



From Ridge to Reef: An Ecosystem Based Approach to Biodiversity Conservation and Development in the Philippines

Project Background

"From Ridge to Reef: An Ecosystem-based Approach to Biodiversity Conservation and Development in the Philippines" is a USAID-funded program being implemented by The WorldFish Center, Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), World Agroforestry Center and FishBase Information and Research Group, Inc (FIN) in and around Mt. Malindang in Misamis Occidental. The program was started last February 2011 and is set to be completed January 2013.

The project aims to address key issues affecting biodiversity conservation in the light of practical need for natural resource utilization around the Mt. Malindang area which has been declared as priority one in terms of biodiversity conservation efforts and risks associated there from in the country. The Program components revolve around three thematic areas: 1) reversing degradation of coastal resources; 2) enhancing livelihoods of coastal people; and 3) capacity-building and information/data base management. Mt. Malindang and its environs are regarded as one of the country's biodiversity hotspots and a priority national protected area. It is envisioned to serve as a model site for sustainable biodiversity conservation integrated within a livelihood and governance framework.

The implementing agencies, all leading international organizations in their respective fields, have mobilized a team of highly competent experts on environmental management, biologists, social scientists, policy consultants, and economists, among others, to ensure the success of the project. It has partnered with local government units, government agencies, and the civil society in the area to ensure project activities are consistent with local needs and priorities.

Project Site

Mt. Malindang Range in Misamis Occidental, Northern Mindanao, Philippines was proclaimed a National Park and Watershed Reserve on June 19, 1971 thru Republic Act 6266 and a Natural Park on August 2, 2002 through Proclamation No. 228 as provided for by Republic Act 7586 (NIPAS Act) which made the same a protected area. Mt. Malindang's biodiversity is relatively rich with 99 species of birds, 18 species of mammals (3 are endemic) and 494 species of plants. Recently, Mt. Malindang and its environs have been identified as an extremely high priority conservation area under the National Biodiversity Strategy Action Plan (NBSAP) of the Department of Environment and Natural Resources (DENR).

The natural resources of Mt. Malindang range are threatened by the economic activities of the people, living inside and outside the park, most of which are farmers who would often turn to the park for additional sources of income. Considering the serious implications of continued destruction of the natural resource, conservation activities must be seriously pursued with a full understanding and appreciation of the people's needs around the area. It is against this background that this study is conceived. The unique features of Mt. Malindang and the various biodiversity conservation programs already pursued in the area provide excellent opportunities for piloting and modifying biodiversity conservation measures that could be replicated elsewhere and could clearly demonstrate how the complex environment could be integrated in one framework that allows for sustainable biodiversity conservation.



Strategies

Theme 1: Reversing degradation of coastal resources

Finding ways to reduce transfers of chemicals, nutrients and sediments from agriculture and forestry in catchments to coastal waters; rehabilitation of fish habitats damaged and destroyed by these processes and valuation of all links in aquatic production systems. These efforts should lead to a better understanding of effective conservation and sustainable management of natural resources.

Project 1: Understanding material transfers from watersheds and reducing 'downstream' effects of agriculture and forestry on coastal aquatic ecosystems

Project 2: Addressing non-optimal use of resources through valuation and "environmental payments"

Project 3: Identifying, mapping and strengthening management of critical coastal habitats

Theme 2: Enhancing livelihoods of coastal people

Determining the factors that underpin livelihoods; identifying technologies and policies to improve existing means of earning income and obtaining food from coastal resources; and ways to create alternative and supplementary livelihoods are the principal issues within this theme.

Project 4: Understanding the factors determining livelihoods for poor coastal people and facilitate the application of ecosystem approach to fisheries (EAF)

Project 5: Restoring production from capture fisheries

Project 6: Identifying and introducing locally adapted technologies for alternative or supplementary livelihood for coastal communities

Theme 3: Capacity building and information/data base management

For effective information dissemination for policy making and identification of appropriate strategies that would sustain efforts toward biodiversity conservation and management following the ecosystem based approach.

Project 7: Resource mapping (Biodiversity Information System) for effective resource management and monitoring

Project 8: Capacity Building in Biodiversity Conservation and Natural Resources Management



Implementing Agencies

The WorldFish Center (also known as the International Center for Living Aquatic Resources Management – ICLARM), is one of the 15 Centers under the Consultative Group of International Agricultural Research (CGIAR). It is an international, non-profit, non-governmental organization working in partnership with a wide range of government and non-governmental agencies at regional, national and local levels in the developing world, and with advanced research institutions worldwide. The declared mission of the Center is "to reduce poverty and hunger by improving fisheries and aquaculture". It advocates research-in-development to make small scale fisheries more resilient and productive, and support the adoption of sustainable small scale aquaculture that benefits the poor.

SEARCA is one of the 19 centers of excellence of the Southeast Asian Ministers of Education Organization (SEAMEO). It was established to: (a) provide nationals of SEAMEO member-countries with high quality graduate education and training in agriculture and rural development, (b) promote, undertake and coordinate research programs related to the needs and problems of the Southeast Asian region, and (c) disseminate findings of agricultural research and experimentation to a variety of stakeholders.

The World Agroforestry Centre is part of the alliance of the CGIAR dedicated to generating and applying the best available knowledge to stimulate agricultural growth, raise farmers' incomes and protect the environment. It specializes in sustainable management, protection and regulation of tropical rainforest and natural reserves and conducts research in agroforestry to develop more sustainable and productive land use.

The FishBase Information and Research Group, Inc. (FIN) is a domestic non-stock, non-profit, non-governmental organization established in the Philippines in September 2003. FIN has been created and is backed by the FishBase Consortium, a group of nine international Institutes and Organizations that is providing long-term support for FishBase. It is composed of academically trained staff and professionals with long years of experience as fish biologists, programmers, and graphic artists. FIN have partnered with international organizations, government agencies, and NGOs to study oceans' fisheries systems and their impact on marine ecosystems and human well-being.



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