

# Ensuring Environmental Sustainability

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**G**OAL 7 of the Millennium Development Goals (MDGs) is about ensuring environmental sustainability. It covers the following targets:

1. Integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources;
2. Reduce by half the proportion of people without sustainable access to safe drinking water; and

3. Achieve significant improvement in the lives of slum-dwellers.

## At a glance

The table below sums up where the Philippines stands with respect to environmental quality. Most indicators point upwards or downwards when they should be pointing in the opposite desired direction.

A summary of environmental quality derived from the World Bank's Philippines Environmental Monitor 2004:

Indicators	General Trends, Status, Comments
<b>BROWN ENVIRONMENT</b>	
<b>Air pollution in Metro Manila &amp; urban centers</b>	
Ambient TSP level in MM, Cebu, Davao, Baguio	Declining particulate concentrations in urban centers but annual averages still exceed national standards. Nonconventional and area sources like biomass burning and re-suspended dust need controlling
No. of highly polluting vehicles on Metro Manila (MM) roads	Declining; rising production of cleaner motorcycles and vehicles; rapid increase in motor vehicles points to urgent need for public transport and transport management
<b>River and coastal water quality</b>	
% population with access to sanitation and sewage	Access to sanitation rising slowly. Urban access to piped sewerage in MM is very low (8%), investments in sewerage are inadequate.
Contamination of ground water	Total coliform contamination increasing with domestic wastewater accounting for majority of the pollution load.
% industrial waste treated	More waste treated but total production as well as illegal solid, toxic/hazardous waste, dumping is rising
<b>Solid hazardous waste</b>	
Solid and hazardous waste generated	Rising with population while services are not keeping up with demand
% of waste recovered for recycling	More LGUs practicing ecowaste management; level of composting and recycling is rising
% of residual waste disposed of in environmentally sound manner	Open dumping and burning continue as main means of disposal
<b>Mining Pollution</b>	
No. of closed/abandoned mines	20 sites surveyed for rehabilitation and revegetation
Mercury levels in surrounding and downstream water bodies	Rising mercury pollution resulting from artisanal mining. Better management of mining sites and handling of waste needed.

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<b>GREEN ENVIRONMENT</b>	
<b>Forest cover</b>	
% of forest cover	Total forest cover improving but forest protection and rehabilitation need expanding.
Annual rate of reforestation	Slowing in recent years
Open access areas	Increasing forest areas under management or comanagement
<b>Critical habitats and biodiversity</b>	
No. of rare, threatened and endangered wildlife species	One of the highest rates of biodiversity loss in the world. Shrinking habitat along with commercial exploitation in spite of more areas 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 decreasing despite inputs. Increasing deforestation from logging, natural disasters and residential development.
<b>BLUE ENVIRONMENT</b>	
<b>Water supply</b>	
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 to rise with population and economic growth.
% of population with access to improved water source	Steady improvements in access to improved water source.
<b>Watersheds</b>	
% of watersheds considered degraded	Minor improvements noted.
<b>Coastal and marine resources</b>	
Mangrove cover	Increasing but threats continue. Need to fast track reversion and rehabilitation of abandoned fishponds and salt beds to mangroves.
% of coral reefs in excellent condition	Declining. 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. Information, Education, Communication (IEC) on value of seagrasses, coral reefs and mangroves needed. doesnt follow format other SI segments
Fishery production from municipal waters	Going down even with increased fishing effort. Delineation of municipal waters needs to be completed with LGUs taking charge. doesnt follow format other SI segments
<b>GLOBAL ENVIRONMENT</b>	
ODS consumption (in metric tons)	Consumption of ozone depleting substances (ODS) in the Philippines declined to 1422 metric tons by 2003, ahead of international commitments.

**A streak of hope**

The forest cover of the Philippines is now objectively established. It’s been a long time since the country assessment was based on raw data. The last time was 1988, and before that, 1969.

After 17 years, we now have a new baseline from which to track progress. Now we can reduce our reliance on straightline projections, guesswork and anecdotal evidence.

We owe this to the two parallel studies on forest resources of the country undertaken by National Mapping Resource and Information Authority (NAMRIA) and the Forest Management Bureau in 2002-2004. NAMRIA acquired LANDSAT coverage of the country for 2002-2003. The Forest Management Bureau conducted the National Forest Assessment with support from the UN Food and Agriculture Organization. Both studies used a common set of

forest categories derived from the Forest Management Bureau's project "Harmonization of Forest-Related Terms and Definitions," supported by the International Tropical Timber Organization.

The results of these studies were first made public by Director Romeo Acosta of the Forest Management Bureau of the Department of Environment and Natural Resources in his paper, "State of the Philippine Forest: the National Forest Assessment of 2003". The paper was presented at the Philippine Forestry Forum on June 2-3, 2005 at the Asian Development Bank.

#### Philippine forest cover change

	1969	1988	2003
Forest area (in hectares)	10,637,000	6,460,600	7,168,400

Counter intuitively, the main finding was positive! The Philippine forest cover as of 2003 was 7.2 million hectares, an increase from 6.5 million hectares from the 1988 forest inventory.

This table, derived from the numbers in Director Acosta's graph, shows a steady decline of

forest cover from the 1969 inventories up till around the time of the 1992 Earth Summit. A slow recovery followed from that point on.

The increase of 700,000 hectares is attributed to natural regeneration and plantings in both public and private lands. There is a significant area of Other Wooded Lands, indicating that lands previously under pasture, grasslands and agriculture are growing tree cover, either by natural regeneration or planting.

The 2003 (National Forest Assessment) NFA said that of the 7.2 million hectares of forests, 91 percent are public forestlands and 9 percent are in A & D lands (alienable and disposable lands).

But there ends the good news. Director Acosta's study also found out that the increase in forest cover did not necessarily mean an improvement in forest quality. In fact, there has been a continuous decline in forest composition and quality, suggesting a failure to arrest loss of biodiversity.

The forest assessment itself needs to be subjected to more extensive and detailed field checking, if only to dispel some counterclaims and suspicion that the satellite data don't quite match realities on the ground.

And now the huge job ahead.

The table below shows the regional distribution of forests.

Regional distribution of forests, by canopy density						
Region	Closed Canopy	Open Canopy	Forest Plantations*	Mangrove (Natural)	TOTAL FOREST	% of Total
ARMM	106,319	96,661	1,580	45,786	250,346	3%
CAR	384,877	246,848	40,595	-	672,320	9%
NCR	-	2,790	-	30	2,820	0%
REGION 01	37,723	117,217	34,710	151	189,801	3%
REGION 02	503,149	604,473	33,621	8,602	1,149,845	16%
REGION 03	226,241	304,215	58,671	368	589,495	8%
REGION 04-A	117,162	161,165	-	11,346	289,673	4%
REGION 04-B	484,866	604,246	48,465	57,567	1,195,144	17%
REGION 05	50,618	90,284	2,075	13,499	156,476	2%
REGION 06	105,873	104,686	49,355	4,600	264,514	4%
REGION 07	2,231	43,026	17,842	11,770	74,869	1%
REGION 08	36,473	410,111	34,483	38,781	519,848	7%
REGION 09	29,652	126,790	3,474	22,279	182,195	3%
REGION 10	107,071	226,400	1,530	2,492	337,493	5%
REGION 11	177,503	240,986	536	2,010	421,035	6%
REGION 12	126,385	218,858	2,641	1,350	349,234	5%
REGION 13	64,729	431,832	-	26,731	523,292	7%
TOTAL	2,560,872	4,030,588	329,578	247,362	7,168,400	
% of total	36%	56%	5%	3%		

The results of the National Forest Assessment 2003 should trigger a rethinking of forest policy and forest land allocation in the country. We need to determine location and modes of management of natural forests with respect to protected areas, production and plantation forest development, and community-based forest management.

The new baseline generated by the 2003 NFA provides a comprehensive basis for forest management planning at all levels, from the national to the unit level. Director Acosta recommends the following measures:

First, delineate the Permanent Production Forests and Permanent Protection Forests, by legislation if necessary, building also on the current work on the Delineation of the Permanent Forest Line.

Second, having delineated (on the map and on the ground) the Permanent Production Forests and Permanent Protection Forests, management plans should be formulated for these blocks of forests. These forest blocks would have to be further subdivided into Forest Management Units (FMUs), and FMU-level plans formulated.

Third, having determined the metes and bounds of production and protection forests, and the corresponding subdivision into FMUs, all existing forest tenurial instruments should be reviewed and aligned with production/protection use classification. Boundaries of these tenured areas may have to be amended, and the management plans likewise reformulated.

Fourth, since a large part of forests are not formally managed, the government should immediately take responsibility. These areas may be awarded to qualified individuals, families, people's organizations, NGOs, corporations, or directly managed by the government at different levels.

Finally, access and transparency. Information must be made available on demand, particularly to local governments to help them formulate and carry out their Comprehensive Land Use Plans. Equal access must also be provided to concerned organized communities and people's organizations, and the private forestry sector. The Department of Environment and Natural Resources (DENR) field offices should have complete information for use in strategic and annual planning.

### Continuing environmental challenge

The Philippines remains to be in deep trouble owing to its failure to arrest and reverse the environmental decline.

Except in some areas which themselves need

more work, the rehabilitation of our environment as a whole has seen little improvement since 1992. Environmental resources are still being lost, and existing laws intended to arrest, if not reverse, this trend have little to show 10 years down the road from the 1992 Earth Summit in Rio.

The country faces three broad environmental challenges: [1] urban air and water pollution; [2] natural resource degradation; and [3] declining quality of coastal and marine resources. These are otherwise known as brown, green and blue agendas.

The first set of challenges, or brown agenda, refers to pollution caused by industrial, urban, transport and energy sources and the measures to address them. Air quality has been declining in Metro Manila and key urban centers. Much of air pollution can be attributed to emissions by motor vehicles now numbering over 4 million. We see a parallel decline in water quality in rivers and coastal waters due in large part to increasing solid and hazardous waste generation and improper management.

The green agenda includes the environmental impact of agriculture, deforestation, land conversion and destruction of protected species and the conservation measures intended to address them. A sound land use plan could help arrest the decline of forest cover, loss of critical habitats and biodiversity, and land degradation. The adoption of sustainable agriculture could also help avert the emerging water crisis, arrest biodiversity decline, dramatically reduce dependence on costly and harmful chemical inputs, improve nutrition and prevent diseases.

The blue agenda refers to all forms of water resources management. Water supply is increas-





ingly unable to meet the needs of a growing population, especially in urban areas. Watersheds, which are being degraded faster than they could be regenerated, badly need policy and management measures. Coastal and marine resources continue to decline despite, or because of the poor implementation of, the fisheries code.

Sustainable access to clean and adequate water is a serious problem overall, but especially in urban and coastal areas. Only 36 percent of the country's river systems can be classified as sources of public water supply. 58 percent of groundwater has been found to be contaminated with coliform and needs treatment. More than a third of illnesses monitored for a five-year period were caused by water-borne sources. Water shortages are common in many areas during dry season.

While poverty is worse in rural areas, living conditions for the rapidly-growing urban poor are not much better. Already, more than half of Filipinos are city inhabitants and with rapid urbanization, we can expect a dramatic increase by 2015. Improvements in the living conditions of the urban poor are linked closely to arresting the decline and restoring the health of our environment.

### **Environment and sustainable development**

To green our country again we may perhaps need only to leave alone our existing forests and mangrove stands (whatever is left of them) and clear-cut areas. They will most likely regenerate on their own since the Philippines is a wet country

anyway.

But such leave-alone strategy assumes a lot. And some of the assumptions might just be outright unrealistic.

The first has to do with justice and fairness in our society. This suggests that poverty and inequality would be reduced significantly within the MDG timeline. Which means that the rich and affluent are willing to do deep cuts and share their wealth, in other words, to shift from their current behavior of unsupportable consumption behavior to more sustainable lifestyles. The poor would then be able to avoid putting further stress on the environment just to survive.

Second assumption: zero population growth. We can argue endlessly from whatever perspective, equity or carrying capacity or from a mix of both, but still a doubling time in one generation, as what happened from 1970 to 2000, is probably just too much for our fragile archipelagic ecosystem to bear.

Third assumption: governance reform. Basic reforms in policies and institutions will have resulted in good governance in general and sound ecological governance in particular. Philippine democracy, already choking in bad governance and corruption, needs more democratizing to really be a means to sustainability.

There's no shortage of policy and legislation on sustainable development in the Philippines.

The attempts to integrate sustainable development principles into policies and programs have not effected a fundamental shift away from an

unsustainable path to development. Environment and social justice—what sustainable development basically means—remains a vision rather than a reality.

The principles of sustainable development were laid down in the Philippine Strategy for Sustainable Development (PSSD) of 1990 and the Philippine Agenda 21 (PA21) of 1996. Those who lobbied hard for PSSD and PA21 are bothered, though, by the inconsistency between these landmark documents and development plans at all levels. The Medium-Term Development Plans (MTPDP) and local development plans are basically plans for growing the economy, not sustainability plans that will deliver social and environmental justice.

Environment ranks low in government's priorities. President Gloria Arroyo's past three State of the Nation Addresses (SONA) had nothing at all to say about environment sustainability. The same goes for the new 10-point agenda reiterated in 2004 SONA. Perhaps, the problem is not so much not having any environment agenda (there's DENR and its programs), as a lack of appreciation at the highest government level of the environmental crisis and its implications on sustainability.

There is an urgent need for a comprehensive assessment of how far the Philippines has complied with the many multilateral environmental agreements (MEAs) it has signed on to, like the conventions on climate change and biodiversity.

The policy-action gap has been widening. Thanks to strong and stubborn lobbying by social/environmental activists, a bundle of laws addressing



urgent environmental issues is now in place. Examples of these are the laws on clean air and water, solid waste management, genetically modified organism (GMO) and biosafety, and so on. Sadly, these laws have been snagged in implementation bottlenecks, financing foremost among them.

And that says nothing about the inherent weaknesses of several of these laws to address inequality issues. The 1992 Rio Declaration already recognized the historical, common and differentiated responsibility of the rich and the poor for the degradation/pollution of the environment. The principle is a recognition of ecological injustice and therefore, payback. And yet, the government seems so gung-ho about running after poor tricycle drivers while letting the rich get away from just taxation of luxury cars.

Power politics threatens to reverse legislative advances already made, as in what might result from a strong lobby to suspend or soften the provision banning incineration in the Clean Air Act. There is also a strong lobby to take the social acceptability clause out of the environmental impact assessment system.

Another long-standing institutional issue that must be addressed: the Department of Environment and Natural Resources (DENR) cannot continue to be an environmental protection agency and a franchiser of exploiters of natural resources at the same time. Our suggestion is for the DENR to stick to regulation and protection of our environment and natural resources.

Merger proposals of natural resource-based agencies, like DENR, the Department of Land Reform and Department of Agriculture, should be put on the immediate agenda. Studies and recommendations along this line during the late 1980s should also be reviewed along with other institutional reform.

Do we need an environmental summit for all these? Perhaps this could dramatize the urgency of action not only on pressing environmental issues. Lack of leadership at the top is very disturbing and could abet the environmental crisis. One more wake-up call probably won't hurt even if many of us have had enough of summits and have grown so cynical of easy and cheap promises that they generate, but are never kept.

Considering the fiscal crisis budget negotiations could be more agonizing and contentious than previous ones. Expect rough sailing for a demand to increase appropriations for the environment sector. We can at least make a stand to resist further reductions in the current level of environmental

spending, though this is far from enough, to begin with.

The planning and budgeting cycle starts in July. The earlier we get engaged the better our chances of getting our agenda into the mainstream and having it adequately funded. We should remind government planners and policymakers about the often-neglected environment agenda. Remember that the environment has never enjoyed high priority in public spending. The DENR budget has always been comparatively lower. The three most recent legislations on solid waste management, clean air and water have yet to be funded, as already mandated.

Charter change is almost certain. We have to be prepared about what sort of change to support or oppose. What's a green charter for us? What's our green bottom line? What are the possibilities of this bottom line getting enshrined in the new charter? Or the chances that what little legislative progress there has been in the past could still be reversed? Expect the neoliberals to push amendments that will do more harm than good to our already much-degraded environment.

Crucial legislation needs to be passed. An environmentally-sensitive land use policy is overdue. We cannot afford not having a comprehensive and long-range plan in light of rapid urbanization. Cities cannot continue to sprawl spontaneously, even if it might be good to see 60 percent or even two-thirds of Filipinos living in urban areas by 2025. City-type human settlements can help free up more space for other land uses, like protection, agriculture and forestry, industry, and so on.

Department Administrative Order (DAO) 17, which defines the boundary of municipal waters reserved for small fishers, must be restored as soon as possible.

On the other hand, certain bad laws need to be modified or nullified. For example, many provisions in existing land laws tend to be contradictory. A useful research project may be the study of conflicting laws affecting land and other natural

resources. Results can be inputted into the advocacy of legislative reforms.

The environment arena is well covered by different groups. There are land justice movements, System of Rice Intensification or SRI/ sustainable agriculture movements, community-based coastal resources management (CB-CRM) networks, anti-mining coalitions, ecological waste movements, and so on. There's no need to create a new movement. Social Watch needs only to develop close links with those groups and encourage them to reorient their work toward the MDGs.

Social Watch may support or help improve advocacy positions already taken by different groups. In any case we should be able to connect those positions to the MDGs.

The success stories in environmental campaigns should be spread across the Social Watch network. Members of our network who have been involved in those campaigns should take the lead. The recent campaigns around solid waste, clean air, clean water, GMOs and the like should make for interesting cases.

What do people know about MDG or MDG 7? Next to nothing, it seems. The level of MDG awareness is apparently low both in government and among ordinary citizens. This, however, does not mean that people are not bothered by the sorry state of the environment and the lack of progress in ensuring environmental sustainability.

To be sure, environmental awareness has risen significantly since the 1992 Rio summit through the combined efforts of environmental activists, NGOs and people's organizations schools, mass media, and government.

Getting everybody to talk MDG might be expecting too much. But we can at least help spread the word around fast if we get mass media to buy into the MDG campaign.

A word of caution. There's so much cynicism about new buzzwords, and overdoing the MDG hype can backfire. As well, in our promotion of the MDG let's mind that MDG is but a minimum and not equivalent to sustainable development.