



USAID
FROM THE AMERICAN PEOPLE

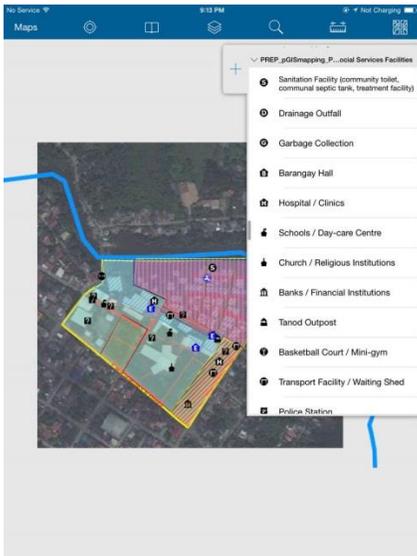


SUCCESS STORY

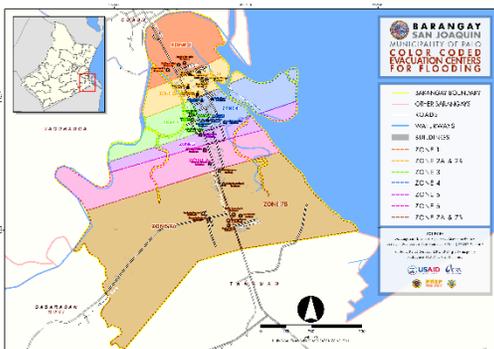
Philippines: Participatory GIS (pGIS) mapping strengthens community resilience, capacity to plan and adapt to climate change.



Janeen Cayetano, DRR GIS Specialist conducting a pGIS orientation for the different members of the community in Barangay San Joaquin, Palo.



A closer look at ArcGIS Collector, customized here to collect GPS points of Social Services Facilities with road, waterways, boundary and satellite image information as background.



Evacuation Center map of Barangay San Joaquin collated after data collection from the community attendees.

In 2013, Typhoon Haiyan caused catastrophic damage in Eastern Leyte, Philippines. With no early warning systems in place, rising floods and storm surges took many residents' lives and property. Currently, two Haiyan-affected municipalities are included in the Planning for Resilience and Effective Preparedness (PREP) project of CRS' Disaster Risk Reduction Program in Leyte. The goal of the PREP Project is for communities to be more prepared for and be able to respond to future shocks and disasters. To better prepare and plan for disasters, CRS conducts a participatory GIS (pGIS) mapping that builds the community's capacity to understand climate-change disasters, hazards and vulnerability situations in their community.

San Joaquin is one of the barangays covered in our PREP Project. Last October 2015, we've started piloting an easy-to-use, customized mobile application named ArcGIS Collector. This is for community members to plot key infrastructures, evacuation centers, hazards, vulnerabilities and risk. Our DRR GIS Specialist, Janeen Cayetano conducts

a pGIS orientation beforehand wherein we invited community members from San Joaquin which is mainly composed of the barangay council, zone leaders, DRR ambassadors and advocates. The goal of the orientation is to capacitate the community to use and understand the mobile application by plotting information regarding their zone boundaries and hazards. After that, together with the CRS' contractors, representatives from the group will roam around the community to get the exact location points and other important information of their key infrastructures and evacuation centers.

pGIS revolutionizes risk mapping from normally hand-drawn maps to high quality GIS maps. These digital maps are stored in the cloud preventing damage/loss during storms. These maps are now the primary information base that help local governments design inclusive evacuation routes/centers, effective early warning systems, and preposition relief goods. pGIS to date 17 out of 40 barangays have used pGIS, which has contributed to 80 maps and/or DRR plans.

“Our risk, hazard and vulnerability maps of the barangays were all beautiful with hand drawn detail. But they were all destroyed during Yolanda.

The p-GIS project will help us to have a readily available map wherein we can update anytime. It will also help us for future infrastructure/risk assessment planning.”

***Gregorio Lantajo
Chairman of Barangay San Joaquin
Palo, Leyte***

U.S. Agency for International Development
www.usaid.gov