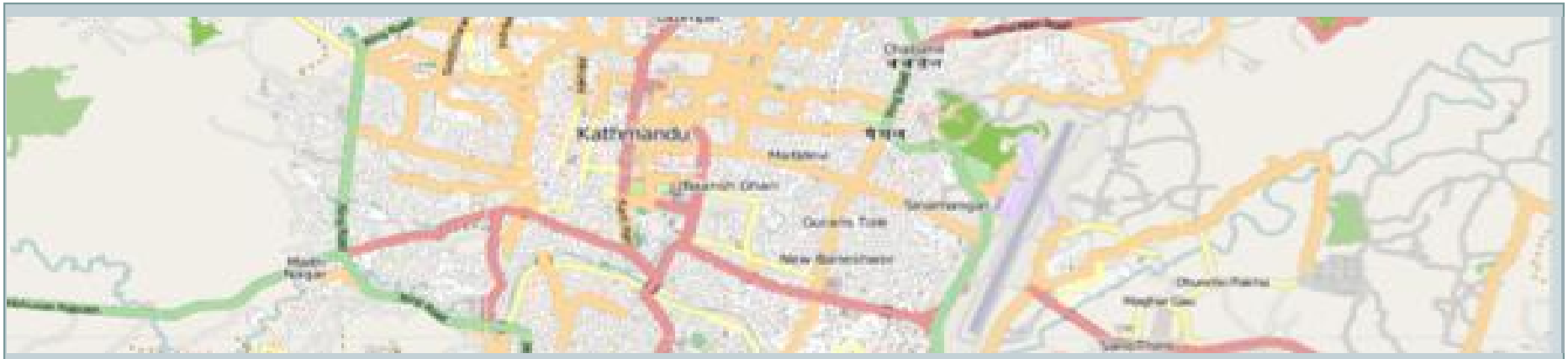


Mapping Kathmandu Valley:
Making and Using Maps with OpenStreetMap

Nama Raj Budhathoki, PhD

Lead, The World Bank's Open Data for Resilience Initiative (OpenDRI) Nepal

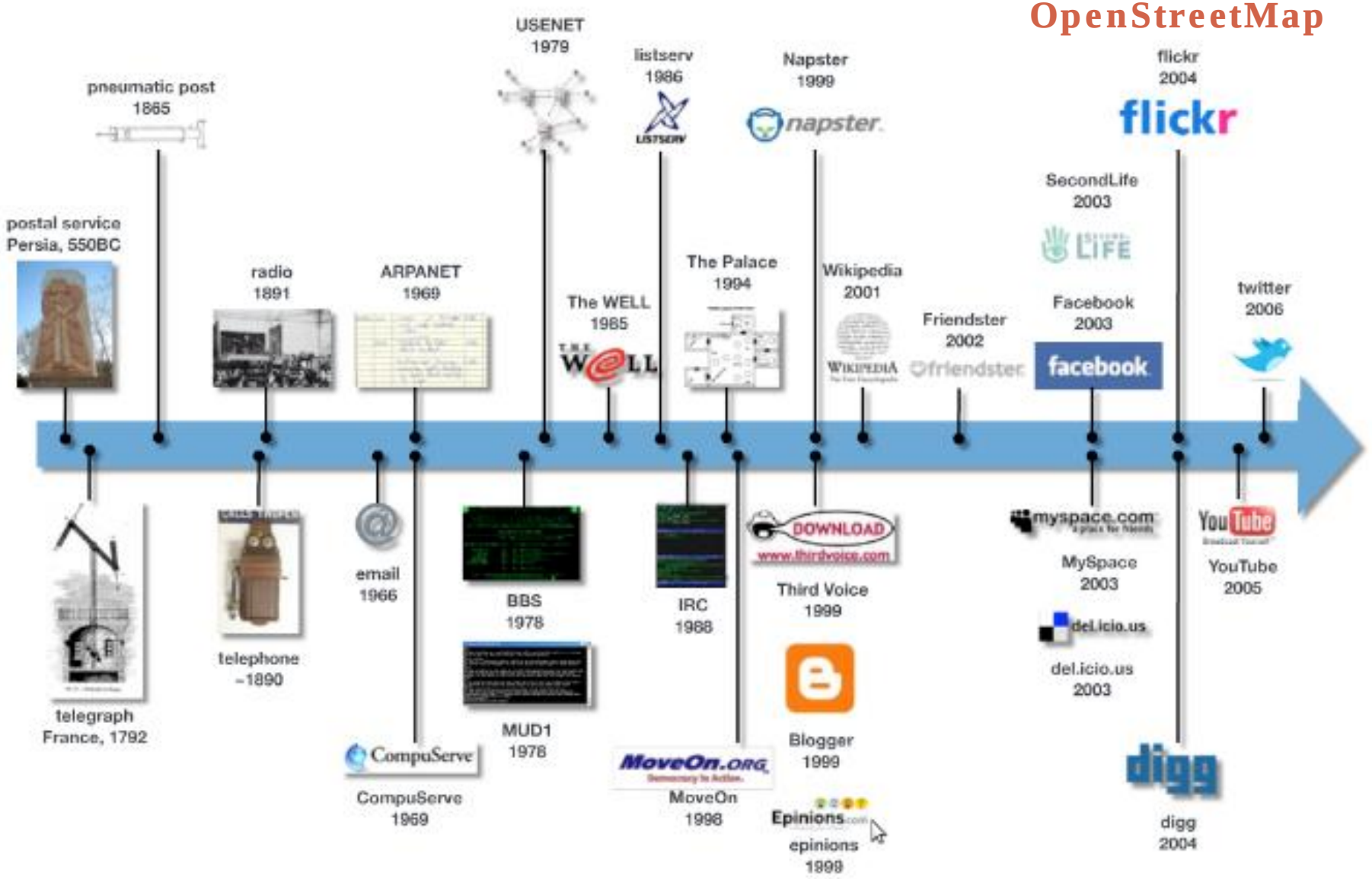
Flagship 4 & 3 National Workshops (March 29, 2013)

Challenges

- Reduce the cost of map data collection and update
- Locate, access, understand and effectively use data
- Building and maintenance of technical infrastructure for data sharing
- Engaging and gaining citizen trust in what we do

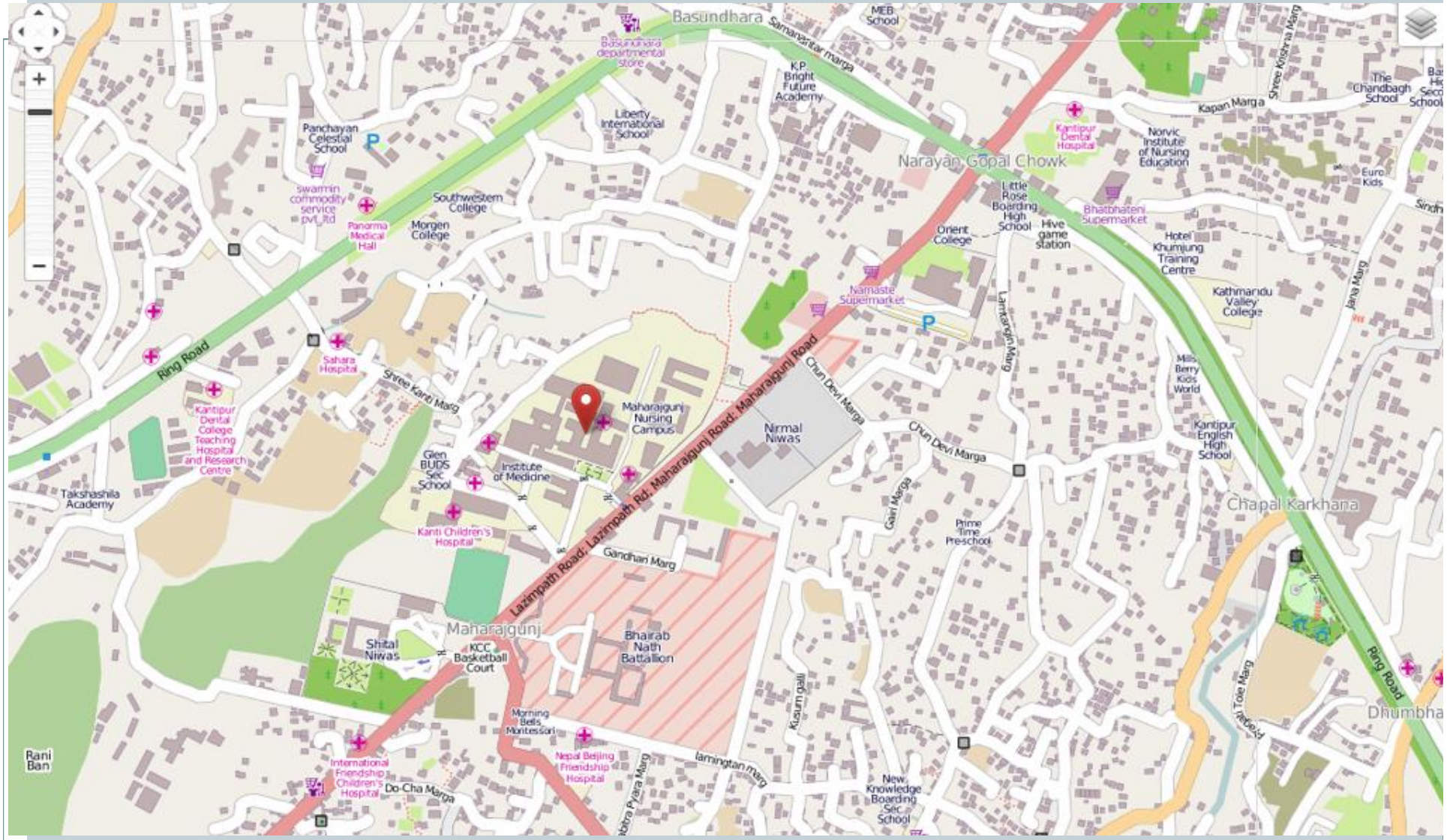
No one knows everything,
everyone knows something.

-Levy, 1997

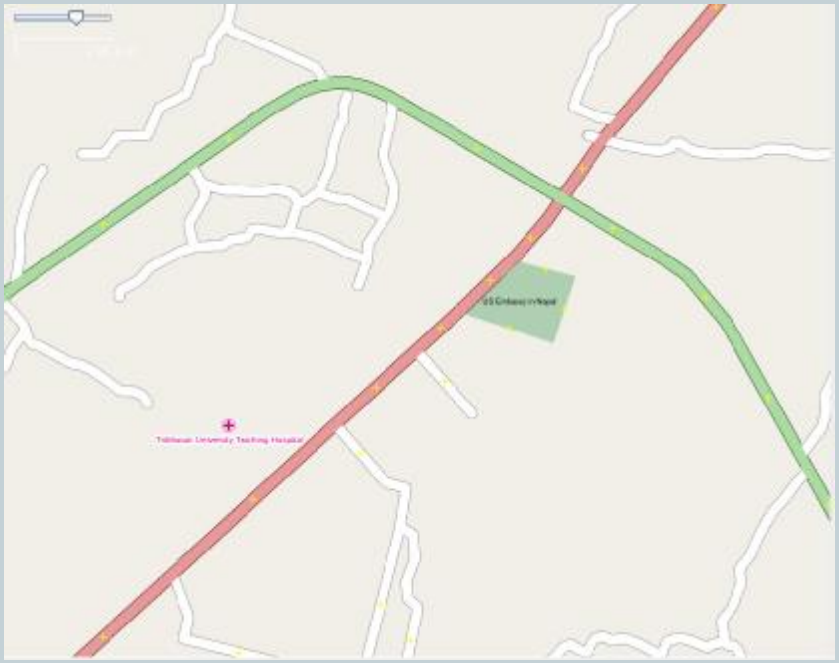


An incomplete list of Social Media timeline—www.idfive.com

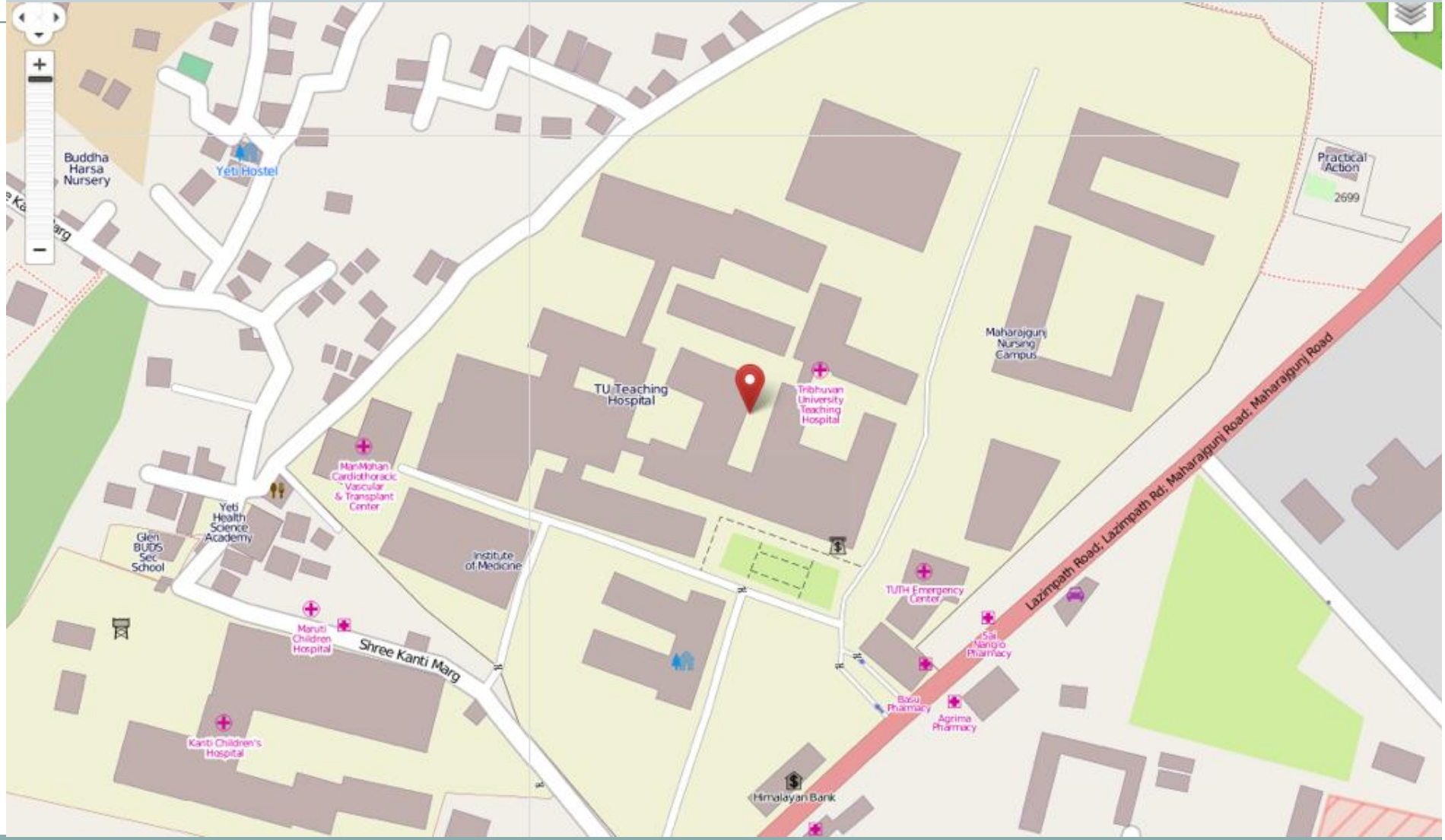
www.OpenStreetMap.org



Maharajgung Area:
Before and After



Teaching Hospital

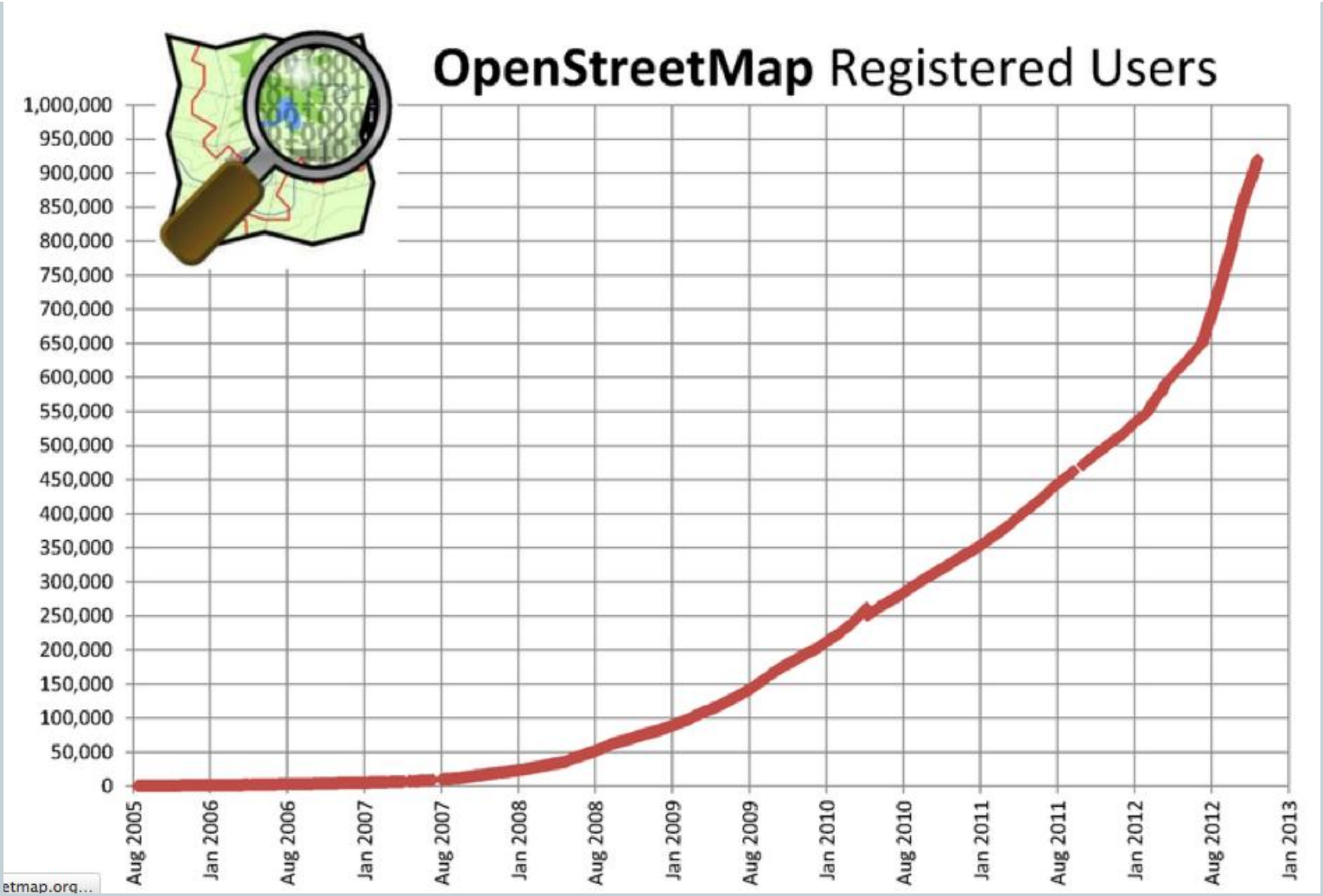


Horticulture Center, Kirtipur

Underlying Concept

- Provides an open collaborative mapping platform to build a free and open map.
- A map of the community, by the community, for the community.
- A global community of about one million volunteers.

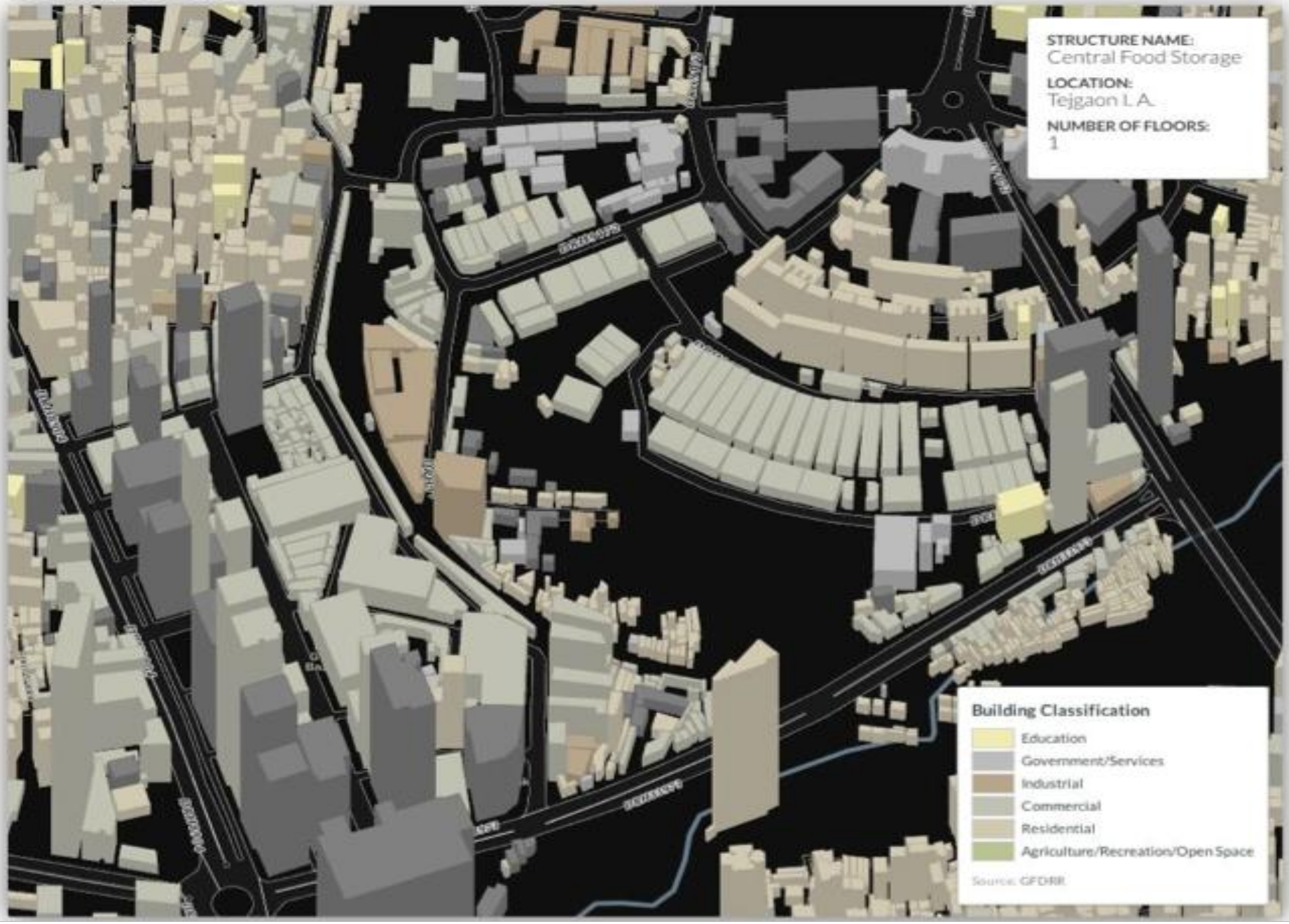
A Growing Community of Mappers



The World Bank's Open Data for Resilience Initiative (OpenDRI) Nepal

Building Use

DHAKA, BANGLADESH



Citizens as sensors *(Goodchild, 2007)*

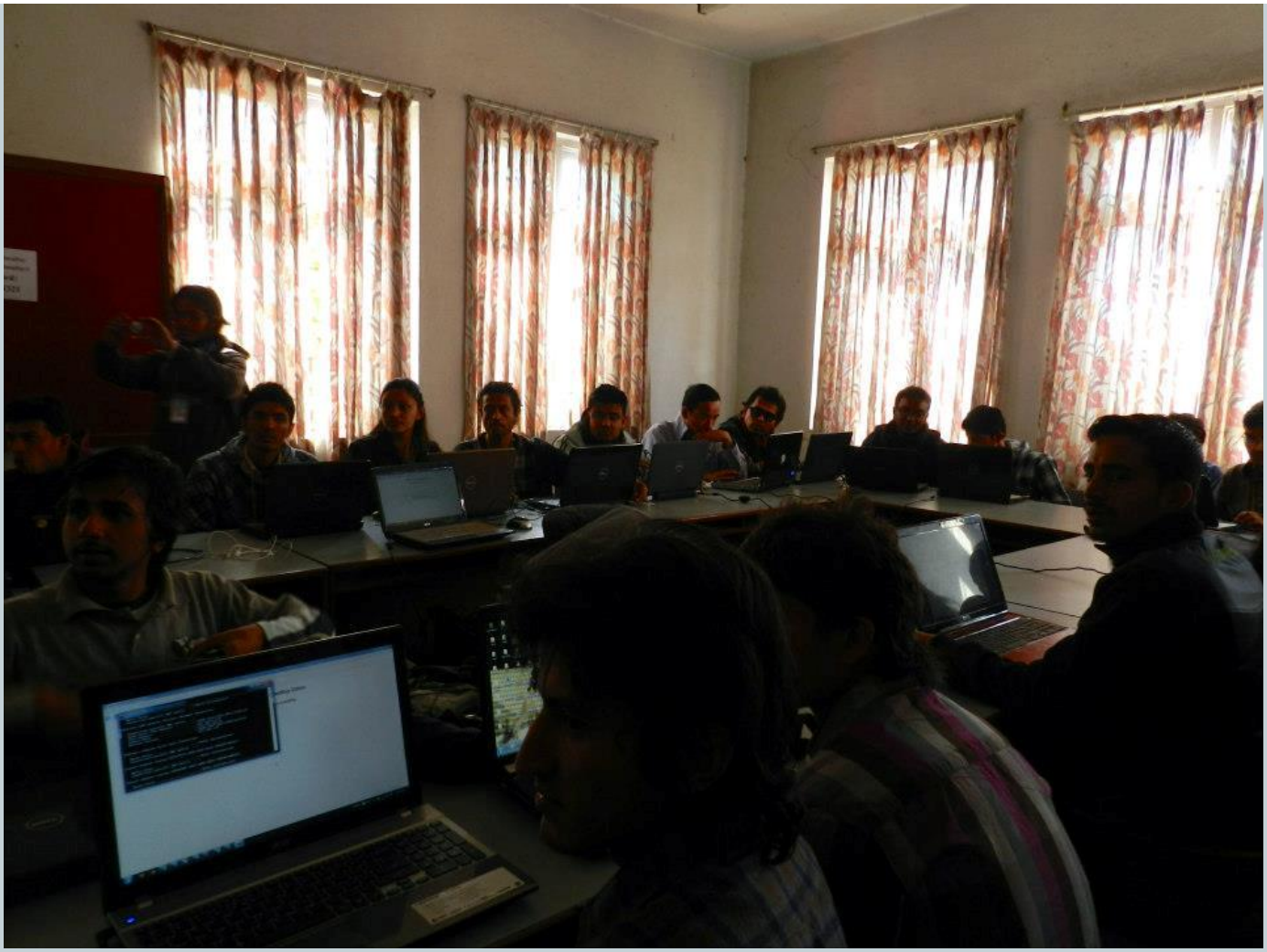
Mapping Party at IOE

At Practical Action

ICIMOD

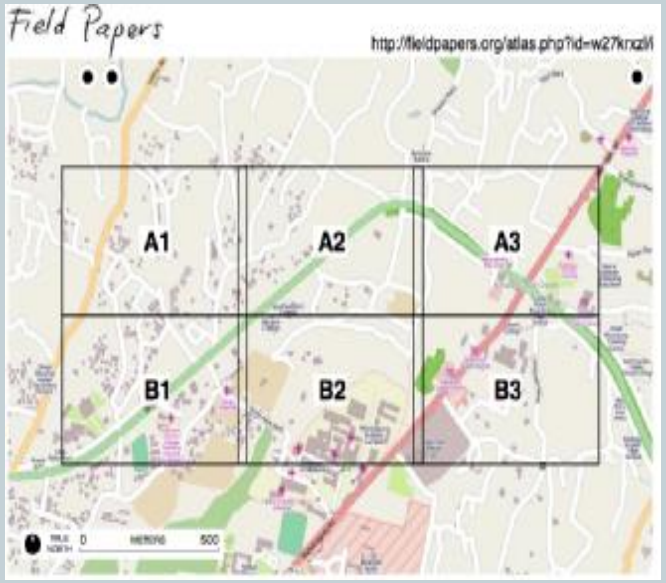
Kathmandu University Mapathon

Open Data Day Mapathon



Girls into Mapping

Tools

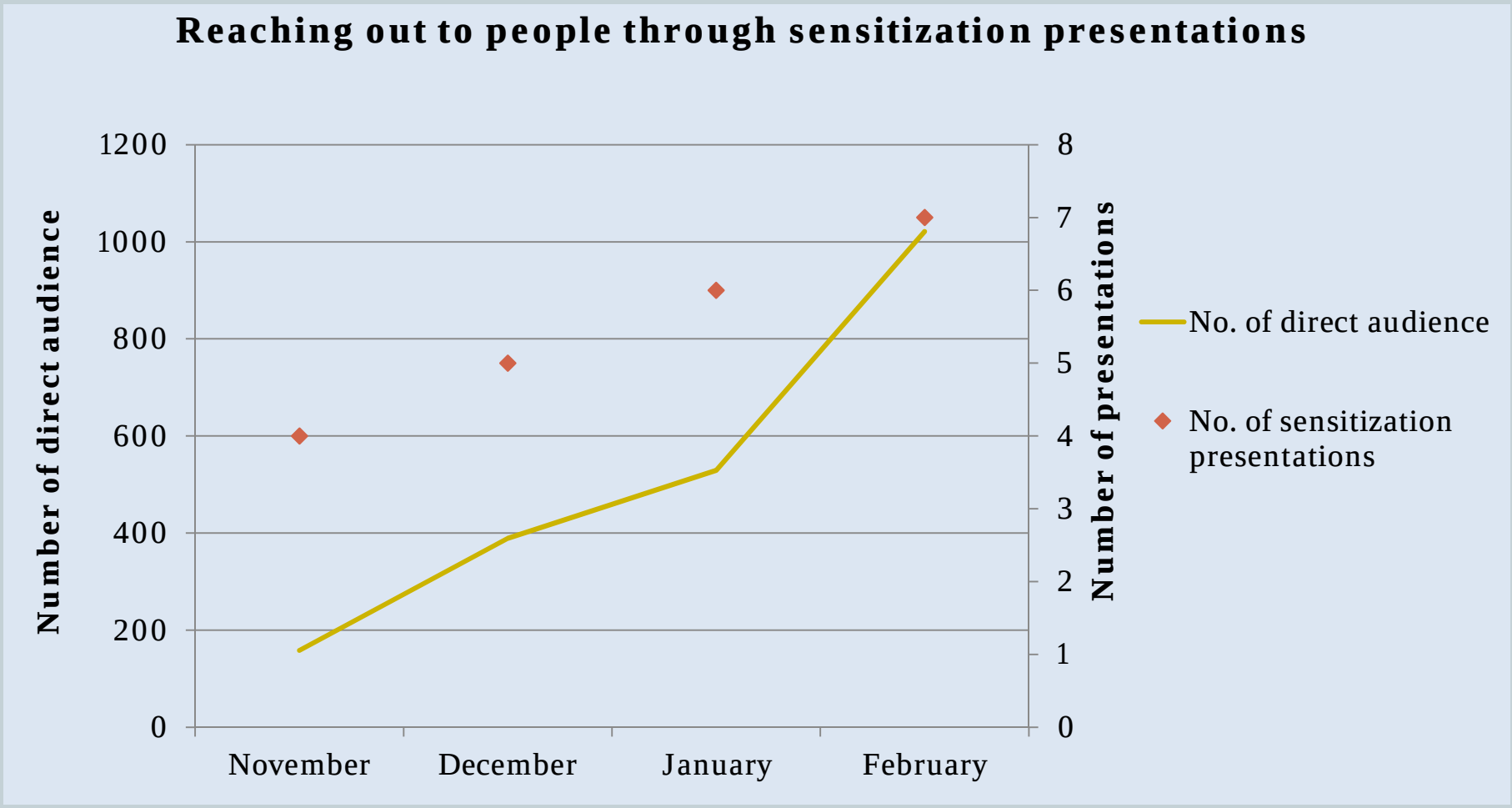


Walking paper

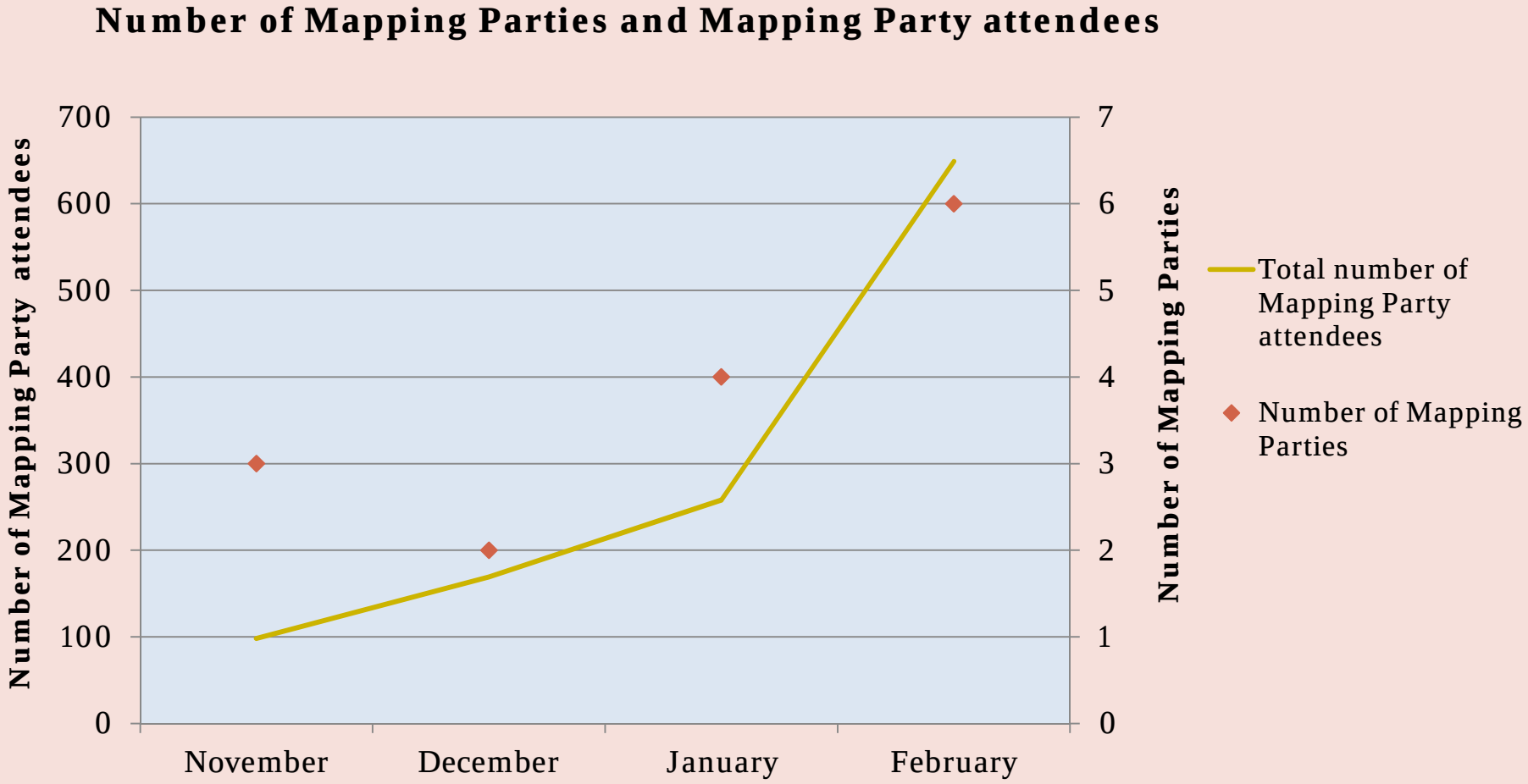
GPS

Smart Phone

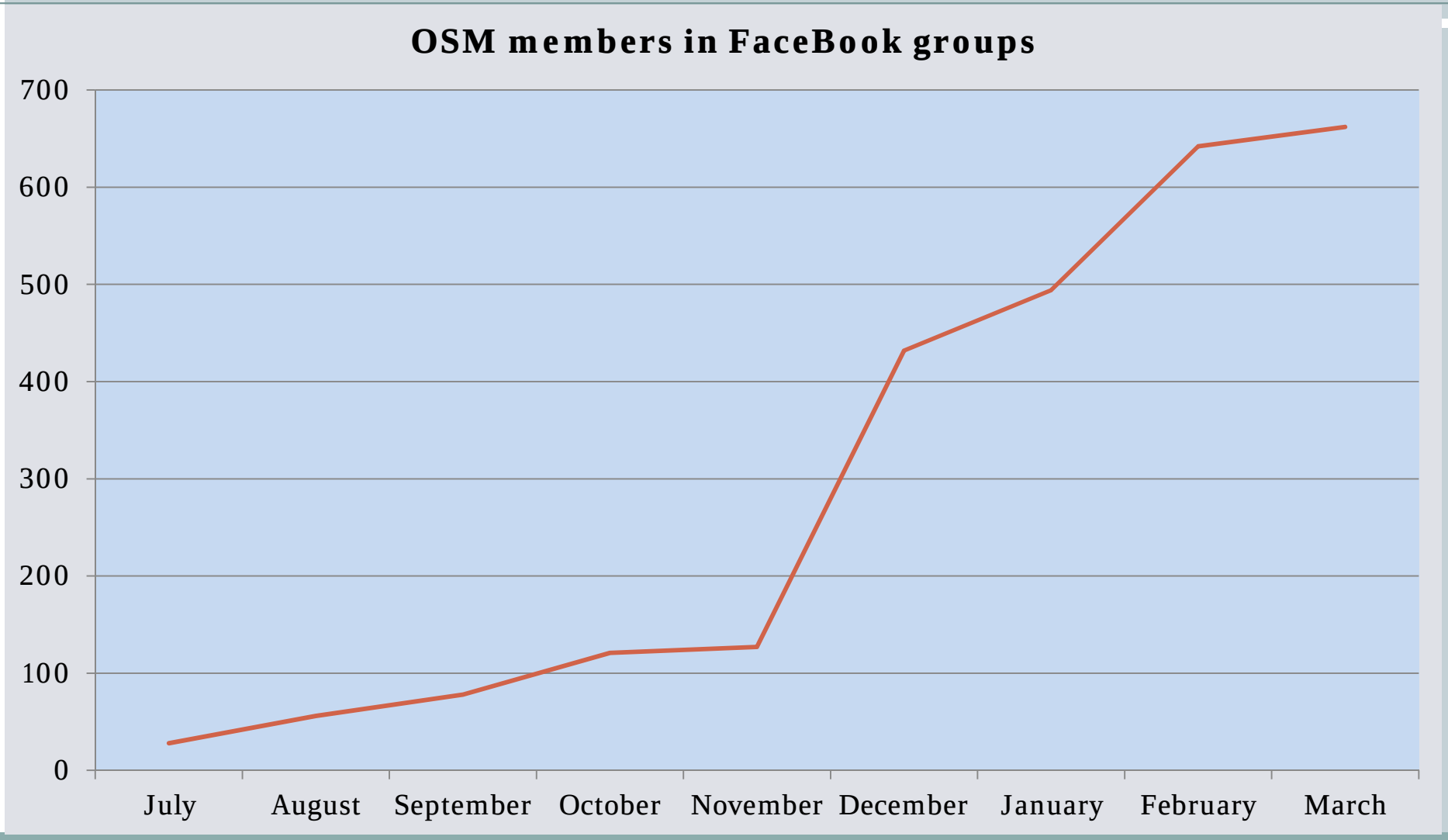
Sensitization Presentations



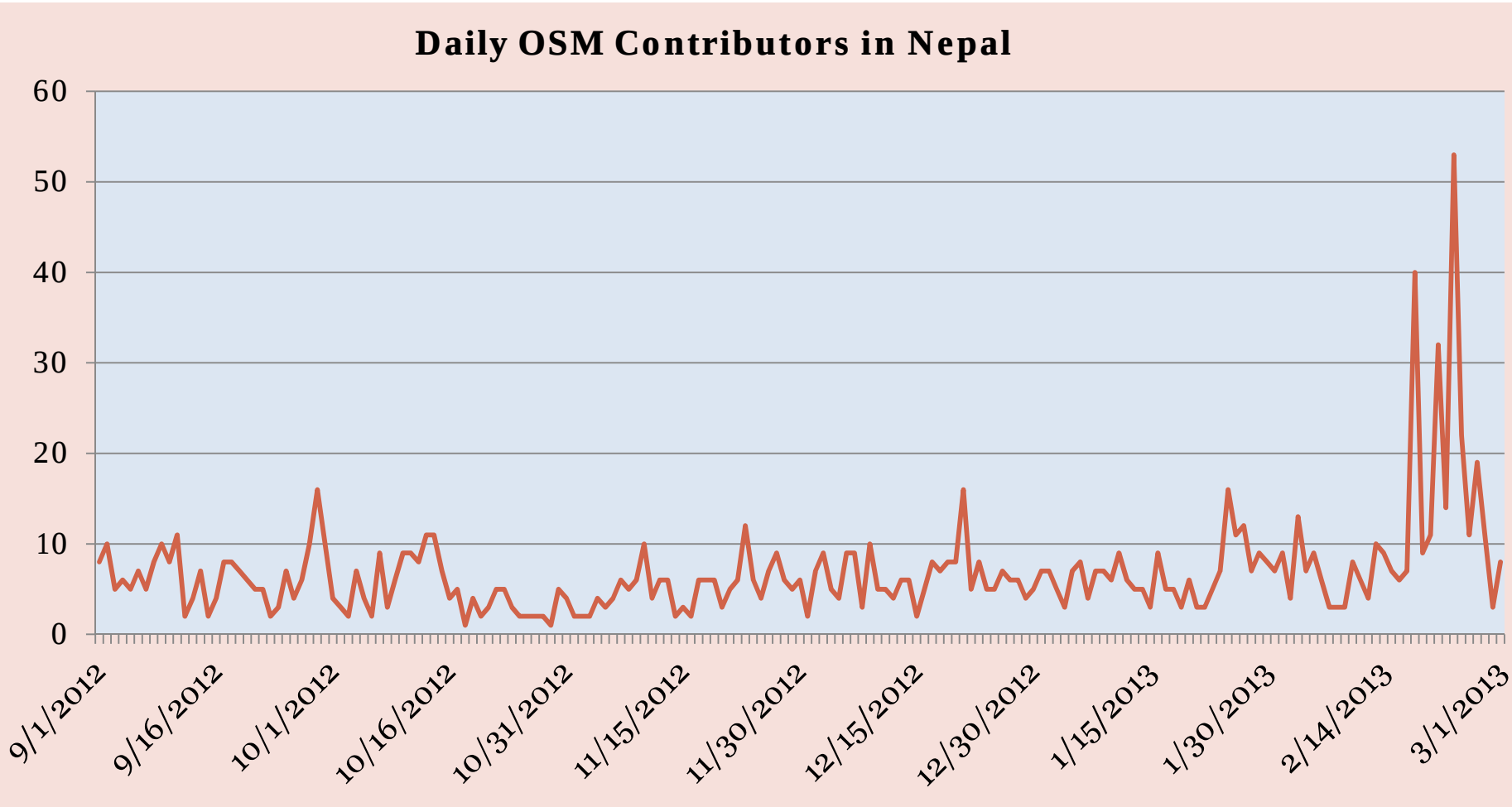
Mapping Parties



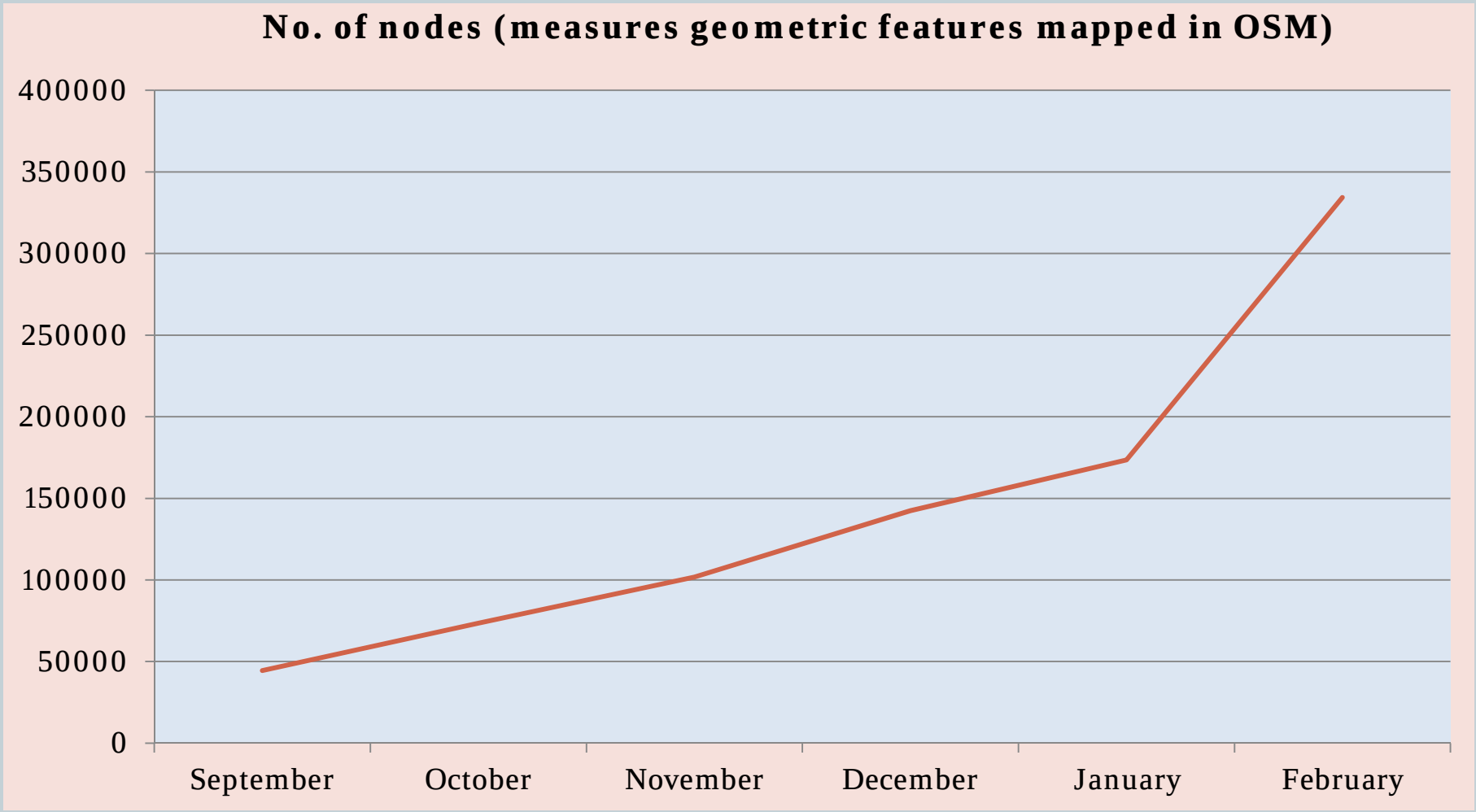
FaceBook Groups



Daily Mappers



Number of Nodes

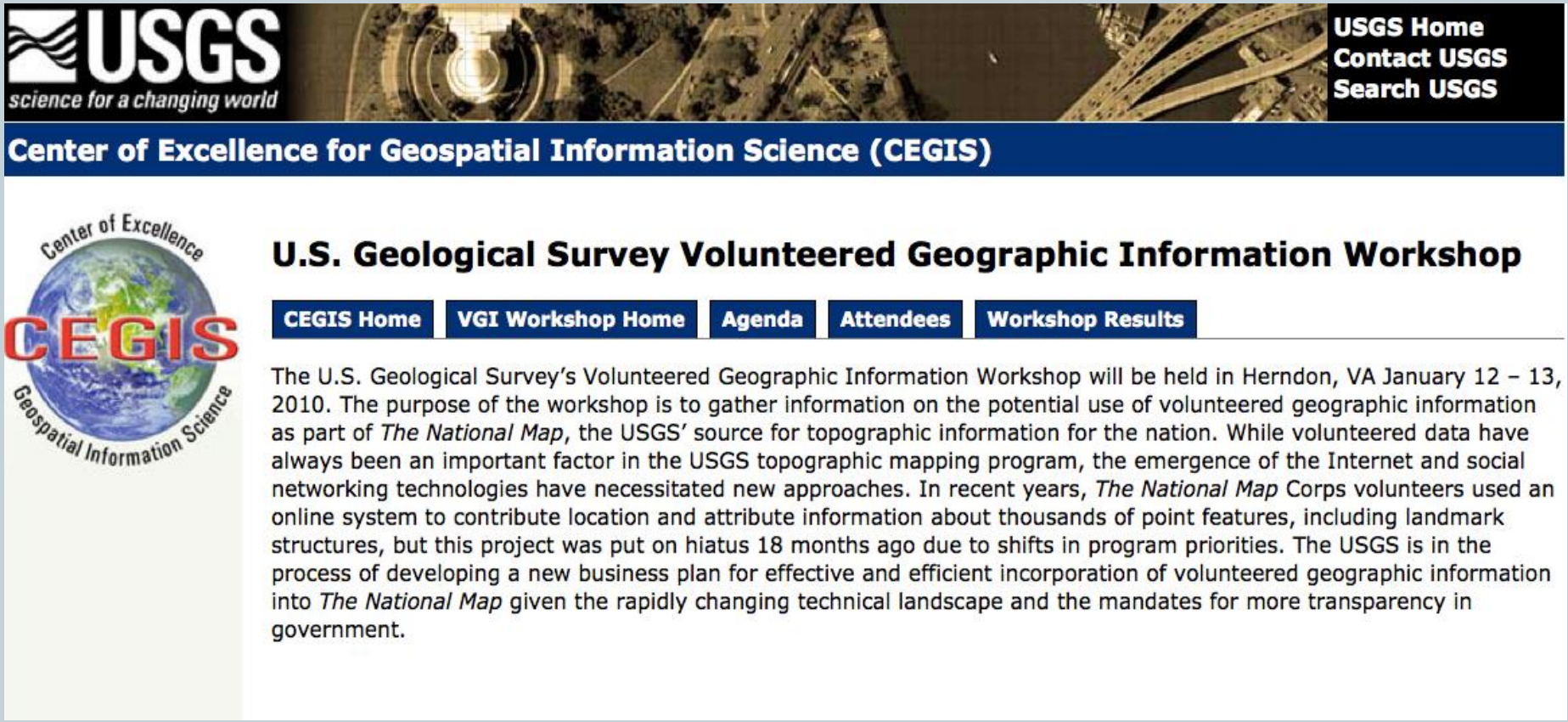


Quality of OSM Data

"The analysis shows that OSM information is fairly accurate: on average within about 6 m of the position recorded by the OS, and with approximately 80% overlap of motorway objects between the two datasets. In the space of four years, OSM has captured about 29% of the area of England."

(Haklay, 2010)

Synergy with Conventional Mapping



Challenges

- Reduce the cost of map data collection and update
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Readings

- http://andreaforte.net/abs.html

Special Issue on Open Collaboration and Wiki Research

- **Budhathoki, N.R.**, & Haythornthwaite, C. (In Press). Motivation for Open Collaboration: Crowd and Community Models and the Case of OpenStreetMap. American Behavioral Scientist.
- Bertram, B., Bishop, A. & **Budhathoki, N.R.** (Forthcoming). Youth Community Inquiry: New media for Community Building and Personal Growth.
- **Budhathoki, N. R.,** Nedovic-Budic, Z. & Bruce, B. (Chip) *(2010).* An Interdisciplinary Frame for Understanding Volunteered Geographic Information. *Geomatica, The Journal of Geospatial Information Science, Technology and Practice. 64(1).*
- **Budhathoki, N.R.** (2010). Participants' Motivations to Contribute Geographic Information in an Online Community. PhD Dissertation, University of Illinois at Urbana-Champaign.

For More Information and Learning

- ***Friday OSM Clinic***
- ***Visit:*** *www.osmnepal.org*
- ***FB Group:*** *OSM Nepal*
- ***Email:*** ***namabudhathoki@gmail.com***