

PCTP-RAPID

Understanding disaster risks in a changing climate,
Working towards sustainable recovery



BACKGROUND

The Philippine Government, through the Climate Change Commission (CCC), and with support from the United Nations Development Programme and the Australian Government, has been implementing Project Climate Twin Phoenix (PCTP) since April 2012 in areas hardest hit by tropical storm Washi (2011) and typhoon Bopha (2012). The main goal is to design and implement a comprehensive and long term capacity development program for cities and municipalities, addressing both risks from climate change and other related natural hazards.

The Project initially covers the catchment areas of the Cagayan de Oro, Iponan, Mandulog and Iligan river systems, particularly Cagayan De Oro City and Iligan City; and municipalities in Compostela Valley Province and Davao Oriental Province. The support was expanded in 2014 to areas affected by Typhoon Yolanda under the component referred to as the Resilience and Preparedness toward Inclusive Development Programme or RAPID.

RAPID has significant focus on community and LGU-based risk management, which would encompass natural resource, disaster and climate risk and vulnerability assessments, emergency preparedness and response, and climate/disaster risk mitigation. It would also contribute to a strong regulatory framework by applying control measures to land-use planning, engineering standards, and project design approval.

The target LGUs under RAPID include those located along the coastline of San Pedro and San Pablo Bays, namely: city of Tacloban and municipalities of Palo, Tanauan, Dulag, Tolosa, Mayorga, Mac Arthur, and Abuyog in Leyte, Basey and Marabut in Western Samar, and Lawaan and Balangiga in Eastern Samar.

PROJECT OUTPUTS

Six project outputs are pursued interdependently to ensure their consistency toward achieving the project Outcomes:

1. Climate/Disaster risk and vulnerability assessments;
2. Priority Preparedness and Mitigation Actions;
3. Awareness Raising and Capacity Building;
4. Mainstreaming Climate/Disaster Risks in Land Use and Development Plans;
5. Building resiliency of the poor and vulnerable;
6. Knowledge and information sharing.



CROSS-PRACTICE SYNERGIES & PARTNERSHIP

The Project works directly with local government units, who are considered primary partners, to ensure ownership and active involvement in project activities. It maintains partnership with national and regional government agencies, notably the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), Philippine Institute of Volcanology and Seismology (PHIVOLCS), Mines and Geosciences Bureau (MGB), National Mapping and Resource Information Authority (NAMRIA), Office of Civil Defense (OCD), Department of Interior and Local Government (DILG), National Economic and Development Authority (NEDA), and Housing and Land Use Regulatory Board (HLURB). These agencies are onboard as implementing partners and, in the process, are tapped for their local expertise, to strengthen inter-agency coordination, and to replicate successes in providing assistance.

Partnerships with academic institutions (e.g. Xavier University, Mindanao State University-Iligan Institute of Technology or MSU-IIT, University of the Philippines System, Visayas State University) and nongovernment organizations had been established to ensure the integrated delivery of outputs.

The CCC also ensures complementation of the Project with related and existing initiatives, e.g. the Department of Science and Technology (DOST)-Project NOAH through the Disaster Risk and Exposure Assessment for Mitigation Program; Climate scenario modelling by PAGASA; developing and establishing early warning systems for natural hazards by PAGASA, MGB and PHIVOLCS; and applying Remote Sensing Technology in river basin management by DOST.

PROGRAM IMPACT

Through cooperative efforts with project partners, Project Climate Twin Phoenix has since been supporting the long-term recovery of these flood-affected areas and has reached the following milestones since 2012:

Utilizing climate-adjusted flood hazard maps to reduce risks of vulnerable communities

Generation of climate-adjusted flood hazard maps involving the four major rivers of Cagayan de Oro, Iponan, Iligan and Mandulog. The maps have already been utilized in the preparation of flood contingency plans for both the cities of Cagayan de Oro and Iligan.

Flood modeling has been completed in Pablo areas, as well as storm surge and severe wind mapping.

Approval of flood contingency plans for Iligan and Cagayan de Oro cities

Cagayan de Oro and Iligan cities have adopted their flood contingency plans, including protocols for updating and conduct of drills. These plans have been formulated by the cluster groups and adopted by the City Disaster Risk Reduction and Management Councils (DRRMC)/Legislative Councils.

Installation of the radio-based flood forecasting and early warning system

PCTP supported the commissioning and installation of the radio-based flood forecasting and early warning systems (FFEWS) for the rivers of Cagayan De Oro and Mandulog. The FFEWS were installed in Talakag and Baungon in Bukidnon and in Rogongon in Iligan City.

Supplemental Guidelines on Mainstreaming Climate and Disaster Risks in the Comprehensive Land Use Plan and Updating of Land Use/Physical Framework Plans

Approval by HLURB on February 24 (2014) of the Supplemental Guidelines on Mainstreaming Climate and Disaster Risks in the Comprehensive Land Use Plan (CLUP).

ClimEx.db as a disaster risk assessment tool

The Climate and Disaster Exposure Database (ClimEx.db) for both Cagayan de Oro and Iligan cities have been completed, including the socioeconomic profile of flood-prone areas.

A hands-on training and workshops were conducted for Iligan and CDO on climate disaster risk assessment which computes risk by considering in the analysis both the ClimEx.db data on exposure and vulnerability, and the probabilistic scenarios of climate-adjusted flood hazard maps.

Climate Change and Disaster Risk Information System for Planning

ClimEx.db data are currently hosted in a Climate Change and Disaster Risk Information System for Planning (CRISP) in Region X.

Strengthening local response capability: flood evacuation drills

Flood evacuation drills were conducted in both Cagayan de Oro and Iligan cities in order to test and evaluate the flood early warning system and the communications protocols and evacuation procedures contained in the flood contingency plan of an LGU.

Natural Resource Assessment

Natural Resource Assessment (NRA) teams for Water and Water Quality, Remote Sensing Geographic Information Systems, Agriculture and Soil, Forest Resources, Marine (corals and fishes), and Marine Protected Areas (sea grass, and mangroves) have started their preliminary data sampling in selected coastal barangays.

Building knowledge and strengthening adaptive capacity through IEC

An IEC activity on the climate-adjusted flood hazard map was completed in October 2014 for the trainers in Iligan City led by the city's DRRMC and composed of barangay chairmen and officials. This activity was echoed in different puroks of 13 barangays in Iligan.

Community-based Climate and Disaster Risk Reduction and Management (CBC/DRRM)

RAPID has conducted a series of capacity development courses on Climate Systems, Good Governance, Mainstreaming DRR, and Stakeholders Mapping, which will kick-off the community-selected rapid results initiatives (RRI). The RRI addresses DRR- and CC-related concerns through simple but impactful interventions in the barangays.

NEXT STEPS

Running until 2017, PCTP-RAPID will execute USD8.8M worth of projects and other assistances aimed to empower local governments and the affected coastal communities so they can work together in coming up with better plans, policies, and regulatory measures that will enable them to cope with natural disasters which are projected to increase in intensity and frequency due to climate change.

In the pipeline are some initiatives that will be implemented in the following areas:

- CBC/DRRM in 75 barangays
- Climate-adjusted flood hazard maps/flood modeling in major riverbasins
- ClimEx.db in 12 local government units
- Natural Resource, Climate and Disaster Risk Assessments
- Guidelines for Mainstreaming Climate and Disaster Risks in the Comprehensive Development Plan
- Risk-Sensitive Comprehensive Development and Land Use Plans of 12 local government units
- Mainstreaming Climate and Disaster Risks in the Project Evaluation Manual of NEDA
- Contingency, Disaster Risk Reduction and Management Plans, and Climate Change Action Plans

