

PROJECT ReBUILD:

Resilience Capacity Building for Cities and Municipalities to Reduce Disaster Risks from Climate Change and Natural Hazards, Phase 1



RATIONALE

The Project aims to assess the disaster vulnerabilities of the cities and municipalities within the Cagayan River Basin and the Jalaur River Basin, Philippines, to geological, meteorological and meteorologically-induced hazards due to climate change. The results will provide the basis for priority mitigation actions like community based and managed early warning systems and integrated contingency planning and mobilization.

A clear gap that this project aims to immediately fill is the spatial dimension of the projected disaster risk from climate change at the city/municipality level where results can be immediately translated to mitigating measures like community based early warning systems, operational contingency plans and re-engineering of infrastructure. It is also at this level where concrete regulatory controls like risk based zoning can be effected.

The project will also enhance the competencies of the concerned local government units on mainstreaming climate/disaster risk management into local land use and development planning and regulatory processes. To increase the resilience of vulnerable communities, the Project will support the development of climate resilient livelihoods and risk sharing/transfer models. The Project will also help cull and organize knowledge on climate/disaster risk management for vulnerable communities.

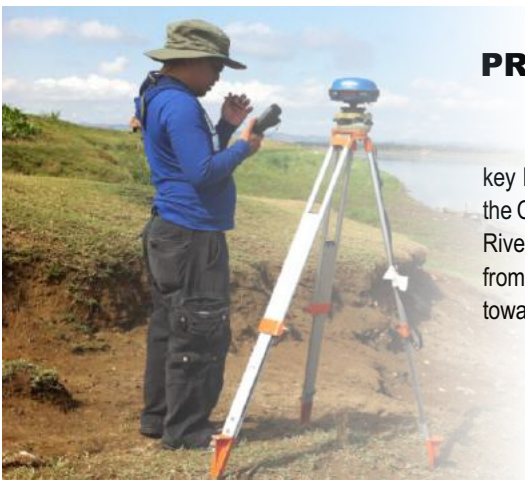
PROJECT OUTCOMES AND OUTPUTS

- Output 1:** Climate change/disaster risk vulnerabilities of Cagayan and Jalaur River Basins assessed
- Exposure database generated
 - Flood inundation maps produced
 - Methodology for Climate/Disaster Risk and Vulnerability Assessment (C/DRA-VA) formulated
 - Climate/disaster risk and vulnerability assessment reports produced
- Output 2:** Priority climate change adaptation and disaster risk mitigation measures for priority cities and municipalities within and around the Cagayan and Jalaur River Basins identified
- C/DRM policy environment assessed
 - Gaps and needs in the implementation of CBMEWS and contingency planning identified
 - Awareness of community leaders on flood hazards enhanced
- Output 3:** Climate change/disaster risk management mainstreamed into the target areas' planning and regulatory processes
- Awareness of stakeholders in pilot LGUs in C/JRB raised
 - Capacity and competency of local planners and key academic partners to mainstream climate/DRM into CLUPs strengthened
 - "Climate/disaster proofed" CLUPs produced
- Output 4:** Socioeconomic resilience of the poor and most vulnerable in target areas developed
- Policy environment on resilient livelihood and risk transfer assessed
 - Gaps and needs in the implementation of risk transfer mechanism and livelihood options for improving the socioeconomic condition of vulnerable populations identified
- Output 5:** Local KM systems established in selected target areas
- Policy environment on operation of knowledge management systems/learning centers in target areas assessed
 - Gaps and needs in the implementation of knowledge management systems/learning centers identified

PROJECT OBJECTIVES

Project ReBUILD aims to increase capacities of key local actors in the cities and municipalities within the Cagayan River Basin (CRB) in Region 2 and Jalaur River Basin (JRB) in Region 6, to manage disaster risks from and adapt to the overall impacts of climate change towards resilient and sustainable development.

The project is intended to improve the governance framework by putting in place the necessary enabling policy environment, mechanisms, systems and tools, as well as, improving the competencies of the concerned personnel to address disaster risks from natural hazards and climate change which set back development gains and make the vulnerable poor population poorer.



PROJECT BOARD

Climate Change Commission – Chair
United Nations Development Programme – Co-Chair

Members:

- Government of New Zealand/NZAP
- Department of Environment and Natural Resources
- Department of Interior and Local Government
- Department of Science and Technology
- Department of Trade and Industry
- National Economic Development Authority
- Housing and Land Use Regulatory Board
- Philippine Commission on Women
- League of Cities of the Philippines
- League of Municipalities of the Philippines
- League of Provinces of the Philippines
- Office of the Civil Defense / NDRRMC



PROJECT ACTIVITIES

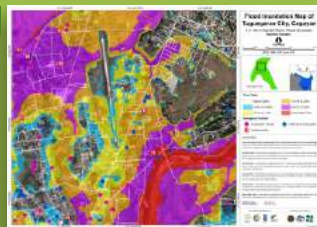


Partner local government units performing the survey for Climate and Disaster Exposure Database (ClimEx.DB). Academic partner-institutions (University of the Philippines Visayas and Cagayan State University) provided technical support and hosted the data server for ClimEx.DB



Barangay officials during the "Orientation Workshop on Climate - Adjusted Flood Inundation Maps for Barangays of Pilot LGUs in JRB and CRB" on the use of maps. The maps were produced in partnership with UP-TCAGP and PAGASA

Climate-adjusted flood inundation maps. The maps were produced in partnership with Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) and University of the Philippines – Training Center for Applied Geodesy and Photogrammetry (UP-TCAGP) using climate projections for mid- and late-century scenarios. Hydrologic Modeling System (HEC-HMS) was used in the rainfall-runoff simulations, which were calibrated using field measurements. The flood inundation maps were derived from Light Detection And Ranging (LIDAR) based Digital Elevation Model (DEM).



Echo Training on DRR and CCA for Cagayan River Basin Stakeholders Project stakeholders during the "Echo Trainings on Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA)." The echo-trainings were part of the awareness and capability-building activities of the Project.



Experts from various government agencies during an Experts Group Meeting on the Climate/Disaster Risk and Vulnerability Assessment (C/DRA-VA) formulated by the Project. The C/DRA-VA process is used as an input to the CCA/DRR-enhancement of the local development plans by the pilot-LGUs.



Participants from the academic partners attending the "Flood Modelling and Mapping Training" on the use of Hydrological Engineering Center – River Analysis System (HEC-RAS), Hydrologic Engineering Center – Hydrologic Modelling System (HEC-HMS), and LISFLOOD FP. The training is part of project strategy of capacitating regional partners.



Pilot LGU participants attending one in a series of five "Training-Workshop on Mainstreaming Climate Change Adaptation and Disaster Risk Reduction in Local Development Planning" (Mapshop). The training was aimed at the CCA and DRR enhancement of their Comprehensive Land Use Plans (CLUPs).



PROJECT ReBUILD



Empowered lives.
Resilient nations.