



# Building a Citizen Centric Ecosystem to monitor land, the environment, and climate change

Europe has the capacity and potential to lead a global citizen-science movement to address critical environmental challenges and provide robust solutions using a people-centred approach.

With the growing need for green spaces, a healthy environment and eco-sustainable land use, five complementary projects, funded by the European Commission, are demonstrating the societal and economic benefits of involving citizens in environmental decision making and cooperative planning.

The projects - LandSense, Scent, Ground Truth 2.0, Grow Observatory and WeObserve - are building on existing and well-tested components related to Earth Observation data and natural resource management to establish Citizen Science Observatories that deliver state of the art tools and services to gather citizen-based science.

## Who benefits?



Civil society and citizens



Policy makers



Researchers  
(in ICT, social science)



IT start-ups and SMEs

## What is the impact?

- Harnessing the potential of **citizen scientists** to provide new data streams of local information about their environment
- Empowering and enabling citizens to become the **eyes and ears** of policy makers
- Complementing existing **monitoring systems and data sources** with citizen-based data for decision making
- Ensuring greater **coordination and a sustainable future** for citizen observatories in Europe and Africa
- Launching **low-cost state-of-the-art tools** that can boost the development of innovative people-centric apps, products and services



## New results and services to transform environmental decision making



### Citizen-driven land cover/use monitoring for efficient flood management

The Scent Toolbox is a collection of smart technologies and applications that enable citizens to monitor and collect various environmental information, which is consolidated to improve flood modelling. It includes a crowdsourcing platform with gaming applications, a citizens campaign management tool, tools for the analysis and interpretation of citizen-generated data, and flood models.

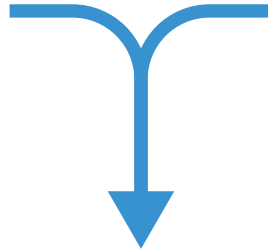
[scent-project.eu](http://scent-project.eu)



### Soil and food cultivation management

The GROW Observatory engages thousands of growers, scientists and others passionate about the land through simple tools to better manage soil and grow food, while contributing to vital scientific environmental monitoring. Thousands of growers are learning via our online courses how to understand the soil and explore global environmental soil issues by becoming a citizen scientist.

[growobservatory.eu](http://growobservatory.eu)



### Creating a sustainable ecosystem of citizen observatories (COs) for environmental monitoring

- Improving the coordination between existing Citizen Observatories (COs) and related regional European and International activities;
- Launching and coordinating Communities of Practice (CoPs) for sharing information and strengthening the knowledge base about Citizen Observatories;
- Delivering Massive Open Online Courses (MOOCs) to support citizens to understand, participate in and create their citizen science projects.

[weobserve.eu](http://weobserve.eu)



### Earth observation through Satellite imagery for urban landscape dynamics, agricultural land use and forest and habitat monitoring

The LandSense Citizen Observatory - aggregating EO technologies, mobile devices, community-based environmental monitoring, data collection, interpretation and information delivery systems to empower communities to monitor and report on their environment.

Services include LandSense campaigner, Farmland support, Change detector, Quality assurance and control.

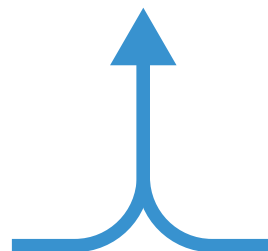
[landsense.eu](http://landsense.eu)



### A new approach to citizen observatories

Ground Truth 2.0 is setting up and validating six citizen observatories in real conditions, in four European and two African demonstration cases. Demonstrating that such observatories are technologically feasible, can be implemented sustainably and that they have many societal and economic benefits.

[gt20.eu](http://gt20.eu)



## Common Dissemination Booster

These projects have received support from the European Commission's Common Dissemination Booster