

Examining the Possible Use of ICT in Disaster Governance: A Training Framework for the Use of ICT in Community-based Disaster Risk Reduction and Climate Change initiatives

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Abstract: *In the Philippines, the need to improve local capacities in disaster risk reduction is crucial in mitigating and responding to future disaster events. Despite being one the most disaster-prone countries in the world, national protocols remain inefficient, marred by corruption and poor inter-agency coordination. In addition, the current top-down and reactive practices have proven to be inadequate in responding to the needs of various stakeholders. For instance, national investments in information and communication technology (ICT) have surfaced capacity and structural gaps in local governments and their communities thus resulting in information-related gaps and possible asymmetries.*

In our study, we examined the information and technology needs of sample communities through a qualitative-descriptive research design and by using disaster governance (DG) as our framework. Using this approach, we focused on the disaster preparedness practices of selected barangays (Iligan and Legazpi cities) and their partner organizations. Initial results of our study point to the difficulties in the use of information highlighting serious gaps in capacity, infrastructure as well as the efficacy of the current ICT tools. Hence, we argue that these gaps further result in the inability of local governments to maximize the use of its ICT resources, thus questioning the efficacy of their disaster risk reduction-climate change adaptation (DRR-CCA) programs.

Lastly, we developed a possible training framework that can increase the efficacy of ICT tools and proposed recommendations on how to improve the capacity of the community stakeholders. Specifically, the proposed framework incorporates open digital mapping and decision-making techniques that can enhance the DRR-CCA capabilities of the stakeholders.

Keywords: *Disaster governance, climate change adaptation, information asymmetries, and information and communications technology*