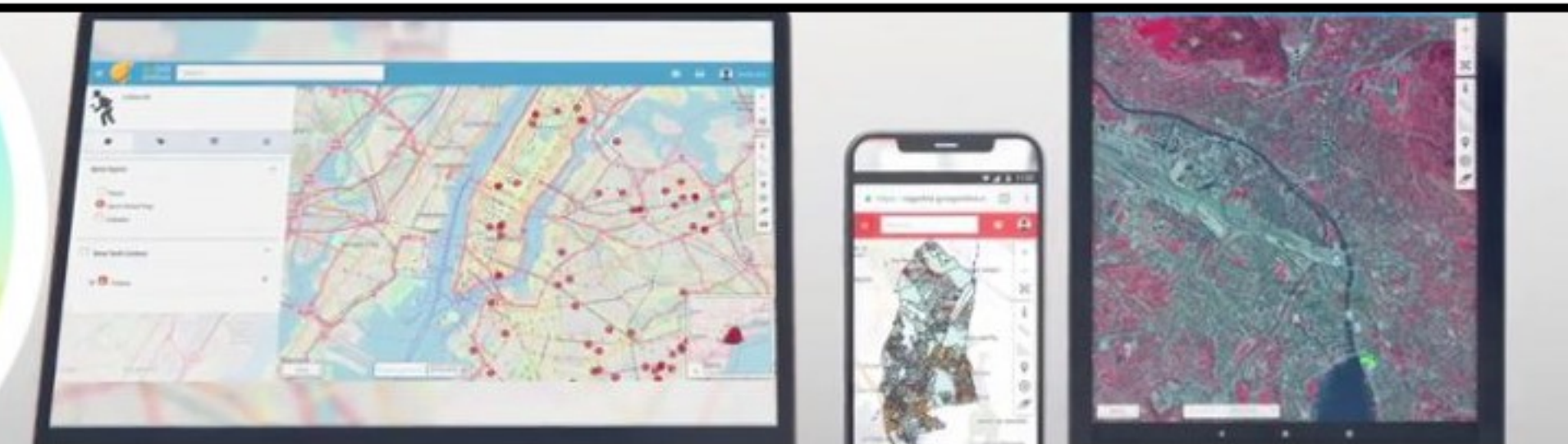


## Questions to the community?

How can gvSIG community make use of the amazing tools available (gvSIG Mobile etc) to help develop innovative applications for small holder farmers?

gvSIG Challenge for Students to develop innovative solutions for global food security using open data?

*gvSIG project blog*





# **GODAN Local Farming Challenge 2017**

**Encourage Geo-Innovation Solutions  
for Zero Hunger**

**<http://eurochallenge.comopolimi.it>**





Participate  
& Help  
to



find  
Solutions  
to



Goal  
to



**ZERO  
HUNGER**



Share  
your  
Ideas



Geo  
Innovation  
for  
solving



## Develop innovative solutions 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.

Details of the open data tools can be accessed through:

<http://eurochallenge.como.polimi.it>

# Key Outcomes of the Challenge

- Several Projects linking Agricultural and Geo Domains participated in the Challenge
- The Winner was AgroSphere developed by a team of High School Students and Undergraduate NASA interns.



# Winner of GODAN Local Farming Challenge 2017

## NASA AgroSphere

100+ Years of Historical Agriculture and Climate Data In Your Hands



<https://worldwind.arc.nasa.gov/agrosphere/about.html>

# Winner 2017 - Agrosphere

*AgroSphere*

INTRODUCTION

DOCUMENTATION

TIMELINE

TEAM

OUTREACH



# AGROSPHERE

**START APPLICATION**

**SOURCE CODE**

**TELL ME MORE**

<https://worldwind.arc.nasa.gov/agrosphere/about.html>

# AgroSphere

AgroSphere is an educational web application that visualizes the effects of Climate Change on Agriculture using a large collection of global agricultural and Climate Data.

- Enables visualization of various types of agriculture (1961-2014) and climate data (1989-2014) simultaneously from hundreds of countries across the globe
- Explore Geo-Comparison of Agricultural Data
- Search for current weather data for any city around the globe





WorldWind

EUROPA CHALLENGE  
HELSINKI 2017



# Lessons Learnt

- This challenge was a step towards enabling “Mass Innovation” in agriculture related applications using openly available technologies and data.
- It enabled building partnership between Universities, schools, teachers, GODAN and NASA
- The Final Award Ceremony at Helsinki brought together all finalists together and enabled further sharing of ideas, skills and knowledge.

# Examples

GODAN AgriGIS Hands  
on workshop and  
ThinkTank @RCMRD,  
Nairobi, Oct 2016





# GODAN AgriGIS Workshop and ThinkTank @RCMRD, Nairobi, Oct 28-29, 2016



Regional Centre for  
Mapping of Resources  
for Development

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Posted: **October 22, 2016**



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## ***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- 28<sup>th</sup> October, 2016.

### ***Background***

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











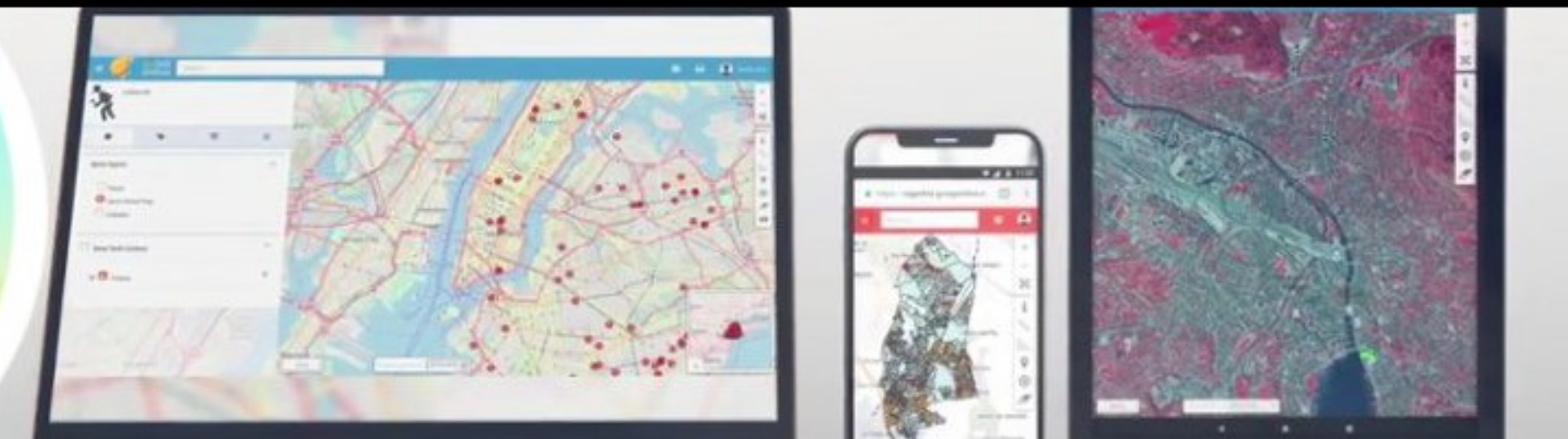
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# Be part of GODAN WG on Capacity development

- Be part of a global community and benefit from sharing ideas and experiences
- Freely available learning materials and resources
- Hands on Workshops on different themes
- Webinars
- Think Tank Meetings
- Storytelling with Data
- Student projects/competitions



Join us at [https://dgroups.org/fao/godan\\_cd/join](https://dgroups.org/fao/godan_cd/join)

## GODAN Capacity Development Working Group

### Join GODAN Capacity Development Working Group

Title:

First Name:

Last Name:

Email:

Organisation:

Position:

Address:

Country:

Reason to Join:

Participation in this community is subject to the [Terms of Engagement](#).

[Accept Terms of Engagement and Join](#)



Thank You!

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