

2-2. Applying Space-Based Technology and Information and Communication Technology to Strengthen Disaster Resilience

2-2-1. Background and Objectives

ADRC jointly conducted with AIT and RESTEC, Asian Development Bank (ADB) Technical Assistant “Applying Space-Based Technology (SBT) and Internet and Communication Technology (ICT) to Strengthen Disaster Resilience” at Armenia, Bangladesh, Fiji and the Philippines.

2-2-2. Overall methodology

Create a basic map, hazard map and evacuation map of the community by using Open Street Map (OSM) based mobile application. If actual disaster occurs, crisis mapping and supporting emergency response can be done.

The satellite image is used for creating a basic map and for estimation damage after disaster, and these information are used for emergency activities in the local government's GIS via the server. Furthermore, it is used for disaster reduction, emergency, and recovery activities at the community level.

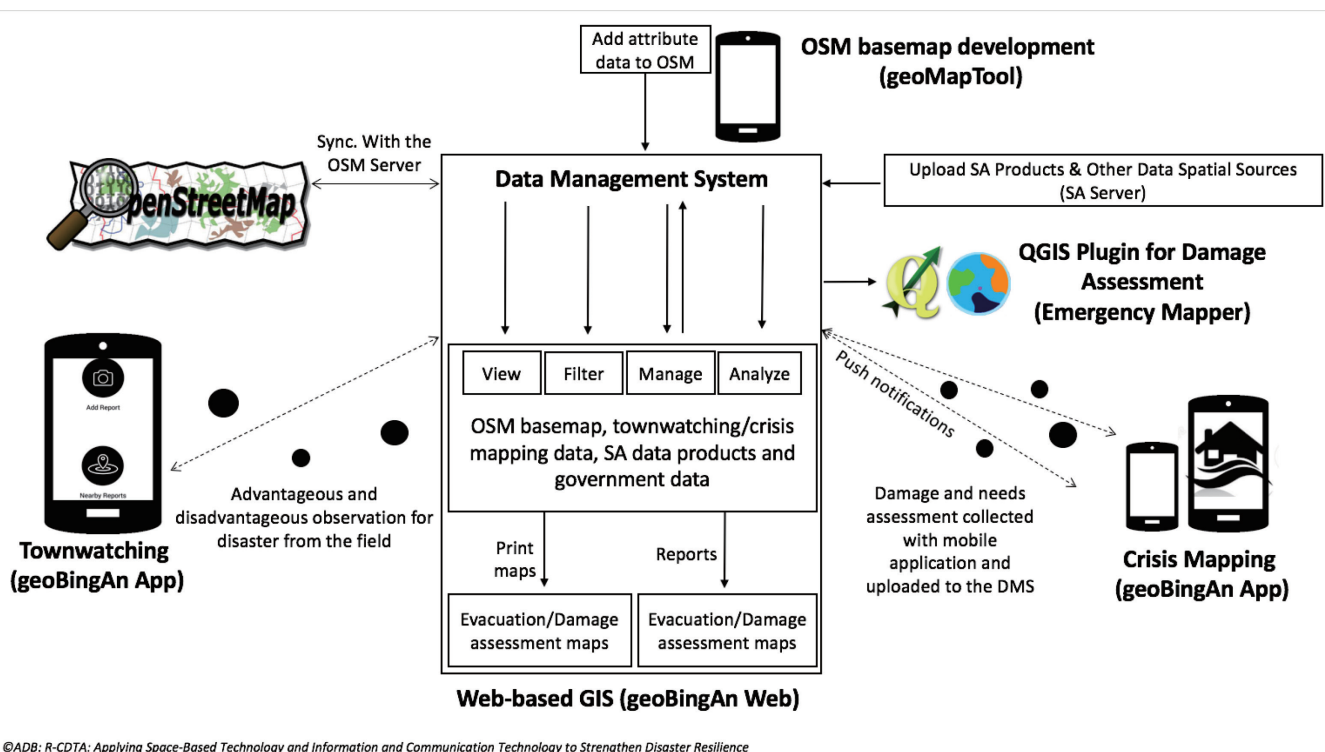


Fig.2-2-1. Overall methodology

2-2-3. Duration

Project period was 22 months from October 2015 to July 2017.

The regional kick-off meeting with the governmental officials of four pilot project countries (Armenia, Bangladesh, Fiji, and Philippines) was held at AIT, Thailand, in December 2015. Throughout 2016, data imputing and the Town-Watching training were conducted in each country. And the software was developed during 2016, then utilized for the Town-Watching and Drill from the beginning of 2017. The final meeting with the governmental DRR officials was held with confirmation of further utilizations of the solution developed by the project.

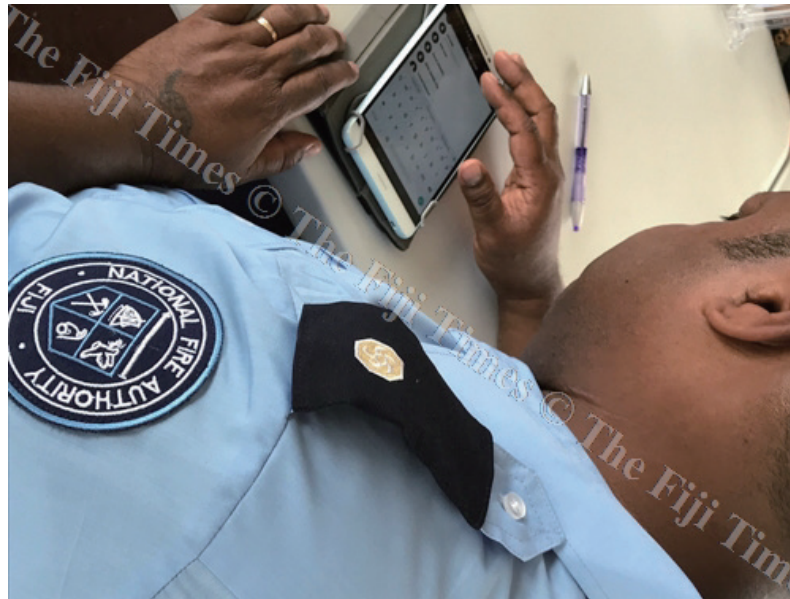


Fig.2-2-2. Mock Drill in Fiji with Mobile app.
(Source: Fiji Times, 5 June 2018)

2-2-4. Further Contribution to member countries

After the project, one large scale mock drill was conducted in Fiji.

The application developed as an outcome of this project could be applied to other member countries in the future and expected to contribute to strengthen DRR at the community level in each member country.