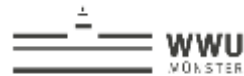# XXVII FIG CONGRESS

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Accelerating Participatory Land Rights Mapping with SmartLandMaps Tools: Lessons Learnt from Benin

Claudia Stöcker (Germany), Auriol Degbelo (Germany), Kaspar Kundert (Rwanda),
Ernst Peter Oosterbroek (Netherlands), Innocent Antoine Houedji (Benin), Gildas Mensah (Benin),
Borduas Gambadatoun (Benin) and Angela Schwering (Germany)

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The Context

Collaboration to explore additional approaches to land rights mapping in Benin

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The SmartLandMaps process

Mapping procedure

Automatic digitisation
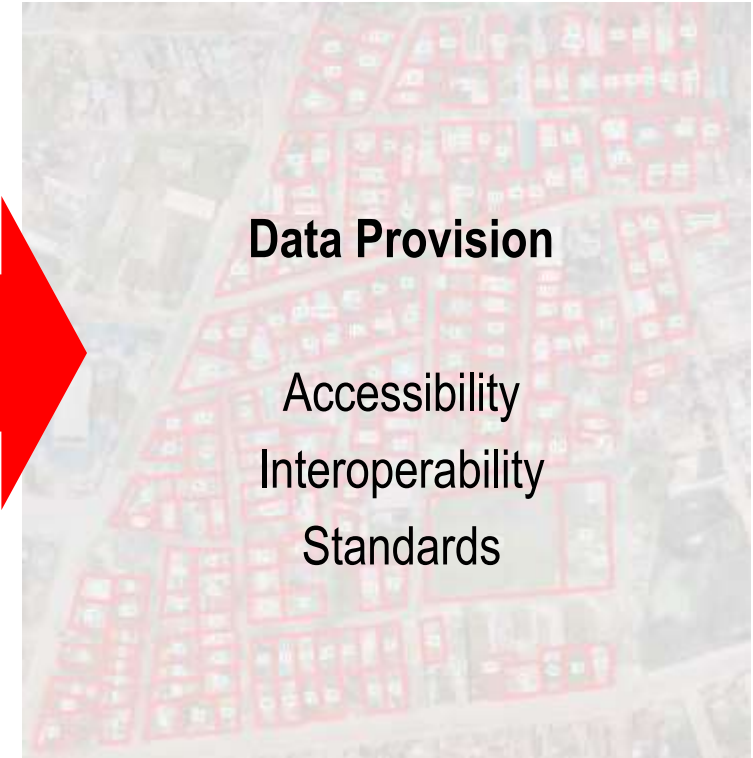
GIS-ready dataset with spatial
and textual data about RRR

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The SmartLandMaps process

Community Mapping

Participation
Transparency
Inclusion
Empowerment

Software as a Service for the automatic digitisation

Efficiency
Easy to implement
Innovative technology
Scalability

Data Provision

Accessibility
Interoperability
Standards

Mapping procedure

Automatic digitisation

GIS-ready dataset with spatial and textual data about RRR

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Pilot study in Benin

- Urban (Sèmè Podji) and rural (Zè) study site

- Community mapping was supported by the Youth Initiative for Land in Africa (YILAA)

- Workshop co-organised by SmartLandMaps, YILAA, Université d´Abomey-Calavi and NELGA

Community mapping

- Local community mobilization team

- A0 sheets of printed UAV-based orthoimagery (GSD of 2 cm)

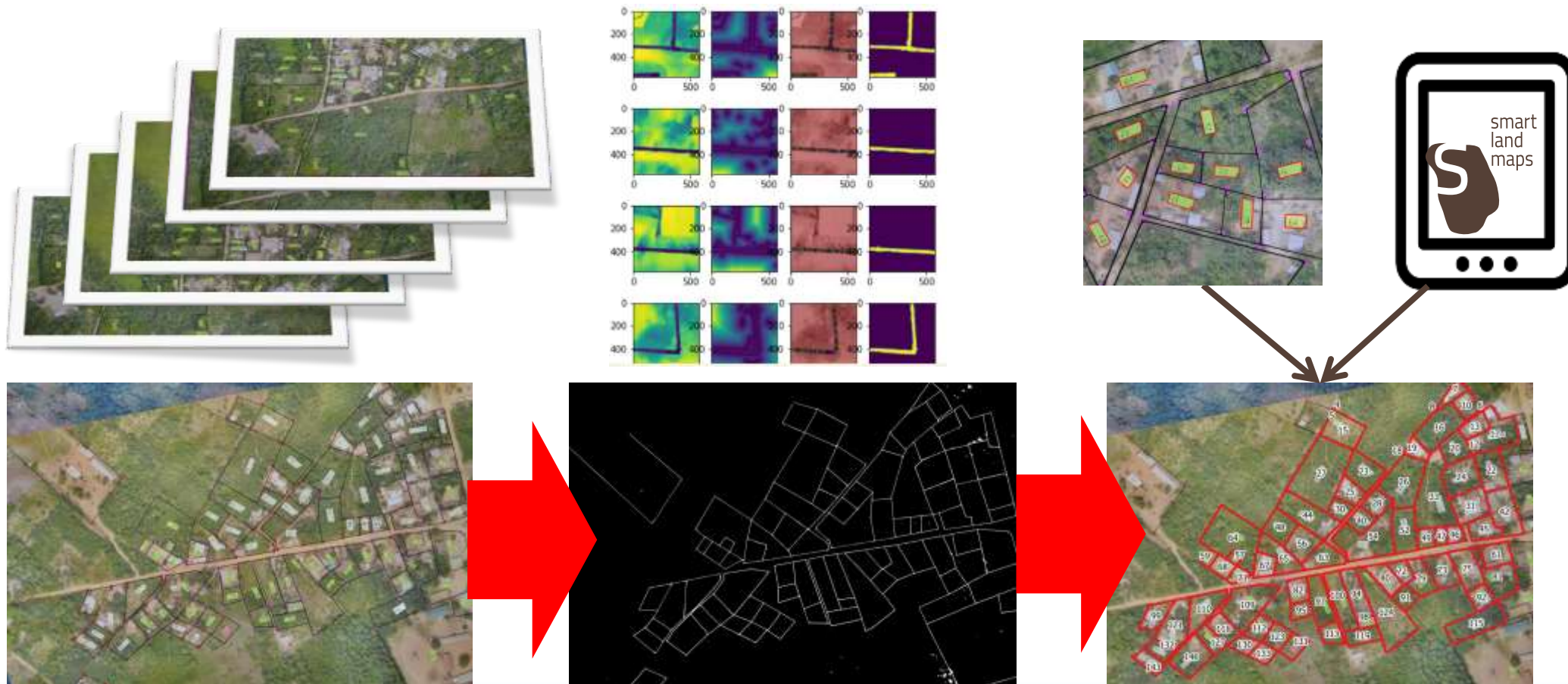- Textual data were collected with a tablet computer

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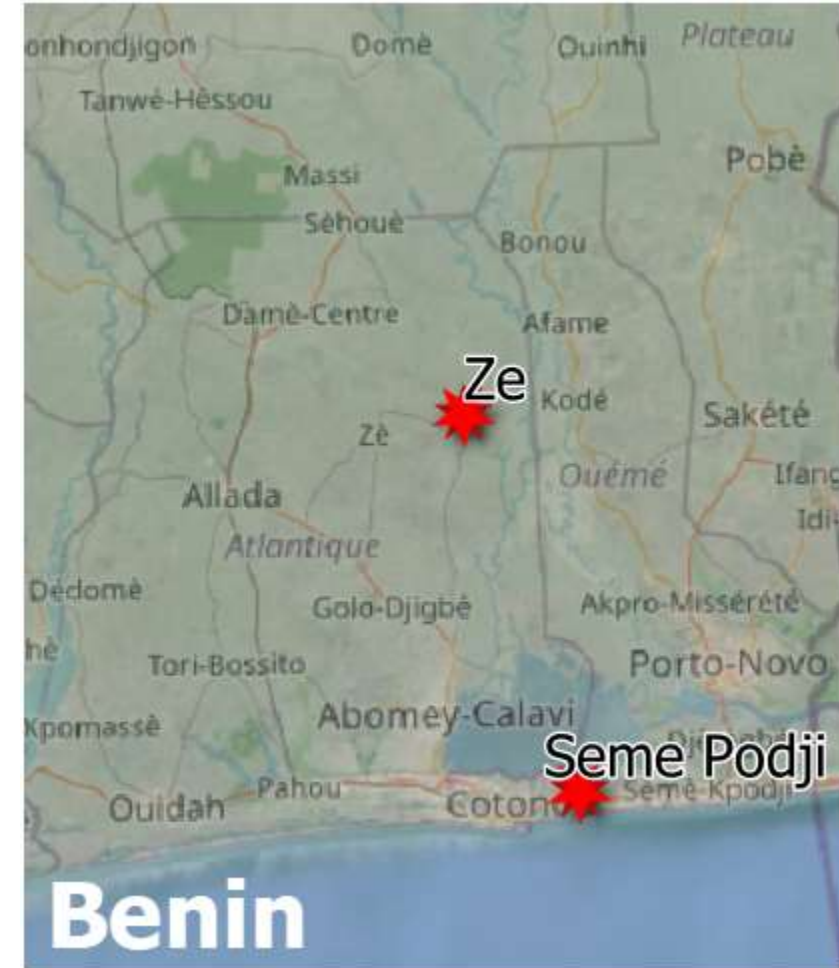
Mapping procedure

Automatic digitisation

1-2 hours

Data evaluation

	Seme Podji (urban)[1]	Zè (rural)[2]
Σ	202	212 (232)
⚙	194 (96%)	207 (98%)
1m	82%	18%
5m	98%	78%

[1] Reference data for Sèmè Podji: systematic GNSS survey provided by PMAF project

[2] Reference data for Zè: Sporadic GNSS survey of 98 points by SmartLandMaps

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Data quality Sèmè Podji

Data quality Zè
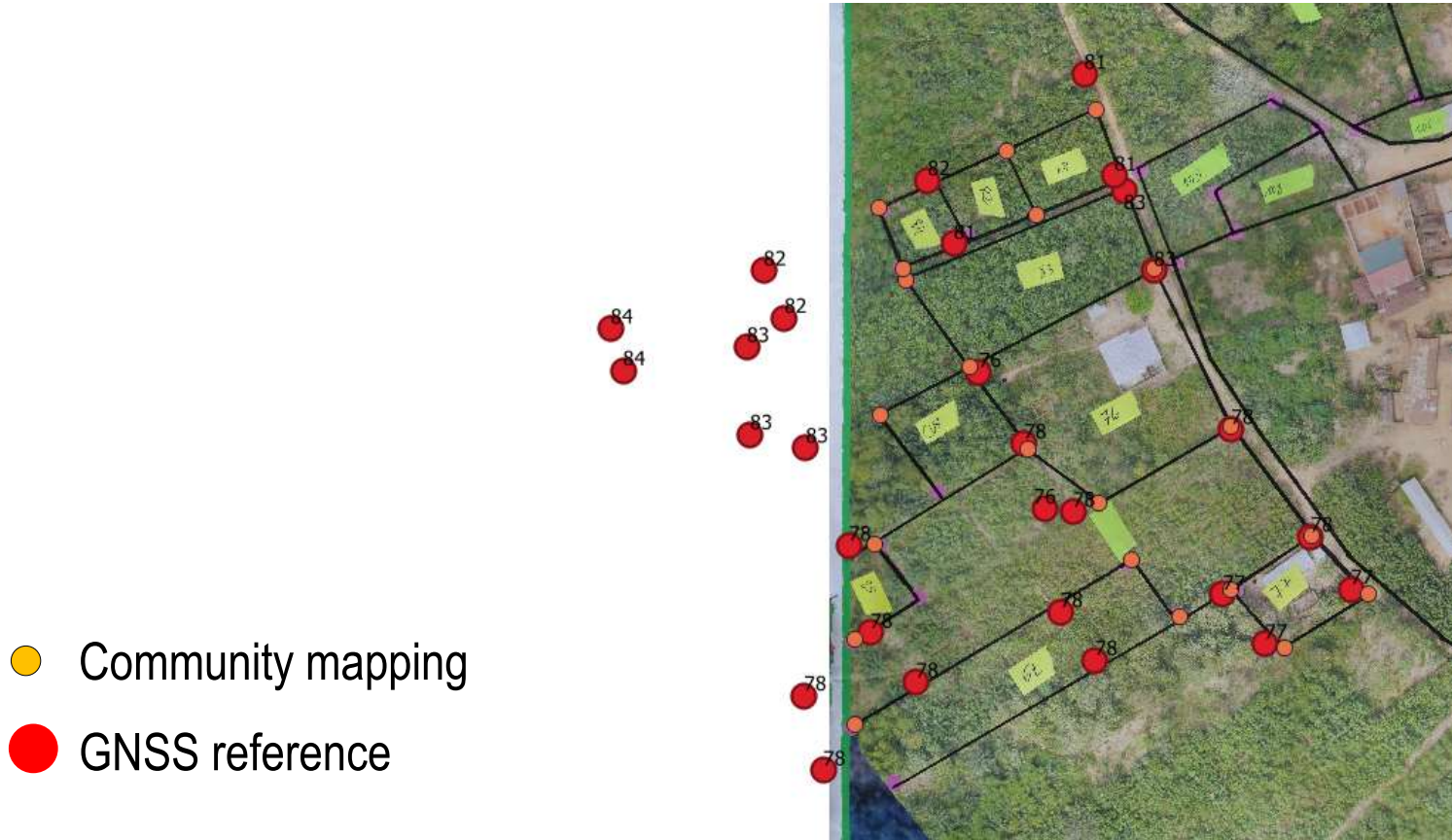
- Community mapping
- GNSS reference

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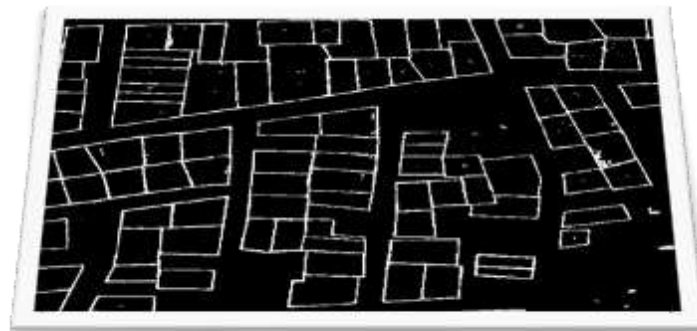
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Some observations from Benin

With a lot of support from a local "task force", the mapping procedure was very efficient.

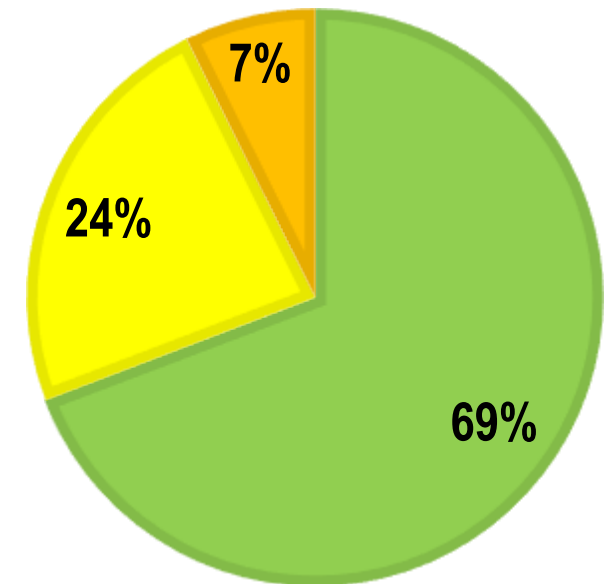How do you rate the ease of finding your plot on the map?

■ very easy   ■ somewhat easy   ■ slightly difficult

Taking pictures of the map works very well

SmartLandMaps tools produce correct polygons

7%

24%

69%

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