IMPROVING COMMUNITY DISASTER RESPONSE AND RESILIENCE THROUGH THE USE OF TECHNOLOGIES IN A COMMUNITY-DRIVEN DEVELOPMENT PROGRAM (CDDP)





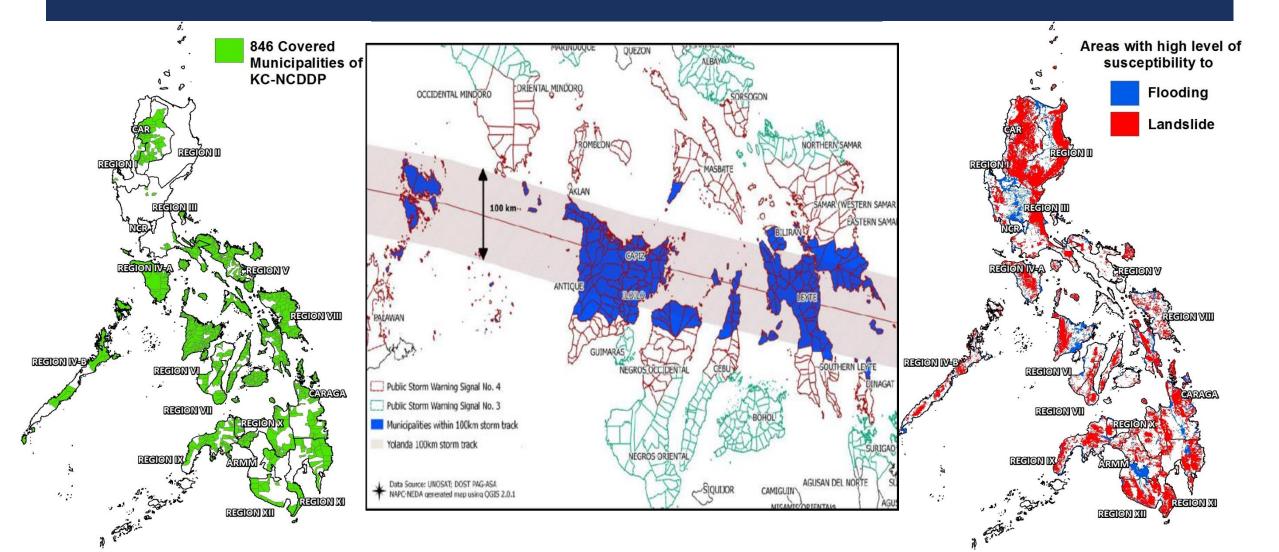




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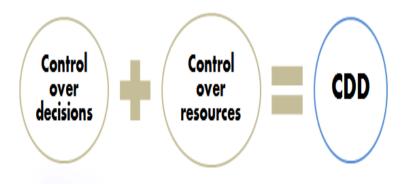
Knowledge Partnership Forum 20 May 2015 ADB

CDDP'S ROLE IN DISASTER RECOVERY & REHABILITATION: COVERAGE



CDDP'S ROLE IN DISASTER RECOVERY & REHABILITATION: OBJECTIVES

CDD is a strategy that gives:

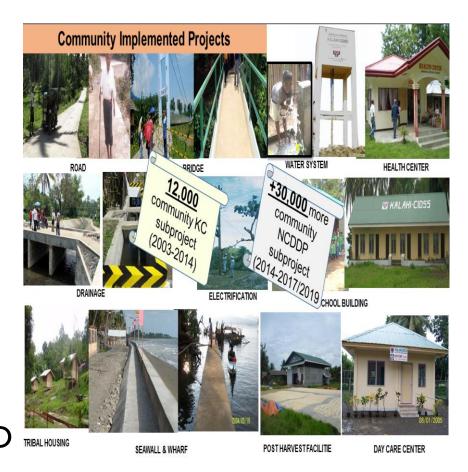


To COMMUNITIES

assisted with access to information, capacity building and engaging local governments and other partners

Communities in target municipalities empowered to achieve improved access to basic services and to participate in more inclusive local planning and implementation

A. Communities achieve reduced vulnerability to disaster risks through CDD



CDDP'S ROLE IN DISASTER RECOVERY & REHABILITATION: TECHNOLOGY CHALLENGES*

A. Emergency response phase

- Data on damages and needs prioritization in different communities are timeconsuming to process/consolidate
 - ✓ Data capture are in paper forms
- Limited local capacity for fast processing of raw data into information for tracking families affected vs met and unmet needs

- Constrained local government capacity and IT infrastructure
 - ✓ Emergency local operation centers usually do not have good database
- Limited means to make information more transparent and accessible to community residents, e.g., relief assistance regular information updates

^{*} Challenges experienced in Yolanda disaster response

CDDP'S ROLE IN DISASTER RECOVERY & REHABILITATION: TECHNOLOGY CHALLENGES*

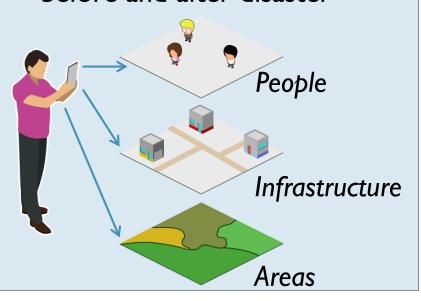
- B. Early recovery and rehabilitation phase Integrating more disaster risks-awareness and action-taking by communities through
- Making information more accessible to the communities
 - ✓ Hazard risks maps and classification guidelines (to build back better)
 - ✓ Different sector agency programs and projects available within their areas

- Facilitating easy community access to and use of their data, through supporting
 - ✓ Creation of e-representations/copies of
 - Community mapping of population, dwellings, assets, infra & services
 - Results of local problem analysis and community plans for action
 - ✓ Securing information from disaster risks

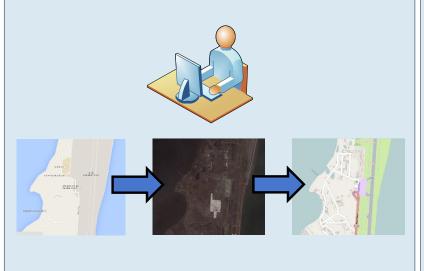
^{*} Challenges experienced in Yolanda disaster response

CDDP'S ROLE IN DISASTER RECOVERY & REHABILITATION: USE OF TECHNOLOGY

Involvement of community participation in geo-tagging community projects and critical facilities at risk and capturing information about hazards before and after disaster



2 Creation of community base maps through tracing satellite imagery and adding building names and attributes



Information from geotagging are plotted against hazard maps.







CDDP'S ROLE IN DISASTER RECOVERY & REHABILITATION: USE OF TECHNOLOGY

4 Provision of base maps to the communities for validation and for use in community planning, prioritization and disaster risk management.

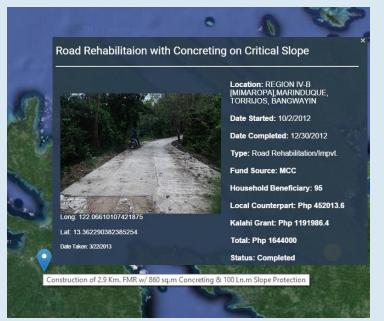


5 Utilization of satellite-based pre-disaster and post-disaster maps for rapid assessment during disaster





6 Sharing of information to other NGAs, communities and LGUS thru web application and android applications



KNOWLEDGE PARTNERS

- Local Government Units and the communities
- National Government Agencies:
 - ✓ NDRRMC (National Disaster Risk Reduction & Management Council)
 - ✓ OCD (Office of Civil Defense)
 - ✓ DILG (Department of Interior and Local Government)
 - ✓ OPARR (Office of the Presidential Assistant for Rehabilitation and Recovery)
 - NAMRIA (National Mapping and Resource Information Authority)
 - DENR (Department of Environment and Natural Resources)
 - ✓ DOST (Department of Science and Technology)
- Development Partners:
 - ✓ Asian Development Bank
 - ✓ World Bank

- Australian Department of Foreign Affairs and Trade
- Academia: Geo-tagging and GIS mapping can be incorporated into school curriculum where students can learn the application of the technologies and experience how to I) acquire GPS coordinates of critical facilities in their barangays, 2) create GIS maps necessary for disaster risk management and 3) crowd source crisis information during and after the disaster.
- International Service Providers:
 - ✓ Sentinel Asia
 - ✓ JAXA (Japan Aerospace Exploration Agency)
 - ✓ AidData
 - ✓ IBM CSC (Corporate Service Corps)