

LANDSENSE

Coupling citizen science and earth observation data to promote environmental monitoring

Inian Moorthy, Linda See, Gebhard Banko, Sofia Capellan,
Vladimir Mrkajic, Ana-Maria Olteanu-Raimond, Elizabeth A.
Schrammeijer, Michael Schultz, Matej Batič, Steffen Fritz

**Center for Earth Observation & Citizen Science
International Institute for Applied Systems Analysis**



@LandSense
Landsense.eu

Motivation

- Improving the quality of Earth Observation (EO)-based Land Use & Land Cover (LULC) maps/products
- Transforming the conventional top-down approach to EO-based monitoring
- Leveraging citizen science and crowdsourcing methods to engage people in environmental monitoring & stewardship

➡ <https://zenodo.org/communities/landsense/>

LandSense 2016 – 2020

 **18 partners**

 **9 countries**

 **20+ journal publications**

 **70+ dissemination events**

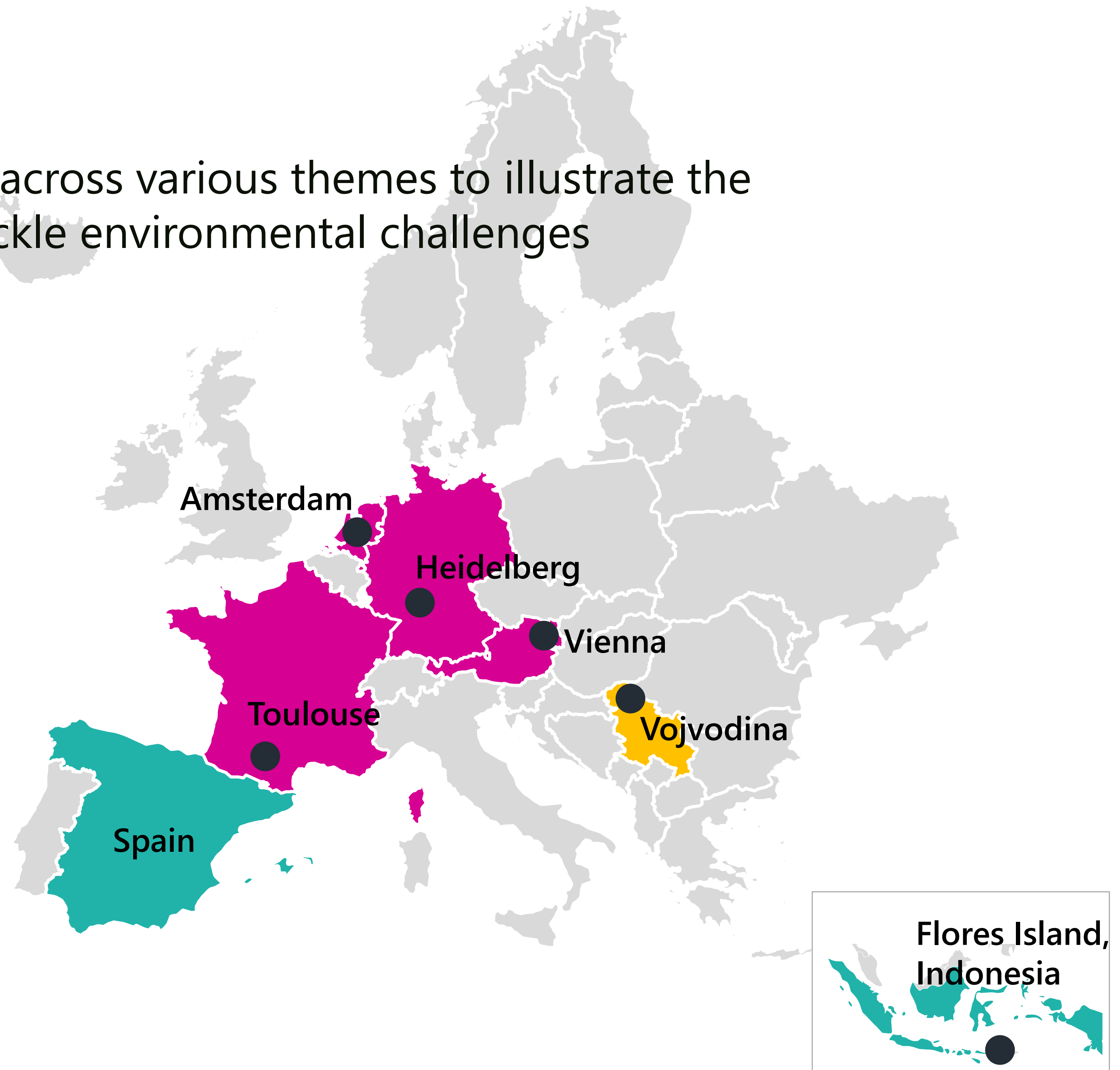
 **5+ open access datasets**



The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 689812

LandSense Pilots

LandSense technologies are deployed across various themes to illustrate the potential of citizen observatories to tackle environmental challenges



Amsterdam Rembrandt Park

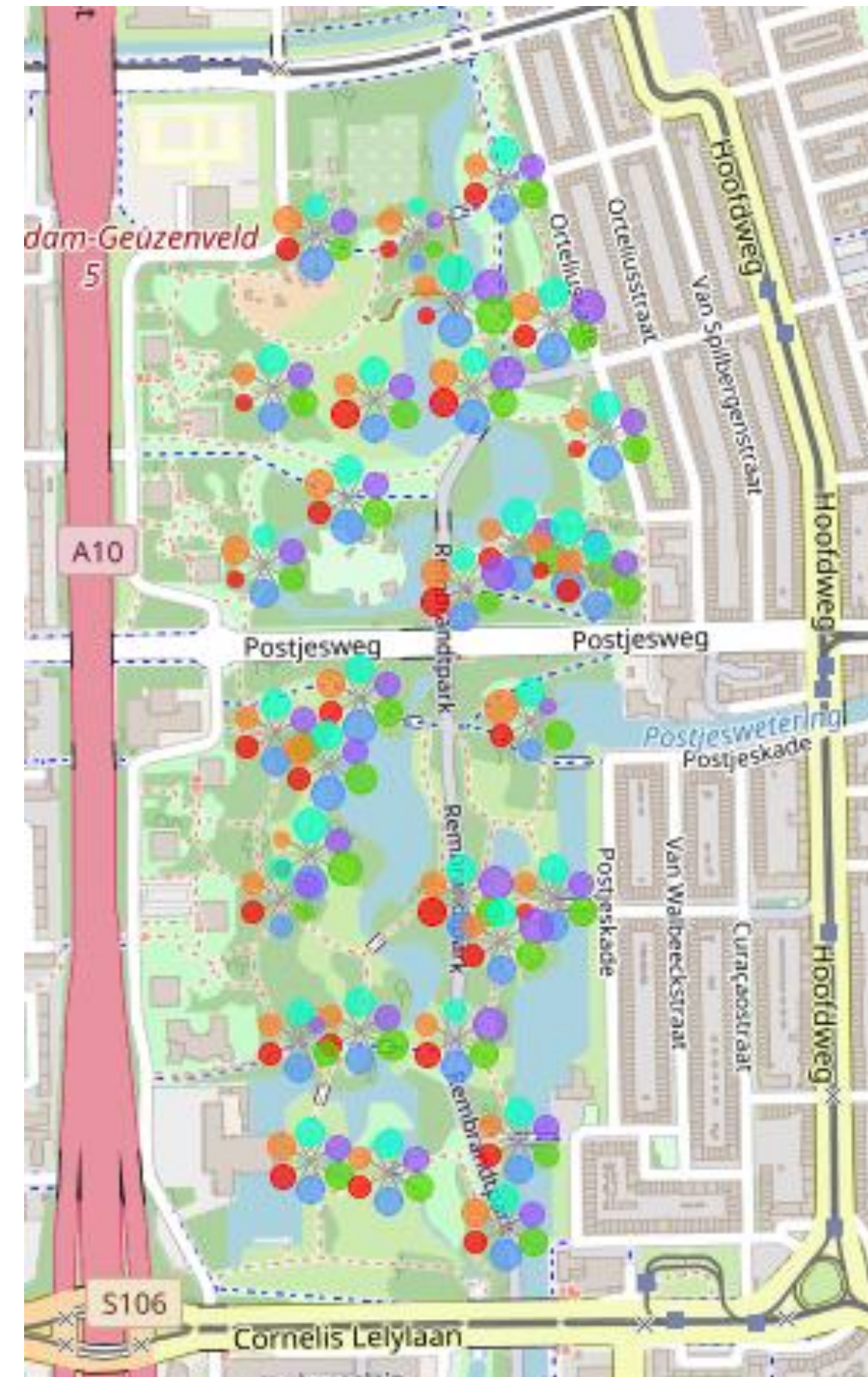
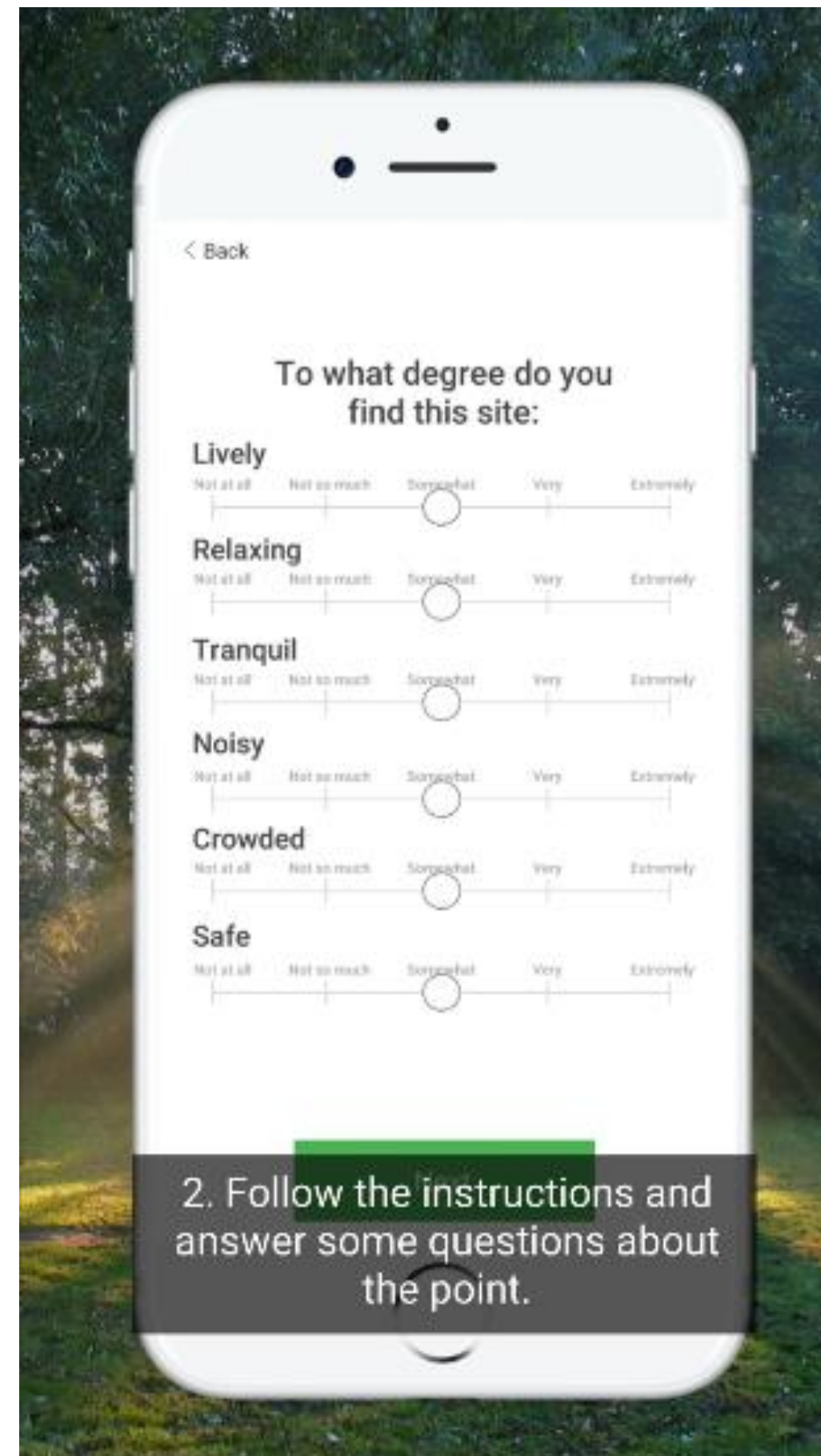
Promoting sustainable urban development with citizen insights on the perceptions of green and open spaces



125+
participants



375+
observations



Feeling

- Tranquil
- Lively
- Relaxing
- Safe
- Crowded
- Noisy



Toulouse – LULC Dynamics

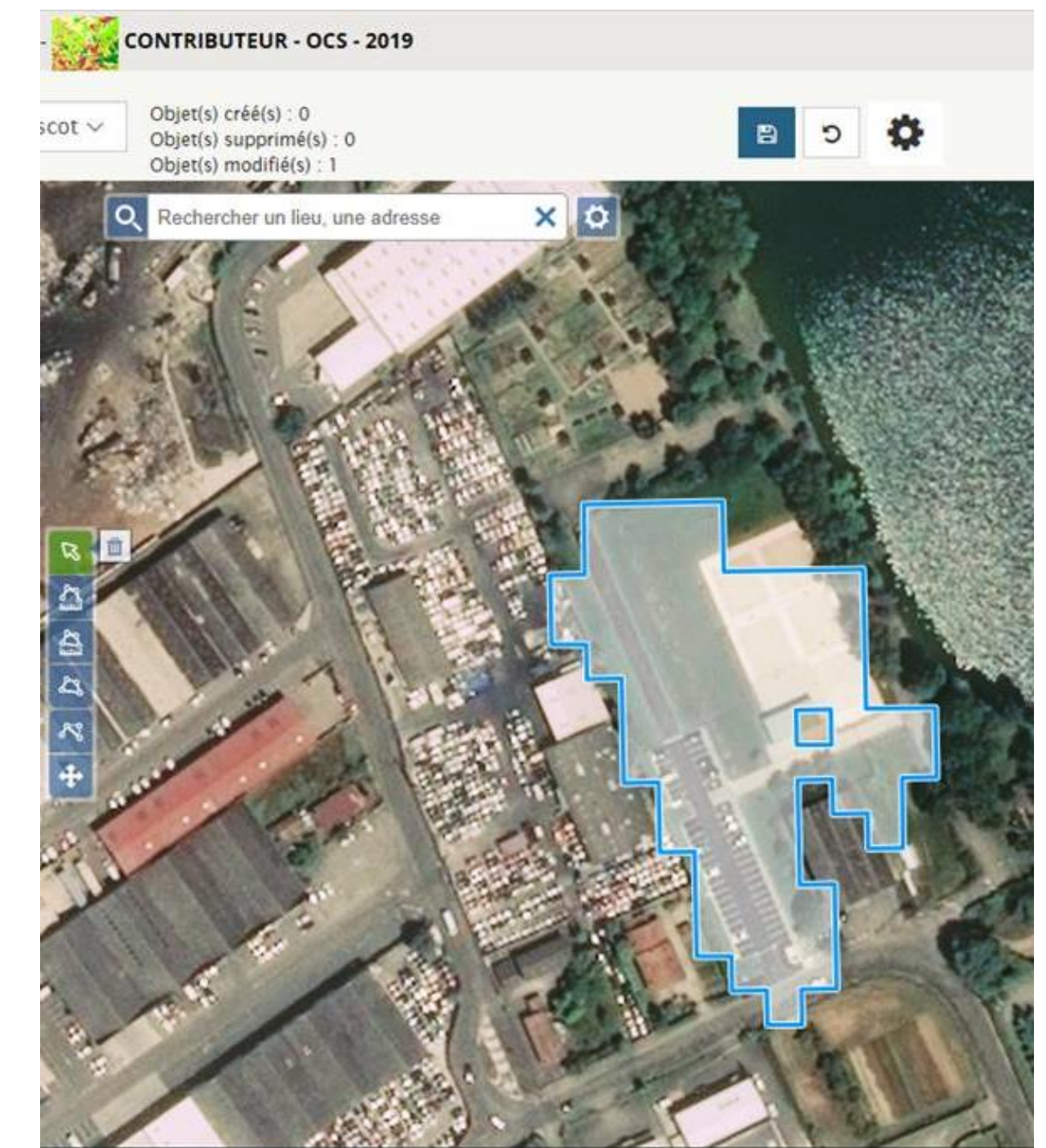
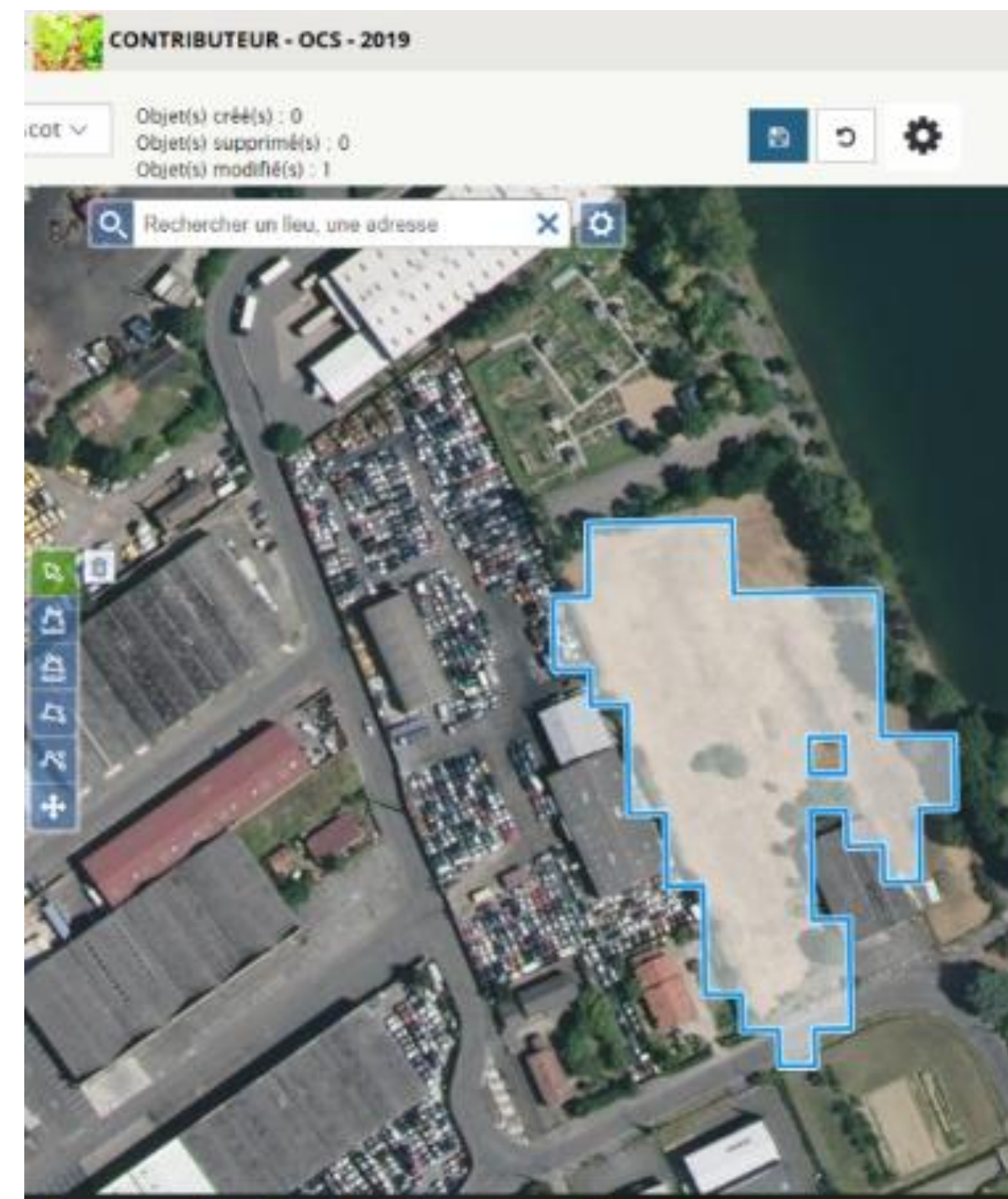
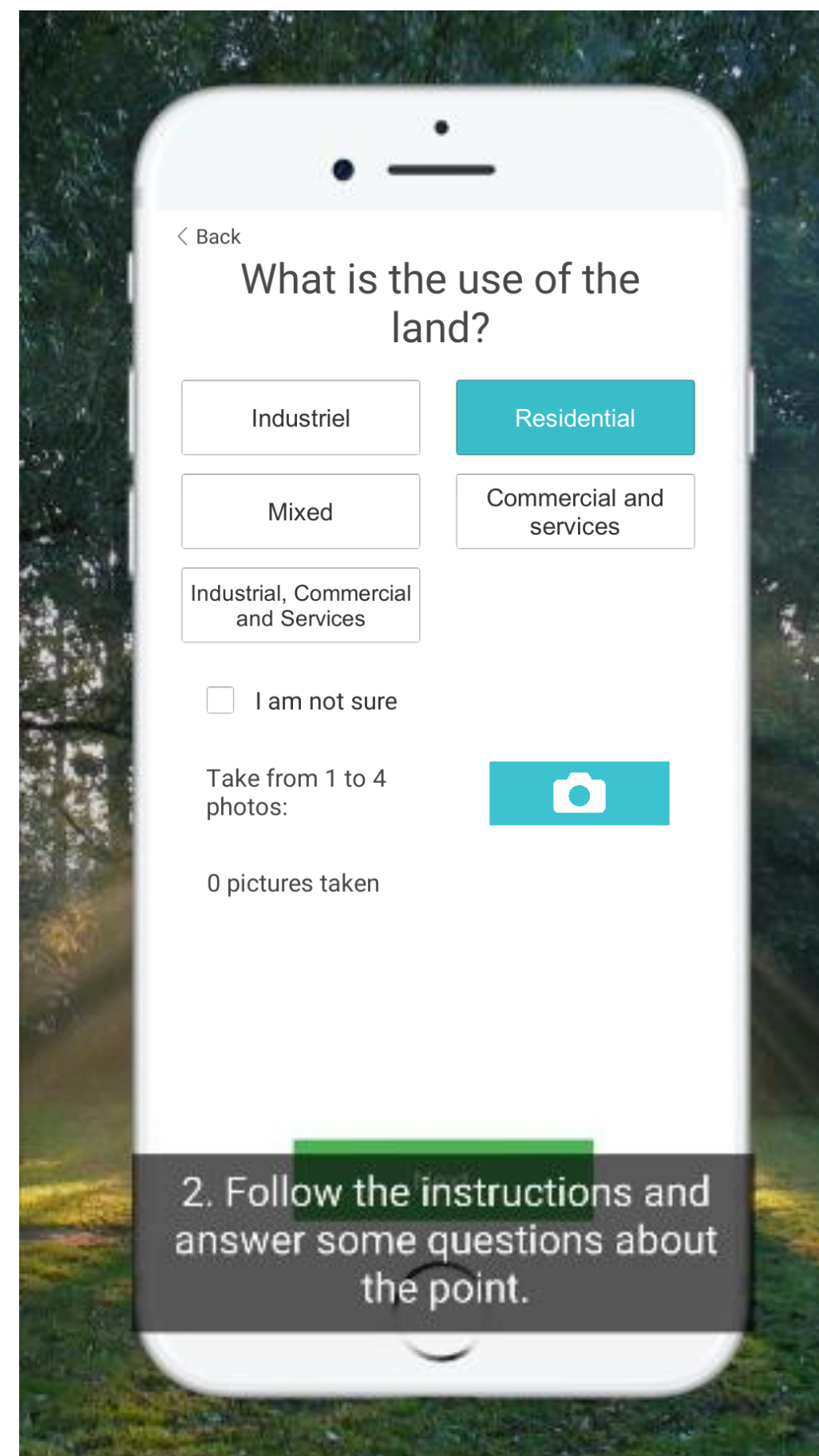
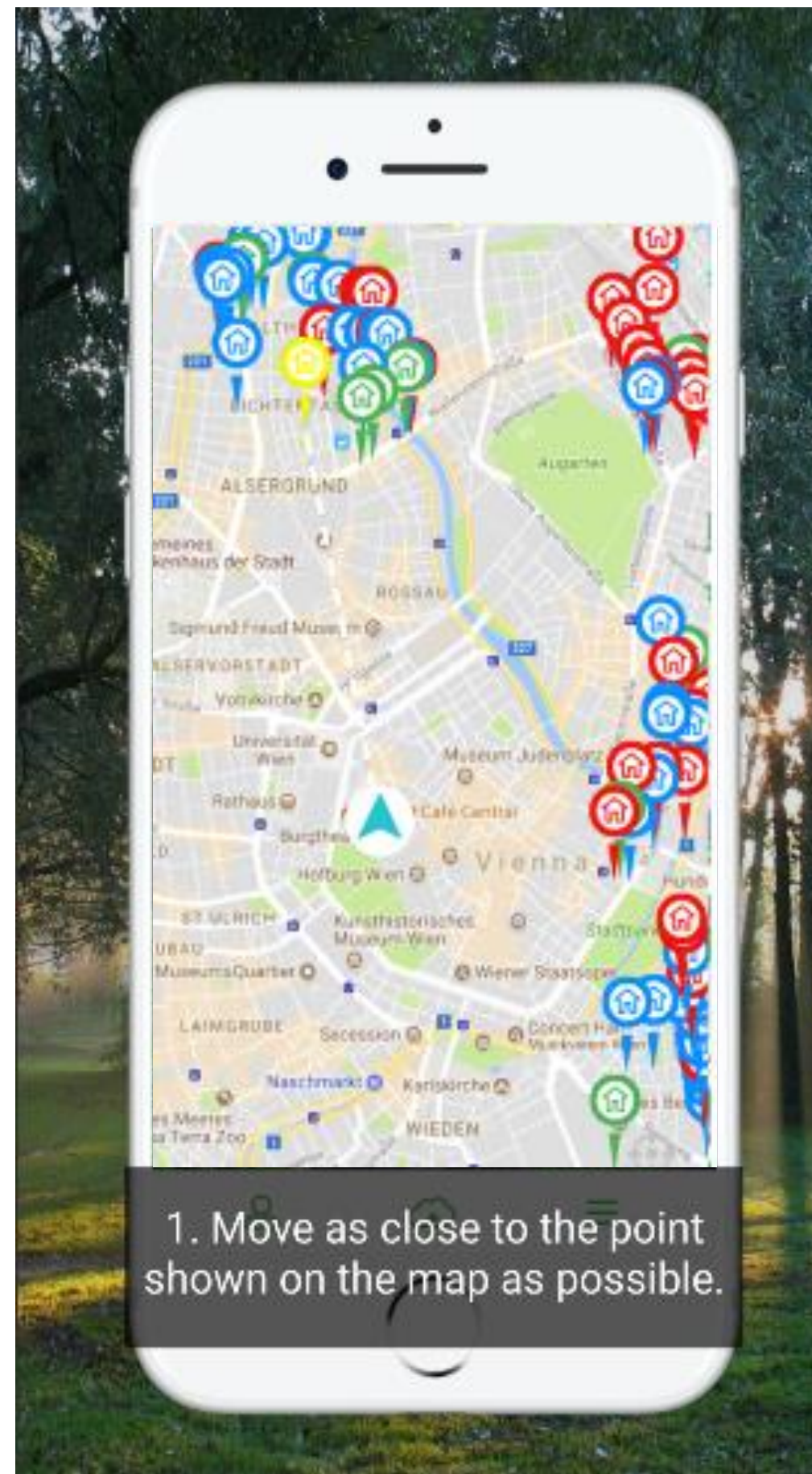
Integrating expert contributions using crowdsourcing approaches into LULC authoritative databases



130+
participants



7500+
observations



Dataset 1: Sentinel 2 change detection validation 2019
Dataset 2: Land use classification 2019
Dataset 3: In-situ validation 2018



Vojvodina

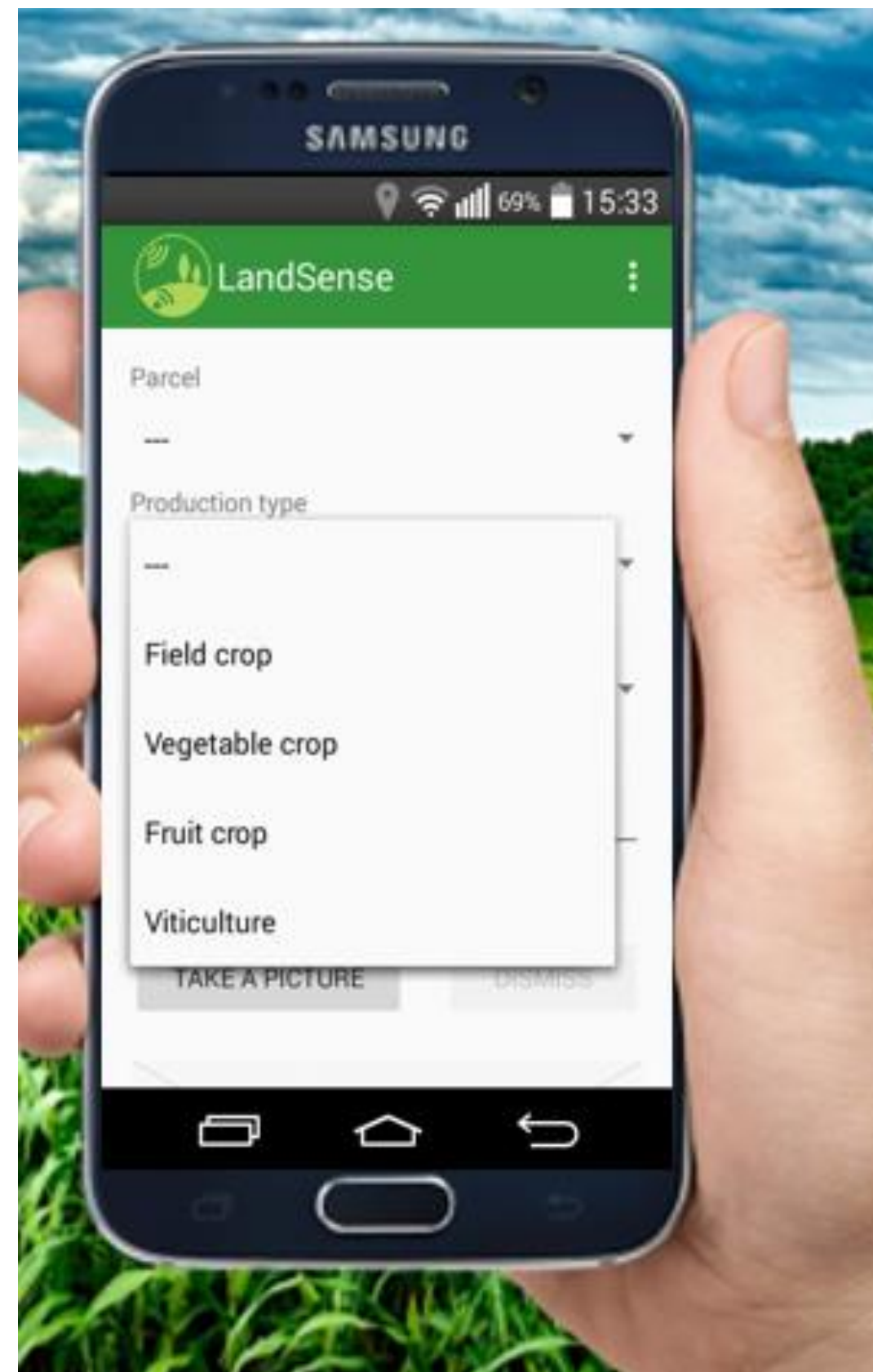
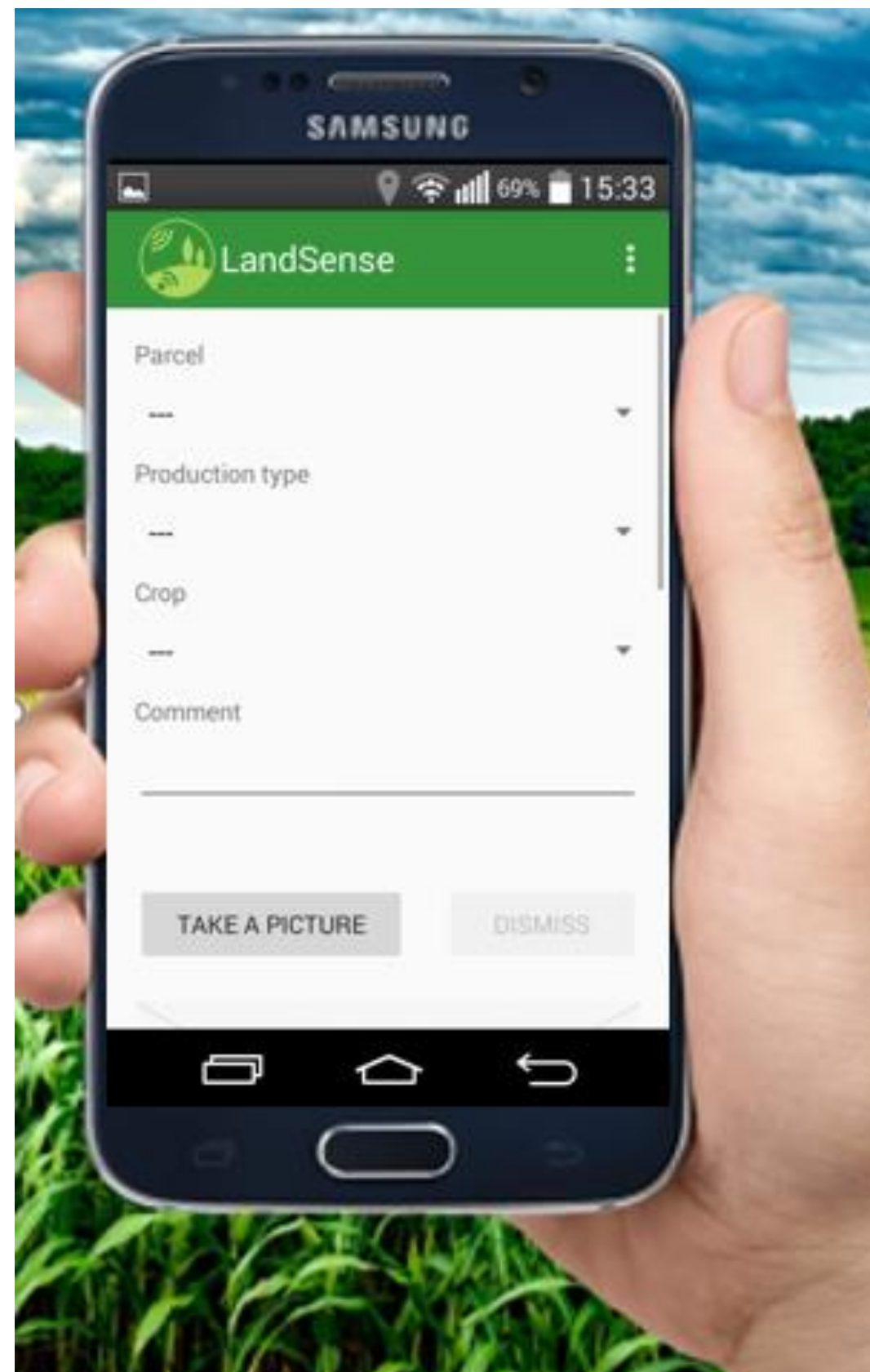
Leveraging the power of EO systems and crowdsourcing to deliver value added service to farmers



181
participants



2850+
observations



Phase 1: Two high schools & University of Novi Sad



Crop Support



Spain

Monitoring threats to biodiversity with a focus of Important Bird & Biodiversity Areas (IBAs) & Natura 2000 sites



40+
participants



450+
observations

Volunteers → IBA Caretakers → National Coordinators



LANDSENSE MAPATHON

**Connecting citizens and satellite data
for land use mapping across the EU**



Contribute now!

<https://landsense.eu/Mapathon>

@LandSense

#EURegionsWeek

#territorialdata



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