

Mainstreaming climate change in biodiversity planning and conservation in the Philippines

Project title:	Mainstreaming climate change in biodiversity planning and conservation in the Philippines
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Rationale

This project is a local climate-change initiative that develops strategies and actions to address climate-change threats to terrestrial biodiversity and tropical forests in the Philippines. It also supports the Philippines Medium Term Development Plan (2004–2010), specifically Thrust Number 3, which calls for the strengthening of the protection of vulnerable and ecologically fragile areas such as those where biodiversity is highly threatened. It is also consistent with the Philippines Millennium Development Goals, specifically within the action agenda on biodiversity conservation under Goal 7. The 4th National Report of the Philippines to the CBD identified climate change as an important cross-cutting issue, but the report had very little to say about how to adapt to its impacts. The research and development agenda for agriculture and natural resources in the country also highlighted the wide-ranging deficit of knowledge and the need to generate science-based adaptation. The proposal will assist in filling these knowledge gaps. The expected output of the project can also be used in future national communications for the United Nations Framework Convention on Climate Change and to help integrate climate-change adaptation into the management of protected areas, working in close partnership with the Philippines Department of Environment and Natural Resources, local communities and NGOs.

Objectives

Our main aim is to integrate the adaptation to a changing climate into biodiversity planning and management in the Philippines. There are seven specific objectives.



1. Support the Department of Environment and Natural Resources in the preparation of a national action plan for climate-change adaptation for biodiversity conservation.
2. Facilitate developing mechanisms and measures to integrate climate-change considerations in biodiversity project planning and implementation at the Protected Areas and Wildlife Bureau and the Forest Management Bureau of the Department and its partners.
3. Assist in assessing the potential impacts of climate change on terrestrial ecosystems in the Philippines including identification of the most vulnerable ecosystems.
4. Support assessing the likely human responses to climate change in the proximity of protected areas and the resulting threats to conservation and develop



appropriate adaptation strategies that mitigate these threats.

5. Support the formulation of climate-change-adaptation strategies and measures to enhance biodiversity conservation.
6. Showcase how climate change can be integrated in biodiversity conservation projects in four pilot sites.
7. Assist in building capacity of the Department of Environment and Natural Resources, other government agencies and NGOs in mainstreaming climate change in biodiversity conservation.

Project components

Component 1: Support national action planning and mainstreaming of climate-change adaptation in biodiversity

Under this component the following key activities will be undertaken: formation of a multidisciplinary planning team; synthesising available impact assessments, coping strategies, past consultations, trends and existing conservation plans; participatory rapid assessment of current vulnerability and potential increase in climate hazards and associated risks; simulation modelling of climate-change impacts on terrestrial ecosystems; periodic public consultations; and formulation of climate-change adaptation action plans and options. The national action plan will include description of at least five priority projects on climate change adaptation.

Component 2: Conduct vulnerability assessment and adaptation options of terrestrial ecosystems to climate change

Under this component, the effects of climate change on terrestrial ecosystems in the Philippines will be assessed. As an initial step, climate-change scenarios for the Philippines will be accessed or generated using several approaches to capture the range of possibilities given the high uncertainty in future climate projections. Based on the climate change scenarios, the impacts on

terrestrial ecosystems of altered climate will be assessed using at least two biogeography models, namely the Holdridge system and the BIOME4 model through a GIS platform. On the basis of projected impacts of climate change on terrestrial ecosystems, potential adaptation policies, strategies and measures will be formulated.

Component 3: Demonstrate climate-change adaptation in biodiversity conservation areas

This component will showcase climate-change-adaptation measures being tested in existing protected areas and indigenous lands in four locations in the Philippines.

1. Mt Apo Natural Park: integrating climate-change adaptation in protected-area planning and management with agroforestry.
2. Mt Kitanglad Range National Park: buffer-zone management through agroforestry. Buffer-zone management. Landscape planning and livelihoods will be enhanced through agroforestry.
3. The Northern Sierra Madre Natural Park: integrating climate-change adaptation in protected-area planning and management in an upland area.
4. Ikalahan Ancestral Domain: ecosystem-based adaptation. Along with the Kalahan Educational Foundation we will assist the Ikalahan indigenous community in implementing ecosystem-based, climate-change-adaptation measures.

Component 4: Capacity building

We will assist people concerned with terrestrial biodiversity to gain sufficient knowledge on climate change concepts, vulnerability and adaptation of biodiversity to climate change. Members of people's organizations, local government units and NGOs working in protected areas will be assisted along with staff of the Department and the protected areas and forest management bureaux.

