Form & Map based Mobile OSM Tool for Field Survey and Validation

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Something about GeoThings

• Trusted Developer of **Ushahidi** (2012)
• Development partner of **Sahana** (2012)
• Standard Editor/Contributor of **OGC** (Open Geospatial Consortium) and **ITU** (International Telecommunication Union) for Open GeoSMS and Q.3615 (2015)
• slayer was the board director of **HOT** (2017)
• Active participant of **OSM** and **HOT**
ADB pilot project (TA8884) was aiming to strengthen the disaster resilience with Spatial Technologies and **ICT Tools**

Target Countries are Armenia, Bangladesh, Philippines, and Fiji

We did the OSM Mapathon

We did the filed validation with local community

We planned the evacuation map with community

**Let’s start from Lesson Learned**

**What We did with ADB for a Pilot**
This is the Reason for Field Survey
Building Details Collection

Roofing Structure of House is not strong

Green building means it has Building Material tag
Blue means its Amenity is Public (school, hospital, and so on)
Environment Details Collection

- Flooded Before?
- Flood Type?
- Early Warning Available?
- Public Information Board for Flood?
- Recent Flooded Level?
Evacuation Details Collection

About the Road to Evacuation Center,
Road Condition? Stair Condition? Sudden Depression? Possible Barrier?
Community-based Tsunami Drill Plan

- **Lavena House**
  - Building address: Nabasovi village Koro
  - Building material: wood
  - Is it a temporary building? No
  - Building roof material: light metal sheet
  - Is there a basement in the building? No
  - Building condition: good
  - Slope of the building: moderate
Fiji National Tsunami Drill (March 1st, 2018)

Drill lead by NDMO (National Disaster Management Office) of Fiji
Video released by UNDP Asia and Pacific
Resource Dispatching Status in Drill
Evacuation Updates in Drill
Evacuation Updates in Drill
geoBingAn in Emergency Operation Center
We Love OpenMapKit + OpenDataKit

To edit tags, OpenMapKit must be launched from within an ODK Collect survey.

LAUNCH ODK COLLECT
Start from 1:25”
- Straightforward UI
- Offline access to GeoThings OSM Vector Tiles
- Offline access to Satellite Imagery by Mapbox
- Repositioning from Map
- Support photo, audio log, GPS trace
- Support mobile notification for task assignment
- Support GeoSMS to submit the updates
Create Group and Form with Simple UI

GeoThings

Create category
Manage category
Invite member
Manage member

Create category
OK

Manage category

Category name

Do you want to add a form to this category?

Is this category only visible to admin?

Notify members when there is an incoming report in this category?

About Development
About Data
OSM Damaged Buildings Assessment
Business Trip
Customize Your Survey Form

HOT Damage Tagging Proposal from Bgirardot
Town Watching with Community in Taiwan

Make it easy for the community to contribute their knowledge to OSM
Team up with the Girl Scouts of Taiwan

Deliver the trusted crowdsourcing disaster information
Shelter: Need Electricity, Evacuated 100 People, No Structure Damage, Caused by Earthquake
One of our Practices for Flooding Drill
Some local government and community **DOESN’T** have ICT officer

Sustainable service is not developed by project-base funding

There’s something we can push further with a group of great developers

User has full control on collected data
to go private, or to be exported in SHP/KML/GeoJSON

**The Key is** Self-Sustainable

**To both developer and user**
geoBingAn (究平安) Smart City SDK

Connect Citizen and IoT Sensors for the City Level Data Science and Service Development

Remote Sensing  Field Survey & Validation  IoT & Crowdsourcing  Open Data with CitySDK  Urban Planning

But we are still struggling with the proper tagging on OSM
Question and Comments?

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