

OCEANIA

Philippines • Guiuan



Context

Guiuan is located in the south of the province of East Samar and is the second largest city in the province (52,991 inhabitants in 2015). The municipality is a peninsula surrounded by the Pacific Ocean and covers 175 km² and several islands, forming part of an important marine reserve. Fishery resources are the heart of the local economy, complemented by coconut, root vegetable and some mining resources (bauxite, nickel). On 8 November 2013, the city was struck by Typhoon Haiyan, leaving behind many human and material damages, including the Catholic Church founded in 1595, a national cultural treasure and a UNESCO World Heritage nomination. It should be noted that the city hosts one of the stations of the national meteorological services.

Stakeholders

In collaboration with local stakeholders and government officials, the Municipality of Guiuan has developed an adaptation strategy to increase the resilience, protection and enhancement of local economic sectors, communities, natural resources and ecosystems to climate impacts. In particular, it is about protecting the health of the two ecosystems of the territory on which the local economy depends: the inland lands that support forests and agriculture and the coastal areas that support marine resources.

Methodology

Following the damage caused by the category 5 hurricane Haiyan, the Guiuan Recovery and Rehabilitation Group (GRRG) was created to oversee the reconstruction efforts. In 2018, the group became the Guiuan Recovery and Sustainable Development Group for Resilience (GRSDGR). Comprising representatives of civil society, regional government bodies, the private sector and scientists, GRSDGR is now a multi-stakeholder cooperation platform that coordinates the implementation of most of the actions of the adaptation plan through shared intersectoral responsibility. Adaptation to climate change thus serves as a development framework for mobilising resources and stakeholders at the territorial level.



VULNERABILITIES

Due to its geography, the territory is highly exposed to hurricanes, storm surges, floods and rising sea levels. The damage caused by Haiyan highlighted the lack of enforcement of regulations and planning tools in land use planning and natural resource and waste management practices.

WATER RESOURCES: poor drinking water quality, declining groundwater levels, siltation and salinisation.

AGRICULTURAL AND FOREST RESOURCES: poor practices, salinisation and soil erosion, landslide risks, invasion of new species and diseases, reduced agricultural yields, loss of forest cover.

FISHERY RESOURCES: decrease in catches and corals, illegal practices, shortening of the fishing season.

SOCIO-ECONOMIC IMPACTS: migration of populations, illegal habitats, network flooding (transport, communication), reduced income from resource exploitation (agriculture and fisheries).

HEALTH: health risks and waterborne diseases, increased health costs.

ADAPTATION ACTIONS

In addition to vulnerabilities, the developed climate change adaptation framework highlights the opportunities created by climate change and highlights the dependence between the socio-economic and health security of local populations and the health of their ecosystems (forest areas, coastal areas and marine resources). The action strategy targets several sectoral outcomes: improving social services, achieving a sustainable economy, protecting ecosystems, increasing resilience and strengthening institutional capacities and resource management tools. To do this, it is structured around two main objectives:

OBJECTIVE 1: ACHIEVE FOOD SECURITY THROUGH SOUND ECOSYSTEM MANAGEMENT.

In collaboration with regional government authorities:

- Creation of a protected forest production that includes agroforestry projects;
- Training of teams in the application of regulations and laws;
- Wetland studies and delimitation;
- Revision of planning tools and creation of new ones (environmental code).

In collaboration with regional scientists:

- Soil analysis at the municipal level;
- Coastal erosion control.

In collaboration with all partners:

- Creation of a research centre on climate and root vegetables;
- Creation of a root vegetable production area using appropriate methods;
- Relocation of coastal dwellings;
- Installation of defence infrastructure (seawall) and road elevation.

Collaboration with regional authorities and the private sector

- Research programme on the analysis of pollutants in water resources;
- Implementation of an integrated management policy for coastal and marine resources;
- Rehabilitation of mangrove forests;
- Monitoring of local fisheries;
- Increased law enforcement.

OBJECTIVE 2: SECURE WATER RESOURCES - IMPROVE CAPACITY MANAGEMENT AND SUPPLY SYSTEMS AT THE MUNICIPAL LEVEL.

Collaboration with municipal departments and/or regional authorities

- Creation of a catchment area management body;
- Creation of a financial system that values ecosystem services;
- Optimisation of drinking water supplies and rainwater recovery;
- Improvement of solid waste management;
- Creation of a desalination plant;
- Development of regulatory zoning maps;
- Development of a local sustainable sanitation plan;
- Improvement of the drainage system;
- Management of rainwater and runoff use.

STRENGTHS OF THE APPROACH

- A pioneer in the development of its climate change adaptation framework as a tool for mobilising local resources and stakeholders;
- The local adaptation plan includes many interrelated actions (systemic and intersectoral approach);
- The approach aims at social and economic security by strengthening the health of the ecosystems constituting the territory (ecosystem and community-based adaptation).

LIMITS OF THE APPROACH

- Many regulatory (top-down) actions that may come up against realities on the ground during their application (lack of awareness, bad habits, illegal practices);
- Due to its small population, the adaptation framework developed is difficult to apply to more populated areas;
- Poor consideration of the share of the influence of causes outside the territory in local impacts.

SOURCES

- Municipality of Guiuan (2018). Climate Change Adaptation Framework.
- Photo : "Bantay Dagat (Sea Patrol) members in Guiuan, Eastern Samar build a floating guard house powered by solar energy, supported by Cordaid and the Institute for Climate and Sustainable Cities. (c) AC Dimatatac/ICSC".