

VGI FOR LOCAL DRR PLANNING: PROSPECTS AND CHALLENGES

Mapping Municipal Structures

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Department of Geography
Field School - Team Rizal



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In support of



and our partner LGUs (Local Government Units)





Workshop for students & LGU staff

FIELD VALIDATION

- presented the plans, rationale, and the project to each barangay
- visited residential and commercial areas to validate building footprints



PLACES VALIDATED

- Poblacion Ibaba
- Poblacion Itaas
- Bagumbayan
- San Vicente
- Kalayaan
- San Isidro



Angono

PLACES VALIDATED

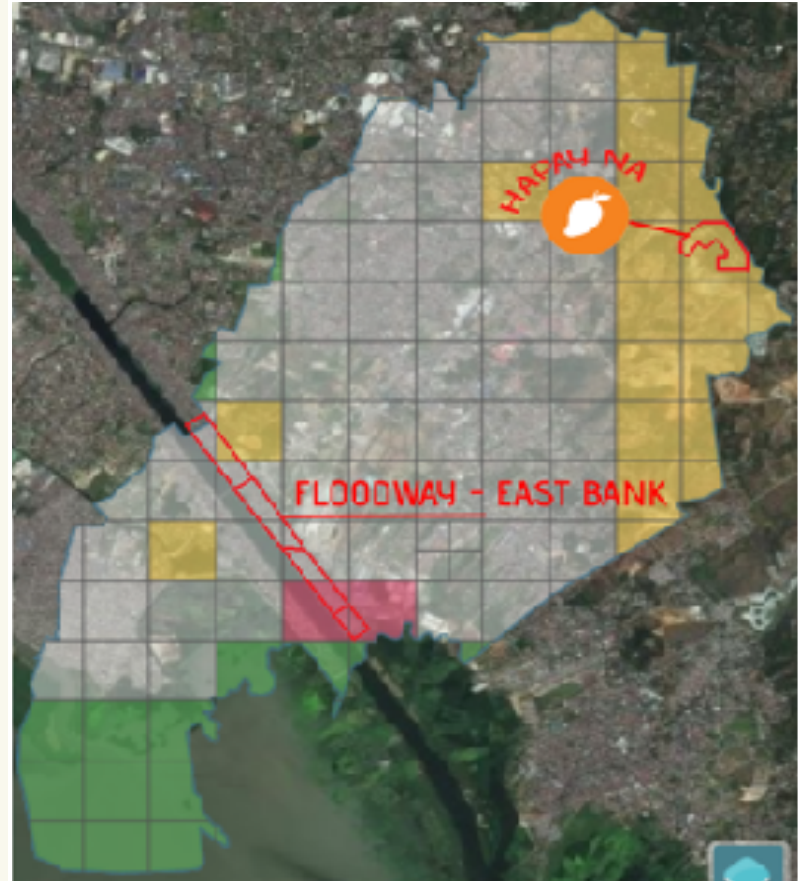
- East Bank of Floodway
- Barangay San Andres, including some parts of bermside
- Sitio San Francisco, Anak Pawis, and parts of Sitio Exodus of Barangay Santa Ana



Cainta

PLACES VALIDATED

- Panghulo, Batasin 1 & 2, Lambak (Brgy. San Juan)
- Hapay na Mangga (Brgy. Dolores)
- Exodus (Brgy. Sta. Ana and San Juan)



Taytay

EXPERIENCES (STRENGTHS)

- OSM is accessible to all -- it is free and an open data, accessible through using either web, mobile or paper-based methods and/or applications
- LGUs can replicate the methodology using open and accessible tools even with minimal budget
- Partner LGUs are cooperative and dedicated to the project
- OSM data, e.g., building footprints, streets, were updated
- As a method for mapping, the use of OSM minimizes costs, but validation can be time consuming

CHALLENGES

- **Imaging and resources** - Low-resolution satellite images, clouds, and shadows that affect mapping
- **Coordination with the locals, different levels of the local government** - scheduling, layers of bureaucracy, miscommunication and misunderstandings
- **Continuity/sustainability of project** - How to attain the ideal conditions: sufficient LGU funding, appreciation of OSM and its benefits, LGU initiative, mapping skills of LGU, designated GIS person who will take charge of the project

OUTPUTS

- **Manual on creating building footprints** – subsequent commitment of CRS and HOTOSM to support the completion and international dissemination of the manual
- **Hazard maps, etc.**
- **Project report and documentations**

OUTPUTS

AWESOME OSM A COMPREHENSIVE GUIDE ON MAPPING BUILDING FOOTPRINTS

USING
OPENSTREETMAP,
HOT TASKING
MANAGER, AND
OTHER USEFUL
APPLICATIONS IN
MAPPING
BUILDING
FOOTPRINTS



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https://www.crs.org/our-work-overseas/research-publications/awesome-osm-comprehensive-guide-mapping-building-footprints

- Mapping with iD Editor
 - Presentation [pdf](#) | [ppt](#)
- Mapping with JOSM
 - Worksheet [pdf](#) | [doc](#)
 - Presentation [pdf](#) | [ppt](#)

Resources

- [Awesome OSM: A Comprehensive Guide on Mapping Building Footprints](#)



<https://www.crs.org/our-work-overseas/research-publications/awesome-osm-comprehensive-guide-mapping-building-footprints>

OUTPUTS

FIELDWORK: ON-SITE VALIDATION IN TAYTAY, RIZAL



A Documentation Report



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University of the Philippines Diliman

RECOMMENDATIONS

- Ensure clearer communication with LGUs, from the municipal/city down to the barangay level, and even with community leaders;
- More detailed delegation of tasks among volunteers;
- Longer project duration to ensure that the project area is amply covered;
- Take precautionary measures for health and security, in communication with relevant personnel; and
- Friendliness and sensitivity to local culture & practices.