

LANDSENSE

A Citizen Observatory and Innovation Marketplace for Land Use and Land Cover Monitoring

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**@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 we can more actively engage people in environmental monitoring & stewardship

LandSense 2016 – 2020

 **18 partners**

 **9 countries**

 **20 journal publications**

 **70+ dissemination events**

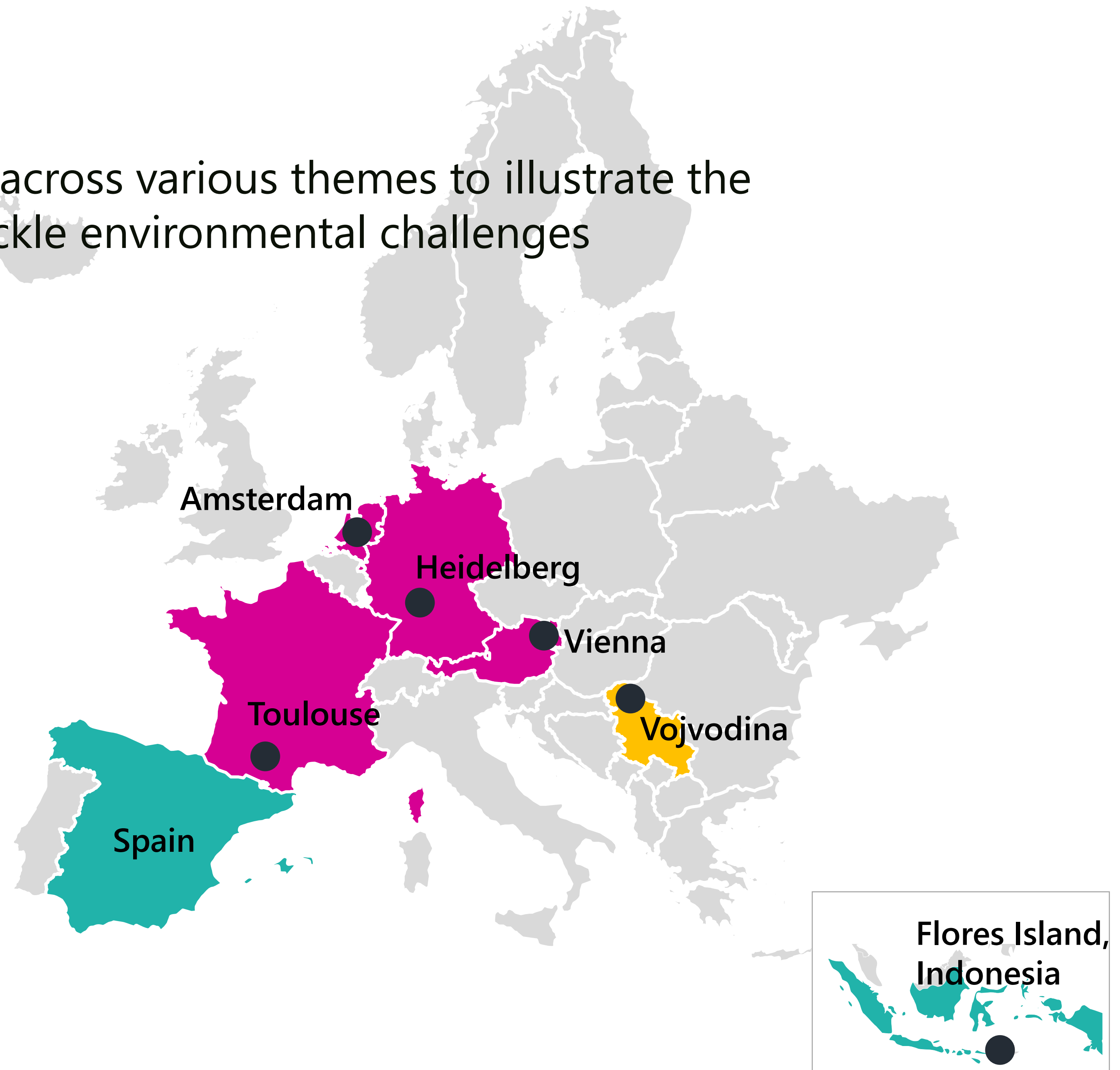
 **4 open access datasets**



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



WeObserve ODC -LandSense Datasets



Amsterdam – Rembrandt Park



Toulouse – Land Use Land Cover Dynamics



Vienna – City Oases



Vojvodina, Serbia – Agricultural Land Use



Global Land Use Land Cover Reference Data



Global Field Size Distribution

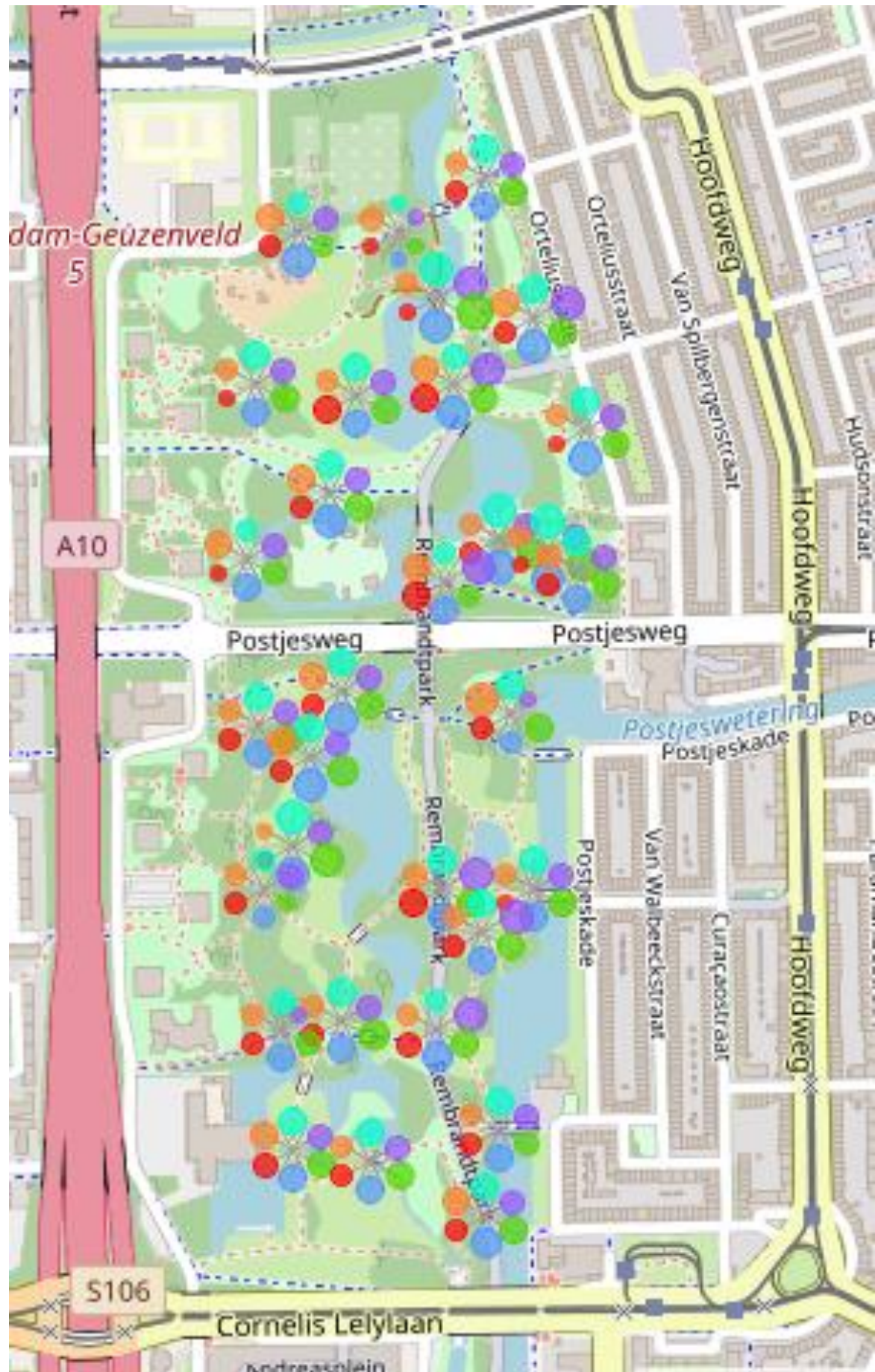
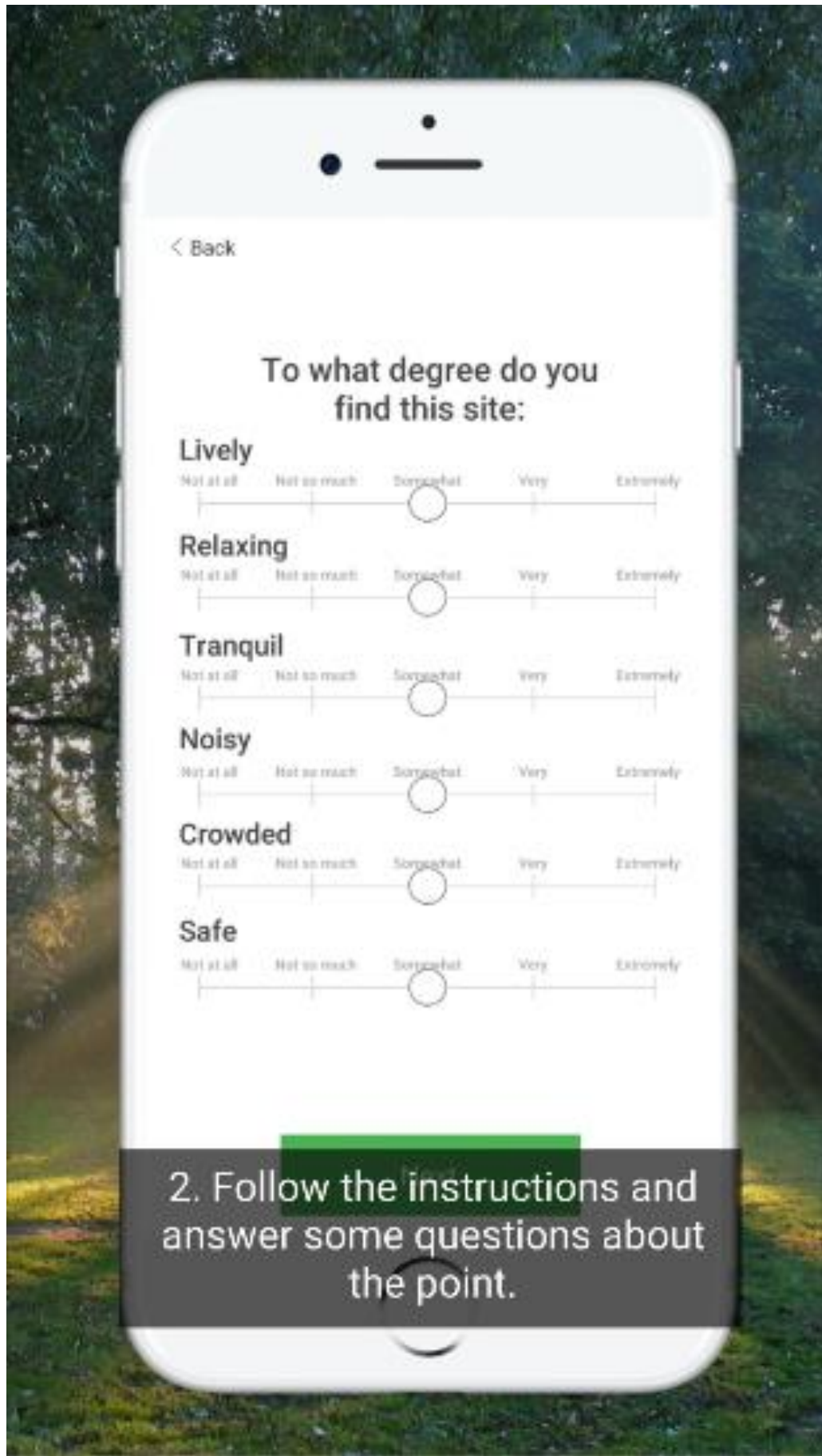
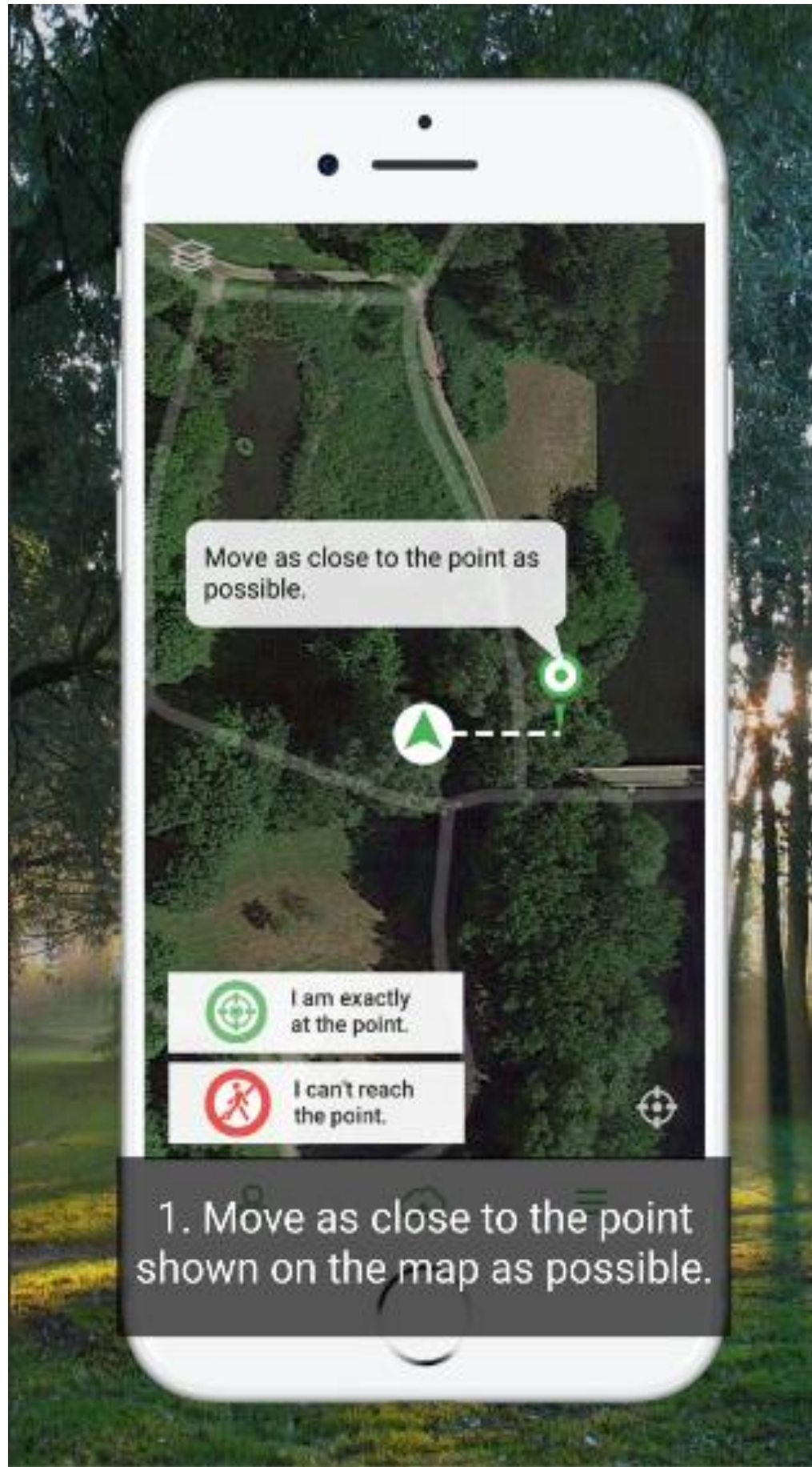
➡ <https://zenodo.org/communities/landsense/>

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



Vienna – City Oases

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



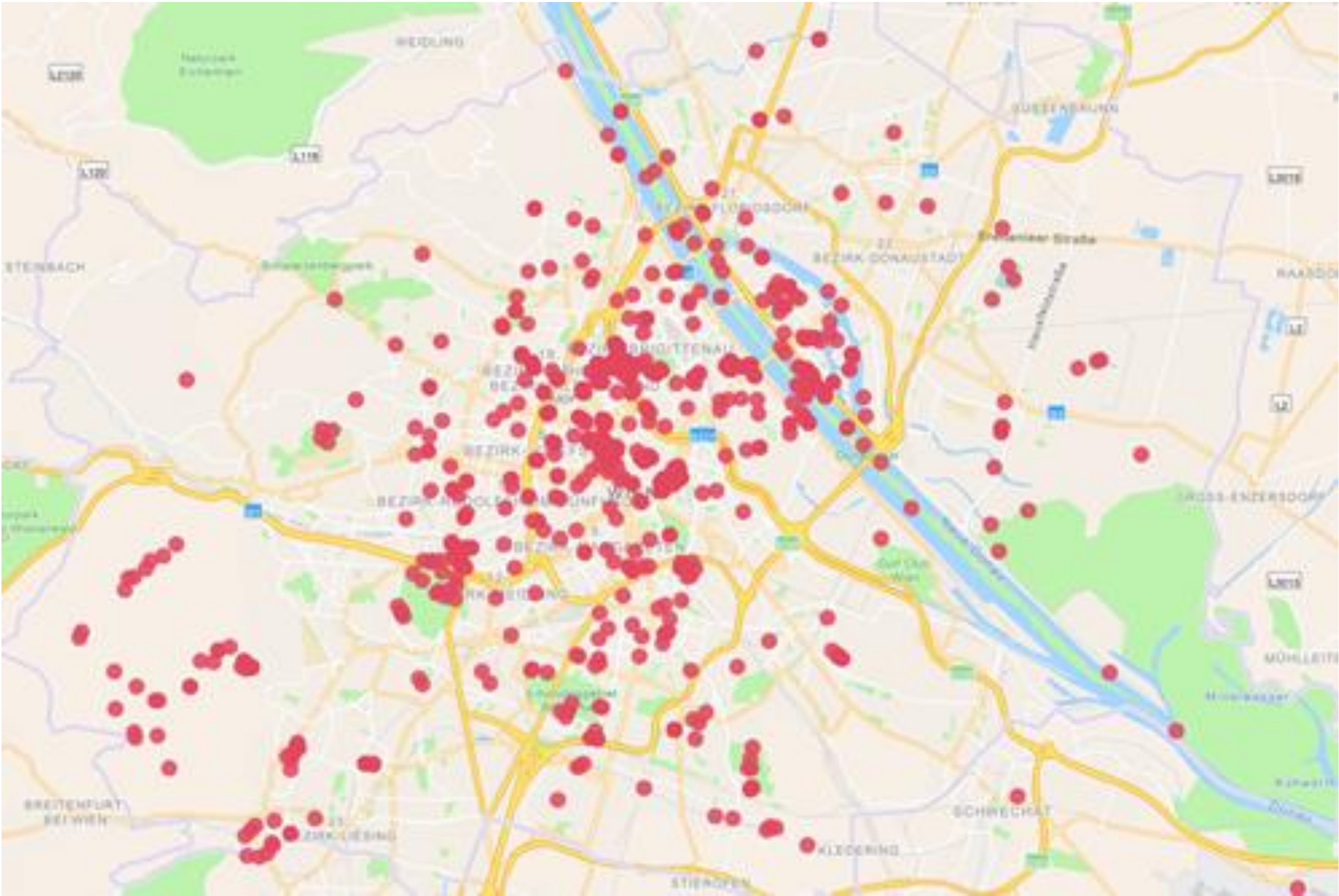
50

participants



788+

observations



Toulouse – LULC Dynamics

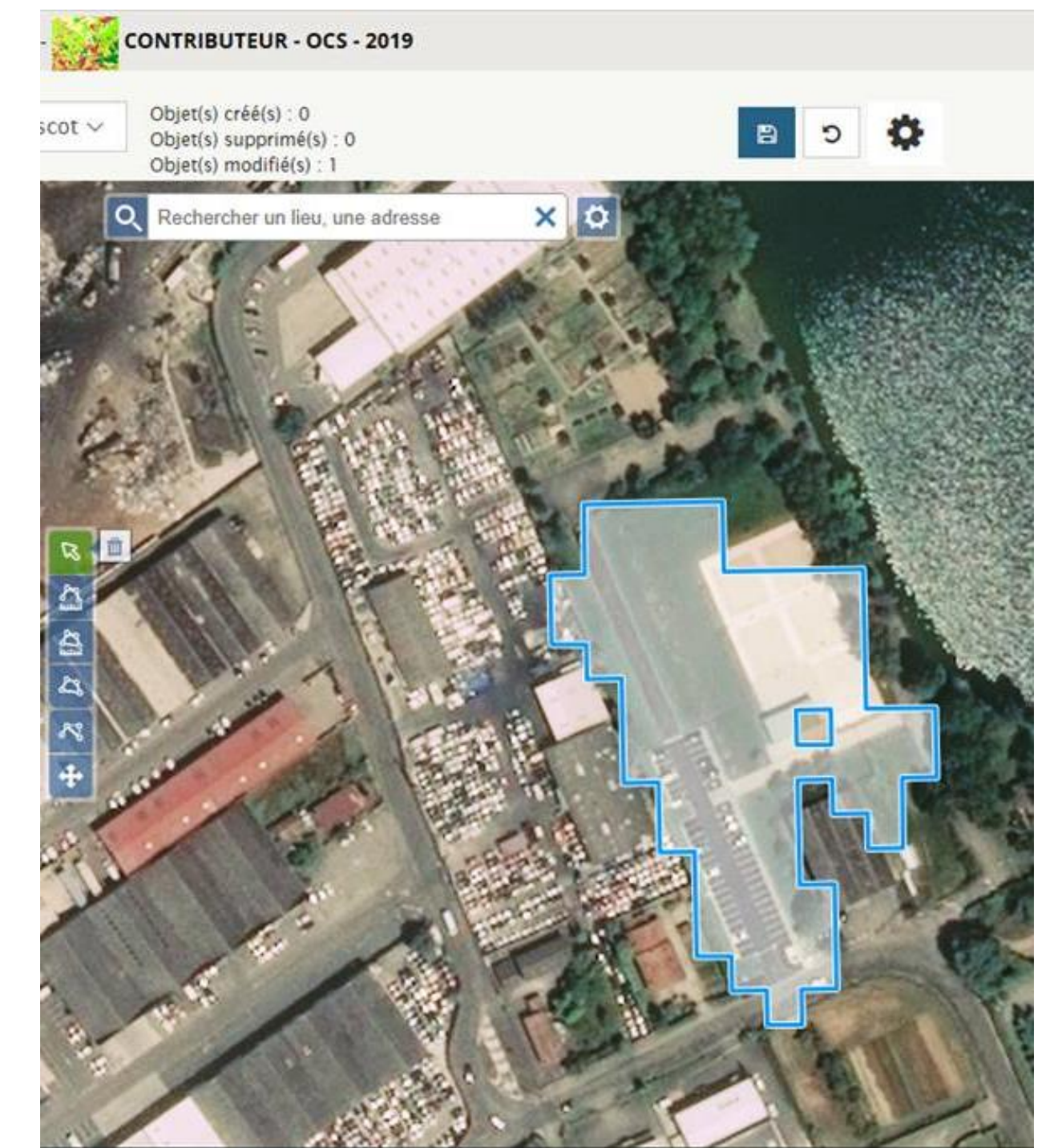
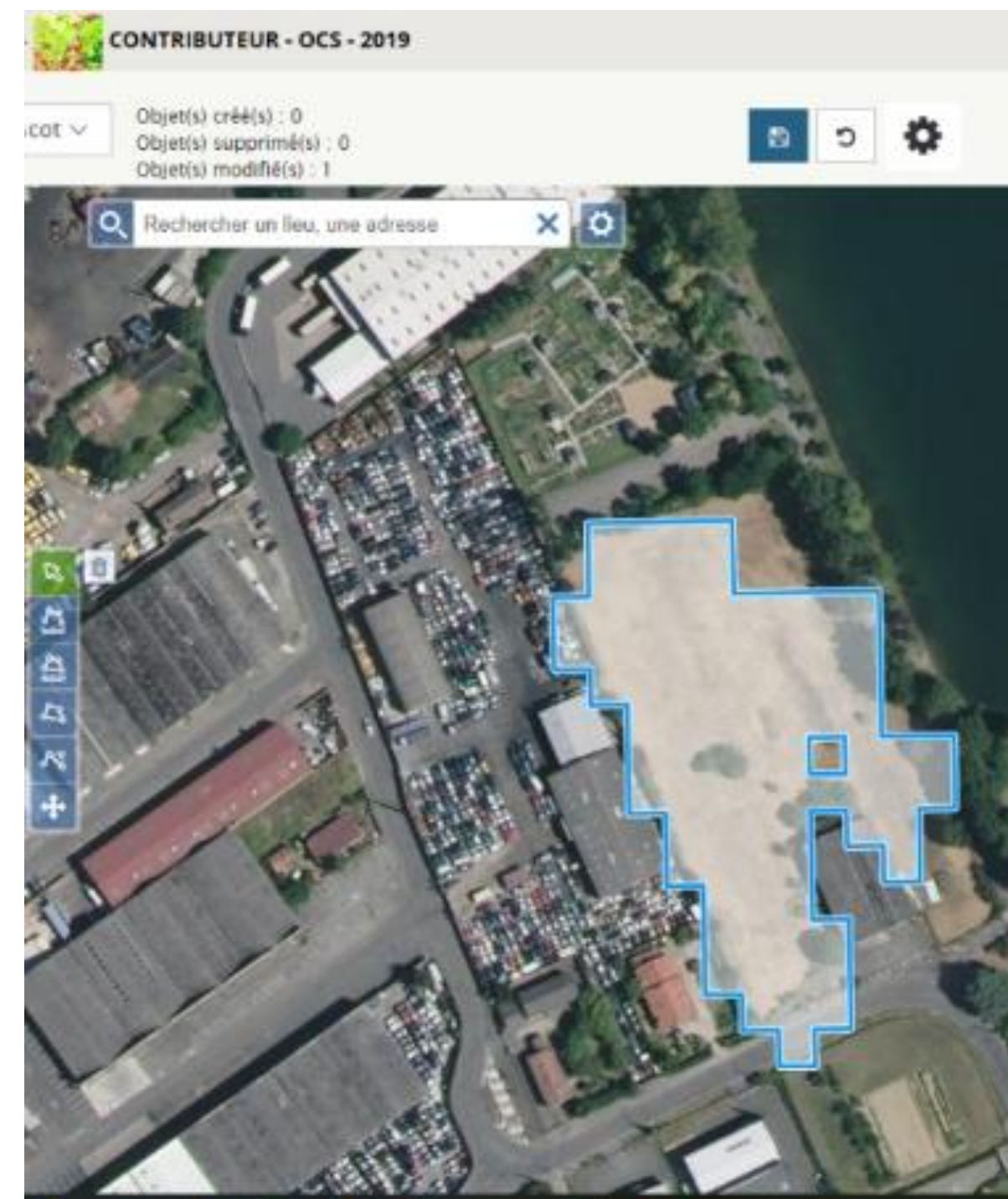
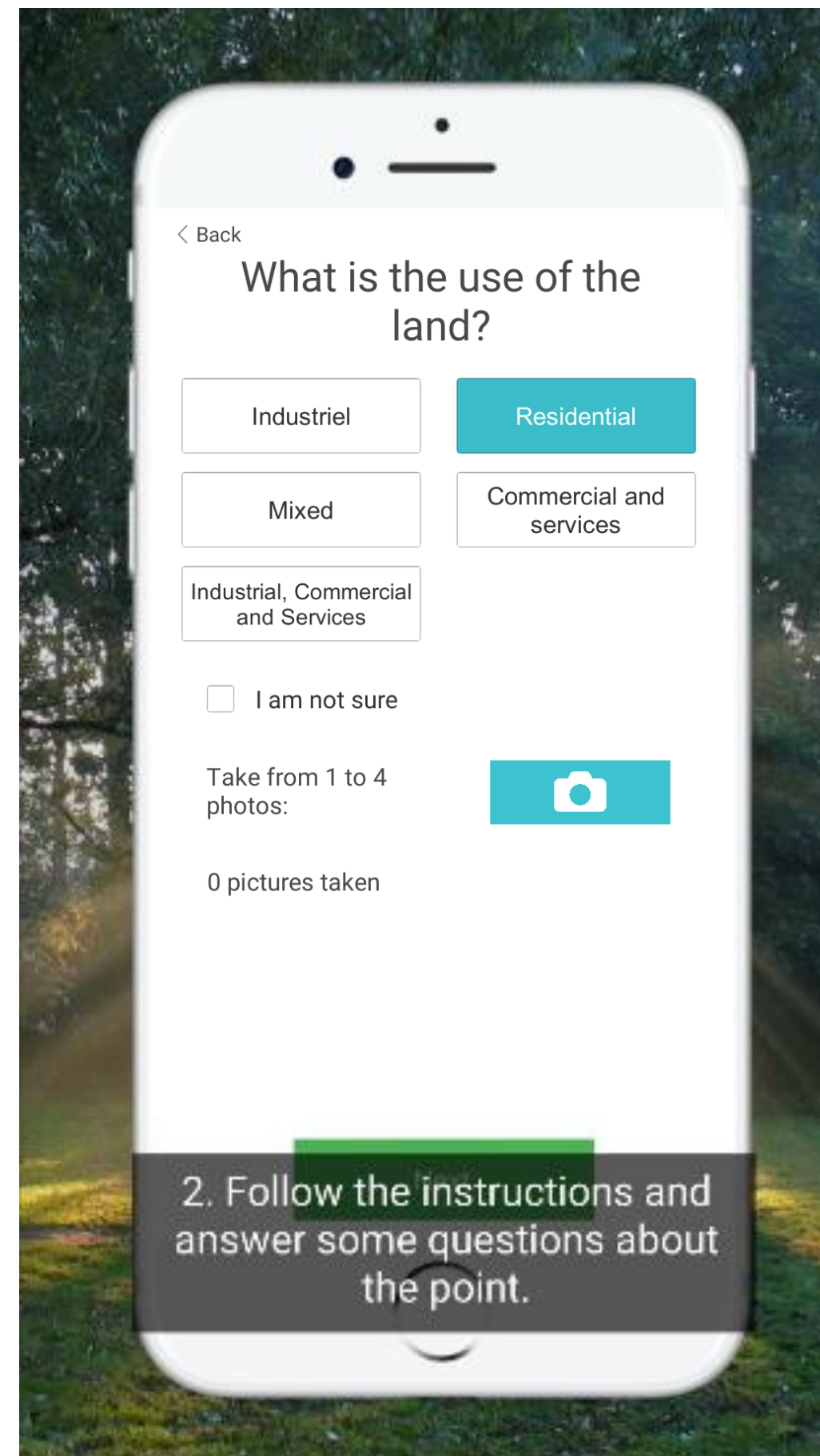
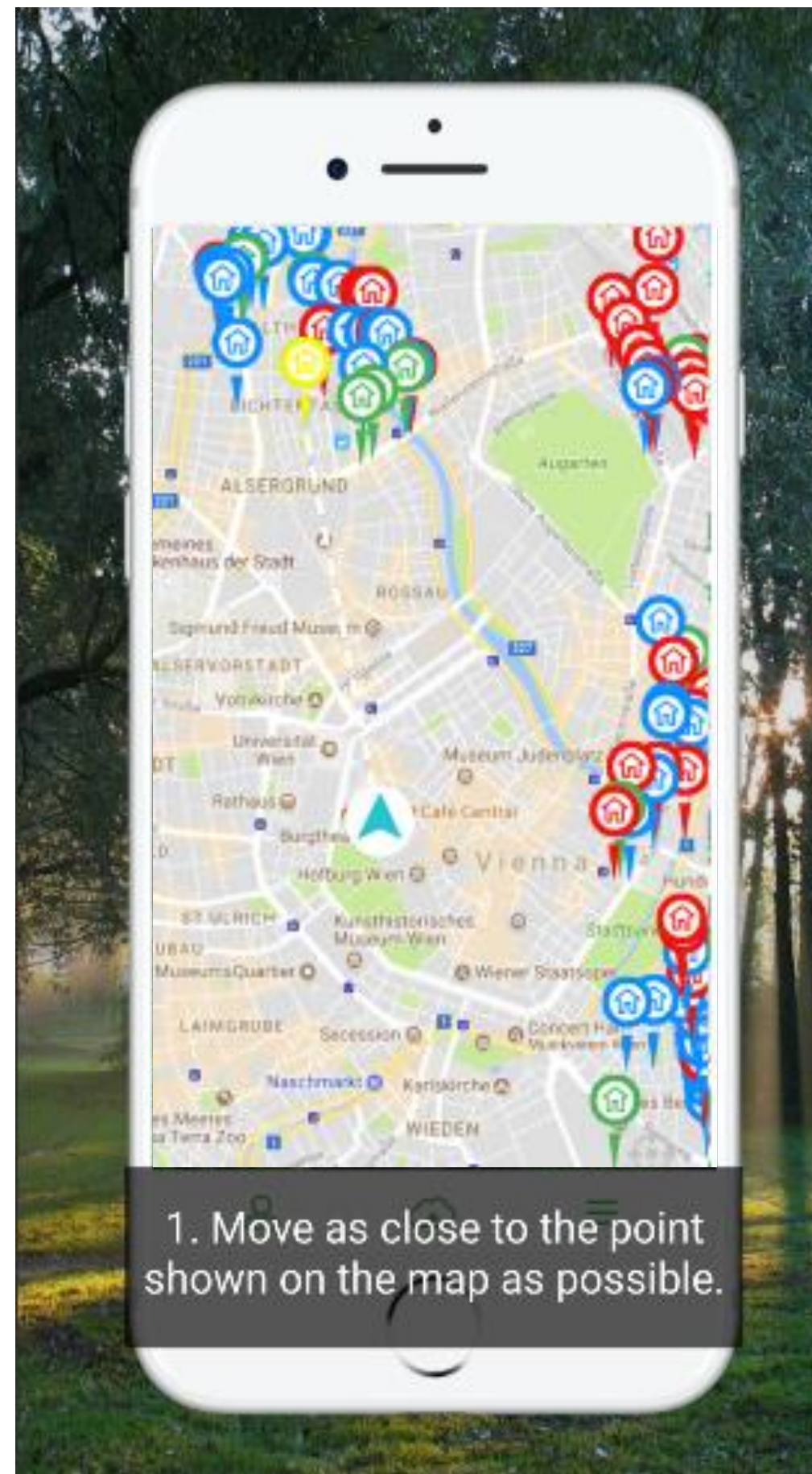
Integrating expert contributions using crowdsourcing approaches into LULC authoritative databases



130+
participants



7500+
observations



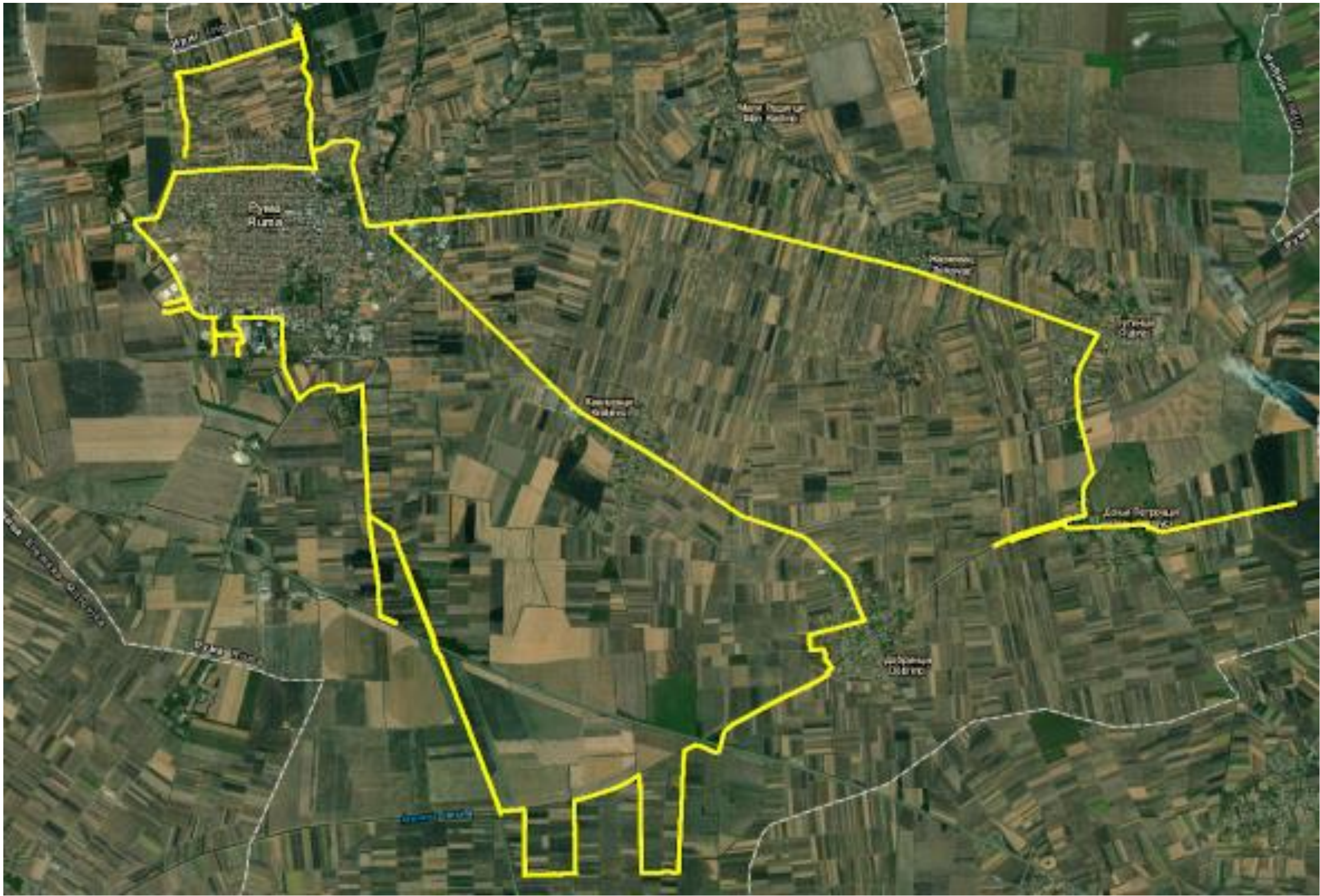
Dataset 1: Sentinel 2 change detection validation 2019
Dataset 2: Land use classification 2019
Dataset 3: In-situ validation 2018

Vojvodina – Agricultural Land Use

Capturing land cover and land use with street level imagery



26K+
photographs



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