

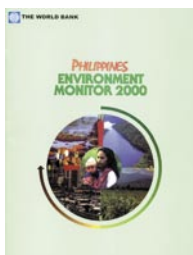


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The Philippines Environment Monitor 2000
presented snapshots of the general environmental trends in the country.



The Philippines Environment Monitor 2001
on solid waste management.



The Philippines Environment Monitor 2002
on air quality.



The Philippines Environment Monitor 2003
on water quality.

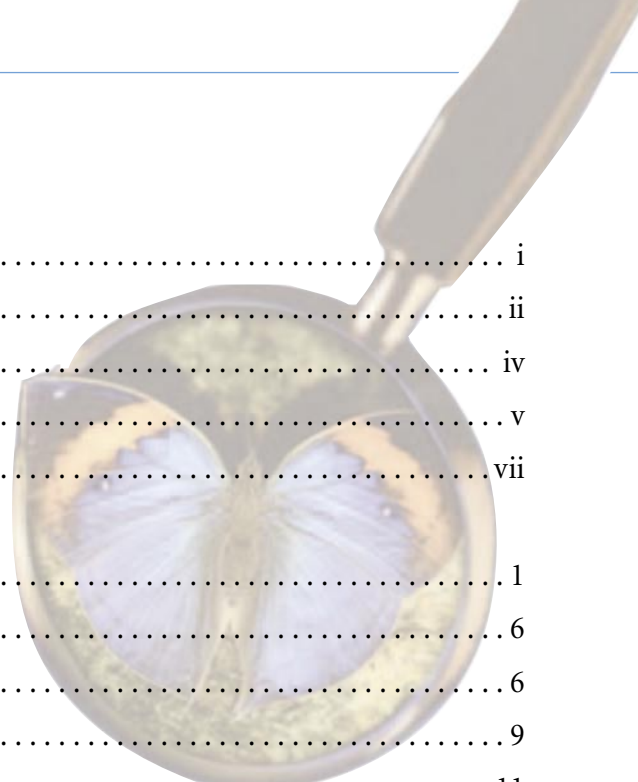
The World Bank Group seeks to help the Philippines improve the lives of its citizens through sustainable economic growth and greater social inclusion. Fiscal stability (in the short term) and public institutions that serve the common good (in the medium term) are critical to these objectives. Our strategy is to support Islands of Good Governance—those government agencies, local governments, and dynamic sectors in the Philippines that demonstrate how improved accountability and service delivery will lead to better economic and social outcomes. We help to expand these successful experiences and thus stimulate a cycle of more effective, transparent and responsive public institutions, fiscal stability, sustained economic growth and poverty reduction, and wider sharing of development benefits, especially among the poor. Our vision is that the Philippines will truly become the Islands of Good Governance.

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The Philippine archipelago is home to a rich diversity of natural resources, from mangroves to seagrasses, to endemic types of flora and fauna. Yet, population growth and economic development have created pressures on many of these resources causing declines in forest cover, soil fertility and fish catches. In addition, the quality of life in crowded, often unplanned urban areas has also deteriorated as a result of increasing levels of air, water and soil pollution.

This report is the fifth in the Philippines Environment Monitor (PEM) Series. Other PEMs have focused on solid waste management (2001), air quality (2002), and water quality (2003). This Monitor updates the first Philippine Environment Monitor (2000), presenting an overview of the status and trends with respect to forest cover, biodiversity, water, air, and soil quality, and coastal and marine management. New laws and policies covering these sectors are also discussed.

The 2004 Monitor pays special attention to the emerging role of civil society in environmental management, highlighting individual and community contributions. Such public advocacy has led to the passage of comprehensive environmental protection legislation. Although some indicators, such as air quality in selected urban areas, have shown improvement, ecosystems remain fragile. There is little reliable information on the extent of illegal logging and over fishing, but their impact is widely recognized. This Monitor finds that reversing years of environmental degradation will require renewed political will, budgetary resources and the more informed participation of the private sector and civil society groups.

The 2004 Monitor is divided into the following six sections: An overview of the linkages between economic growth and environmental protection is presented in the first section. The following three sections are sector-specific, focusing on the “green” environment—forestry, biodiversity and protected areas management; the “brown” environment—covering solid waste management, air pollution, water resources and mining pollution; and the “blue” environment—focusing on coral reefs, sea grasses, mangroves, and fisheries. These are followed by a section that covers progress in implementing global treaties and agreements. Key challenges are summarized in the final section. A list of pertinent websites, a bibliography, and important statistical information on the Philippines is provided at the end.

This Monitor is the outcome of a year-long process that involved national agencies, civil society, academia, and independent researchers. It was prepared, reviewed and finalized with counterparts, through a series of five stakeholder consultations. We hope that such a collaborative approach will foster a common understanding of the problems and priorities for effective environmental management in the Philippines.

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People's Day at the DENR Office.
Source: DENR-Public Affairs Office.



The 2004 Philippines Environment Monitor updates progress in natural resources management; biodiversity conservation; solid waste, air and water pollution control; and coastal and marine management. Since the publication of the first Philippines Environment Monitor in 2000, the Government of the Philippines has adopted overarching legislation aimed at improving air and water quality in the country, and preserving precious, often-threatened, environmental resources. New environmental and economic policies have been put into place. Greater civil society participation and dialogue, and a more engaged private sector, are evidence of a paradigm shift in environmental governance, with increased importance being accorded to local-level decision-making and implementation.

Despite positive steps, actual change on the ground, measured by environmental indicators, has been slow. Years of neglect, haphazard policy-making, and weak local environmental management have taken a toll in the form of widespread environmental degradation and acute pollution problems. Forested areas in the country continue to be threatened by competing development claims of agriculture and urbanization. As habitats shrink, biodiversity in these areas is increasingly endangered. Coastal resources, especially coral reefs (over 90% are at high risk), mangroves, and sea-grasses face threats from coastal zone development, expanding aquaculture, and destructive fishing. Fisheries catch per-unit-of-effort has been declining steadily due to over-fishing in many areas. The costs of environmental degradation are high, where they are quantifiable. For example, mismanagement of fisheries resources is estimated to cost PhP 23 billion (US\$ 420 million) annually in lost revenues. The annual economic losses caused by water pollution are estimated at PhP 67 billion (US\$ 1.3 billion) and the increased health costs of exposure to air pollution (particulate matter) in four urban centers alone are estimated to be over PhP 21 billion (US\$ 400 million). Abandoned mining areas and mercury pollution in water bodies that surround mines remain problematic and unquantified even as the Government encourages new, environmentally-sensitive mining investment.

The role of environmental information has been stressed, as the availability of timely and reliable data is essential to informed decision-making in the public and private sectors. While the air pollution in most cities is severe, particulate matter levels have recently declined in Cebu, Baguio and Manila suggesting that public policies can be effective. Although the Monitor aims to present the latest environmental trends, available information is patchy and may not fully reflect the reality on the ground. In some areas, it is difficult to ascertain improvements or lack thereof, because of poor information-gathering, data analysis, and a general lack of capacity to translate analytical results into policy decisions. The notable contributions of government, civil society and the private sector are highlighted under “environmental champions.”

While each sector faces specific problems, the general challenges to environmental management are cross-cutting and relate to environmental governance, policy-making and implementation. The following are key challenges:

1. Long-term national commitment to environmental protection to reverse degradation.
2. Encourage greater public awareness and involvement to create political will.
3. Increase private sector participation for environmental services to reduce capital investment by the Government.
4. Improve coordination and capacity to harmonize the decentralization process.
5. Modernize monitoring, enforcement, and public disclosure to ensure compliance.
6. Streamline bureaucratic processes to encourage investment in natural resources.












Indicators	General Trend	Status and Comments	Priority Level
BROWN ENVIRONMENT			
Air Pollution in Metro Manila (MM) and urban centers			
Ambient TSP level in MM, Cebu, Davao, Baguio		Declining particulate concentrations in urban centers but annual averages still exceed national standards. Non-conventional and area sources like biomass burning and re-suspended dust need controlling.	★★
Number of highly polluting vehicles on Metro Manila roads		Declining number of polluting vehicles and rising production of cleaner motorcycles and vehicles. Rapidly rising vehicle population points to urgent need for public transport and transport management.	★★
River and coastal water quality			
% population with access to sanitation and sewerage		Access to sanitation rising slowly. Urban access to piped sewerage in Metro Manila is very low (8%) as the investments in sewerage are inadequate.	★★★
Contamination of groundwater		Total coliform contamination increasing with domestic wastewater accounting for majority of the pollution load.	★★★
% industrial waste treated		More waste treated but the total production as well as illegal solid, toxic/hazardous waste, dumping is rising.	★★
Solid hazardous waste			
Solid and hazardous waste generated		Total waste generation is rising with population while services are not keeping up with the demand.	★★★
% of waste recovered for recycling		More LGUs practicing ecowaste management. Level of composting and recycling is rising.	★★★
% of residual waste disposed in environmentally sound manner		Open dumping and burning continue as main means of disposal.	★★
Mining Pollution			
No. of closed / abandoned mines		Twenty sites surveyed for rehabilitation and revegetation.	★★
Mercury levels in surrounding and downstream water bodies		Mercury pollution resulting from artisanal mining. Better management of mining sites and handling of wastes needed.	★★★
GREEN ENVIRONMENT			
Forest Cover			
% of forest cover		Total forest cover improving but forest protection and rehabilitation needs expanding.	★★
Annual rate of reforestation		Annual reforestation rate slowing in recent years.	★★

Low Priority ★

Medium Priority ★★

High Priority ★★★



Indicators	General Trend	Status and Comments	Priority Level
Open access areas		Forest areas under management or co-management increasing.	★★
Critical habitats and biodiversity			
Number of rare, threatened, and endangered wildlife species		One of the highest biodiversity loss rates in the world. Shrinking habitat along with commercial exploitation inspite of more area under protection.	★★★
Soil erosion and flooding		Increasing soil erosion and flooding. Deforestation and land conversion continue to add to the problem.	★★★
Yield / hectare (mt/ha)		Static yield / hectare increasing despite inputs. Deforestation from logging, natural disasters, and residential development.	★★
BLUE ENVIRONMENT			
Water Supply			
Water supply (in per capita availability / year)		National water demand expected to outstrip supply.	★
Water demand in major cities (in MCM / year)		Critical seasonal shortages worsening as demand continues with population and economic growth.	★★
% of population with access to improved water source		Steady improvements in access to improved water source.	★
Watersheds			
% of watersheds considered degraded		Minor improvements noted.	★
Coastal and marine resources			
Mangrove cover		Mangrove cover increasing but threats continue. Fast track reversion and rehabilitation of abandoned fishponds and saltbeds to mangroves.	★★
% coral reefs in excellent condition		Destructive fishing, construction, solid and hazardous waste disposal continue to threaten coastal and marine resources. More active participation of LGUs and communities needed.	★★★
Sea grass cover		Reclamation and pollution continue to threaten seagrasses. IEC on value of seagrasses, coral reefs and mangroves needed.	★★
Fishery production from municipal waters		Production going down with even increased fishing effort. Delineation of municipal waters needs to be completed with LGUs effectively managing same.	★★
GLOBAL ENVIRONMENT			
ODS consumption (in metric tons)		ODS consumption in the Philippines declined to 1422 MT by 2003, ahead of international commitments.	★

Low Priority ★

Medium Priority ★★

High Priority ★★★



ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
BFAR	Bureau of Fisheries and Aquatic Resources
BOD	Biochemical Oxygen Demand
CAA	Clean Air Act
CBFM	Community-based forest management
CDM	Clean Development Mechanism
CFC	Chlorofluorocarbons
CITES	Convention on International Trade in Endangered Species of Flora and Fauna
CLASP	Community Livelihood Assistance Special Program
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CO	Carbon monoxide
DA	Department of Agriculture
DAO	Department Administrative Order
DENR	Department of Environment and Natural Resources
DO	Dissolved oxygen
EMB	Environmental Management Bureau
EMPOWER	Environment Management with Public and Private Sector Ownership
EO	Executive Order
EPIC	Environmental Management Programme for Industry Competitiveness
ESWMA	Ecological Solid Waste Management Act
FAO	Food and Agriculture Organization
FMB	Forest Management Bureau
FTAA	Financial and Technical Application Agreement
GDP	Gross domestic product
GEF	Global Environment Facility
GOP	Government of the Philippines
ICLARM	International Center for Living Aquatic Resources Management
IPAF	Integrated Protected Areas Fund
ITTO	International Tropical Timber Organization
JICA	Japanese International Cooperation Agency
km²	square kilometer
LGU	Local Government Unit
LISCOP	Laguna de Bay Institutional Strengthening and Community Participation Project
m³	cubic meter

MARPOL	International Convention for the Prevention of Marine Pollution from Ships
mcm	million cubic meters
mg/l	milligrams per liter
MGB	Mines and Geosciences Bureau
MMDA	Metro Manila Development Authority
MT	Metric ton
MWSS	Metropolitan Waterworks and Sewerage System
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-governmental organization
NIPAS	National Integrated Protected Areas System
NSWMC	National Solid Waste Management Commission
NWRB	National Water Resources Board
O₃	Ozone
ODP	Ozone Depleting Potential
ODS	Ozone Depleting Substance
OSPAR	Oil Spill Preparedness and Response
OSRAP	Oil Spill Response Action Plan
PAB	Pollution Adjudication Board
PAMB	Protected Areas Management Boards
PBE	Philippines Business for the Environment
PBSP	Philippines Business for Social Progress
PCF	Prototype Carbon Fund
PD	Presidential Decree
PET	Polyethylene teraphthalate
PHP	Philippines Peso
PM10	particulate matter less than 10 microns
PO	Peoples' Organization
POP	Persistent Organic Pollutants
RA	Republic Act
RAMSAR	Ramsar Convention on Wetlands
SWM	Solid Waste Management
TLA	Timber License Agreement
TSP	Total Suspended Particulates
UNCLOS	United Nations Conference on the Law of the Sea
UNDP	United Nations Development Programme
UNFCC	United Nations Framework for Climate Change
USAID	United States Agency for International Development
WBCP	Wild Bird Club of the Philippines

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