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Environmental Management Success Stories: A Contribution to the Philippines Country Environmental Analysis

Draft for discussion
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Background

Environmental degradation and good environmental management is inextricably linked with sustainable development and growth. The two themes have been an integral part of the development agenda of both the Government of the Philippines and the World Bank Office in Manila. As such these two themes are major considerations and focus of the Philippines Medium Term Development Plan and WB Country Assistance Strategy (CAS) as “significant contributors to poverty, inequality and loss of livelihood.”

Against this background, the World Bank has decided to undertake a Country Environmental Analysis (CEA) for the Philippines. The CEA will review and place a substantial volume of studies in a coherent framework, apply economic valuation across issues and interventions to enhance the rigor in prioritization, and thereby guide future programs and projects. The CEA is not only a document, but also a process of engagement and harmonization with various stakeholders, including the government, other development partners, NGOs, academics, and the private sector. The CEA shall review major areas of environmental and natural resource management concerns in the Philippines, namely: (i) air pollution (outdoor/indoor), (ii) climate change, (iii) water and sanitation, (iv) coastal/marine resources, (v) forestry/watershed management, (vi) land degradation and (vii) environmental governance/institutions.

A parallel documentation to the CEA is a case study documentation of environmental management success stories from any of the major areas of environmental management concerns that were achieved at the national or local levels. The objectives of the success stories are to analyse the factors behind success, explain the reasons and factors behind its success, present documented and quantifiable beneficial result, if any, to the community and target beneficiaries, and to discuss its potential not only for sustainability but also for replicability. This documentation of success stories shall be a complementary material that would provide a more concrete and ground-level representation of the CEA sectoral reviews.

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Abbreviations

ADF	-	Annual Development Fund
BDP	-	Barangay Development Plan
BENRO	-	Barangay Environment and Natural Resources Officer
BEMO	-	Bohol Environment Management Office
BEW	-	Barangay Extension Worker
BFAR	-	Bureau of Fisheries and Aquatic Resources
B/FARMCs	-	Barangay Fisheries and Aquatic Resources Management Councils
B/LGU	-	Barangay Local Government Unit
BTWG	-	Barangay Technical Working Group
CAS	-	Country Assistance Strategy
CBDPM	-	Community-Based Disaster Preparedness and Management
CEA	-	Country Environmental Analysis
Cenro	-	Community Environment and Natural Resources Office
CEP	-	Comprehensive Environmental Plan
CESO	-	Canadian Executive Service Organisation
CityENRO	-	City Environment and Natural Resources Office
CLEC	-	Coastal Law Enforcement Council
CLUP	-	Comprehensive Land Use Plan
CO	-	Carbon Dioxide
CPUE	-	Catch Per Unit Effort
CRM	-	Coastal Resource Management
CWP	-	Community Watershed Plan
DA	-	Department of Agriculture
DAR	-	Department of Agrarian Reform
DENR	-	Department of Environment and Natural Resources
DFS	-	Diversified Farming System
DoF	-	Department of Finance
DILG	-	Department of Interior and Local Government
EcoGov	-	Environmental Governance Project
EDF	-	Economic Development Fund
EU-UDP	-	European Union-Upland Development Programme
FDCP	-	Fisheries Development and Conservation Programme
FISH	-	Fisheries Improvement for Sustainable Harvest
FLUP	-	Forest Land Use Planning
FTGs	-	Farmers' Training Groups
HC	-	Hydrocarbons
IRA	-	Internal Revenue Allotment
JBIC	-	Japan Bank for International Cooperation
LGC	-	Local Government Code of 1991
LGU	-	Local Government Unit
LUBDP	-	Land Use-based Barangay Development Plan
MAgrO	-	Municipal Agriculturist Office
MDC	-	Municipal Development Council
MDCC	-	Municipal Disaster Coordinating Council
MDP	-	Municipal Development Plan
MOA	-	Memorandum of Agreement
MPDC	-	Municipal Planning and Development Coordinator
M/FARMCs	-	Municipal Fisheries and Aquatic Resources Management Councils

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M/LGU	-	Municipal Local Government Unit
MTWG	-	Municipal Technical Working Group
NGA	-	National Government Agency
NGO	-	Non-government Organisations
NIPAS	-	National Integrated Protected Area System
NSO	-	National Statistics Office
NVS	-	Non-vegetative Strips
PCRA	-	Participatory Coastal Resource Assessment
Penro	-	Provincial Environment and Natural Resources Office
P/LGU	-	Provincial Local Government Unit
PNP	-	Philippine National Police
SCARRFC	-	Special Committee on Agos River Rehabilitation and Flood Control
SCPADS	-	Special Committee on Poblacion Area Drainage System
SUD	-	Sustainable Upland Development
TFH	-	Tricycle-for-Hire
UBAs/UCOs	-	Upland Barangay Associations/Upland Community Organisations
USAID	-	United States Agency for International Development
WB	-	World Bank
WPA	-	Water Production Area

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Executive Summary

Many environmental experts and practitioners have realised that the way forward towards addressing the plethora of issues and challenges facing our environment and achieving global sustainable development objectives relies on the continuous efforts of local communities and local governments in providing on the ground and on-site application of effective environment and natural resource management strategies. The catchphrase of many environmental activities of “Think Global, Act Local” has gotten more valuable currency with the now open acceptance by the global community and experts of what many local communities in developing countries have faced and confronted daily --- the emerging effects of global warming and climate change.

The five (5) case studies of Philippine communities and local government’s jointly working together to address 5 different environmental and natural resources management issues that is typically confronted by many similar communities and local governments in the country. Despite the recent passage of many landmark environmental legislations on clean air, clean water, solid waste, protected areas, wildlife and habitat protection, among others over the last ten years, the health of the Philippine environment needs a boost in the arm.

The effects of the continuing deterioration of country’s environment is temporarily being arrested by the tenacious and determined efforts by local communities such as Vigan City in the Northern Philippine province of Ilocos Sur; the Pacific Ocean-facing town of Infanta, Quezon in Southern Luzon; the coastal municipality of Ubay in Bohol province and Bayawan City in Negros Oriental, both in Central Philippines; and, the upland area of Nabunturan in Compostela Valley in the Southern Philippine island of Mindanao.

These communities and their local government units (LGUs) have strived to overcome difficult natural, physical, political, social and economic challenges in order to what they have seen as “survival” issues in the management of their environment and natural resources. From their local leaders to the ordinary citizenry, what we have seen in these case studies were the sheer determination and unrelenting spirit of these people to make a difference and avoid being swept away by the effects of environmental mismanagement and resource depletion.

On the other hand, these case studies showed local excellence and good practices in managing their environments while still creating new wealth, increasing incomes for their constituencies and improving their local economy.

a. Vigan City, Ilocos Sur – Air Quality Management to Preserve Vigan’s Cultural Heritage

The city of Vigan in Northern Luzon adopted a no nonsense air quality management programme focused on converting highly-pollutive 2-stroke motorcycle engines into more environment friendly technologies into order to continually preserve its “core heritage center” that has been formally inscribed in December 1990 as one of only five UNESCO World Heritage List of Site and Monuments in Asia. Almost two years after its full implementation in 2006, Vigan’s campaign to reduce air and noise pollution coming from tricycles-for-hire (TFH) has shown long-term economic and physical benefits to the community. Air quality has been observed to have ‘significantly reduced’ with almost two-thirds of the target vehicles converting to more environment-friendly engines.

b. Municipality of Nabunturan, Compostela Valley – Rehabilitation and Sustainable Development of Degraded Upland Communities.

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The municipality of Nabunturan in Compostela Valley province is one of the many upland municipalities in Southern Mindanao that was perennially plagued by poverty and declining economic productivity of its more than 16,000 hectares of farm lands, mostly located in the uplands, due to deforestation, soil erosion, and poor farming techniques. It decided to adopt a sustainable upland development approach that integrated the formulation of land and resource use-based local community development plans, developing a network of community-based extension workers, adoption of soil and water conservation farming techniques, and mobilisation of local community members for forest protection and labour maintenance of vital barangay roads. After four years of implementation, the communities have enjoyed a 60% increase in crop yields, 30% reduction in farm production costs, and dramatic increases in LGU revenue collections in the adopting villages.

c. Municipality of Infanta, Quezon Province – Community-based Disaster Rehabilitation and Recovery Programme

Infanta, Quezon was almost wiped out from the face of the earth because of the mudslides and floodwaters that inundated and destroyed millions worth of properties and infrastructure after a day of continuous rain brought by a super typhoon in October 2004. Complete isolated on the first few days after the disaster, the people of Infanta resolved to rely on their own and mobilise the whole community in order to save the town and immediately recover from the devastation of October 2004. Three years after the disaster, the town has fully recovered, generated record collections in local taxes and revenues by almost 50% and has even slightly reduced dependence on national revenue transfers from its pre-disaster period.

d. Bayawan City, Negros Oriental Province – Sustainable Forest Land Use Planning and Management

Perennial flashfloods and inundation of its vast agricultural lands, more than two-thirds of its total land area, have been the bane of this five-year old City that hampers its full growth potential as the province's new economic center. Meanwhile, almost 70% of its forestlands are "open access" areas that has been largely deforested and eroded due to slash and burn and poor farming practices. The city embarked and fully supported a 5-year sustainable forest land use and management programme and a co-management arrangement to address the problems of deforestation and lowland flash flooding. In three years, flash flooding has been noticeable reduced while floodwaters have receded more quickly. The LGU has also established 134 km of riverbank protection, 220 km forestline delineated and another 14 km forest firelines established and maintained. More than 400 rural households have benefitted from the livelihood and income projects from the project's implementation.

e. Municipality of Ubay, Bohol Province – Coastal and Fisheries Resource Management, Enforcement and Development.

The municipality of Ubay is typical of many coastal towns in the Philippines. It suffers from low fish catch and deteriorating coastal habitat due to destructive fishing practices, illegal and overfishing activities. It affects the livelihood of more than half of the town's population and is a major reason for the growing poverty in its coastal communities. Ubay's situation becomes more critical because of its location in a unique marine ecosystem - the Danajon Double Barrier Reef in the Visayan and Camotes Sea. The town embarked on a determined and consistent coastal resource management and enforcement programme to address these problems. Over the last four years, Ubay's efforts has resulted to an improvement in fish biomass diversity and catch per unit effort, a reported five-fold increase in fishery income and more than PhP 50-90 million or

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US\$ 1.1 million – 2 million (at US\$1=PhP 45) per PhP 2 million or less than US\$ 45,000 investment on coastal and municipal fishery activities.

These 5 case studies showed that the specific objectives of their environmental management strategies, particularly resource-based management approaches such as coastal, forest and upland management, were adopted to address immediate needs of local constituencies to protect their livelihoods or sources of income aside from the communal goal of resource protection and conservation.

It also showed the amount of investment needed over several years, a minimum of three (3) years, to sustain these environmental management initiatives to achieve any tangible or felt economic benefit for both individual farmers and communities. At best, results showed that the increases in productivity and income were first directly received by the individual upland farmers, marginal fisherfolk or forest settlers. However, this does not mean that the funds and resources poured into these resource management areas and communities did not have any returns for the larger community or the LGU.

On the contrary, there seems to be a truism to Nabunturan Mayor Jumol and Bayawan City Mayor Sarana's logic that while the resource management plans that they have adopted and implemented were costly in terms of funds budgeted by the LGUs over time and that real economic benefits were slowly being made only after the target communities and beneficiaries have themselves improved their economic conditions. Some LGUs have gained more in terms of improved local governance, greater constituency participation and involvement in resource management affairs and over time have now experienced increased collection of real property taxes, improved buying power of farmers and fishermen increasing business/commercial and trading activities in the town center, higher investments to local goods and services, and lesser dependence on dole-outs and burden on social services from the government, among others.

There are a lot more lessons learned and experiences that can be gleaned from the five (5) case studies that are presented in the CEA. And there are a hundred more best practices in the field that are being implemented and realised by local communities, people's organisations, local government units and individual families. The task is how to further expand and consolidate these local efforts into a critical mass of good environmental management initiatives that would truly have a significant impact into the Philippines environmental conditions. But whilst that juncture has yet to be reached, these small, local and unknown actions continue to march on.