



## Sustainable Rural Development in the Philippines: Brief invitational of root problems

A discussion paper for the PDF<sup>1</sup> Group on Sustainable Rural Development

*The Philippines has rich and diverse natural resources. However, these resources are being rapidly depleted due a variety of mutually reinforcing negative factors: high population pressure with the majority of the poor deriving their income from natural ecosystems; **absence of approved and broadly accepted land use plans in forest lands; environmentally unfriendly agricultural practices due to lack of agricultural extension service and support for upland farmers; illegal and unsustainable formal logging in forest lands; lack of security of tenure in the agriculture areas; limited allocation of resources to enforce effective implementation; a complex regulatory framework and lack of clearly defined mandates between the various authorities are among the root causes of the problem.***

### High population pressure

High population growth rate<sup>2</sup> and severe rural poverty and inequity in the rural areas put pressure on the forest, forcing poor people to move to the uplands marked by fragile ecosystems. There are over 18 million landless people living in the uplands areas, including some 7 million indigenous people<sup>3</sup>. While the total amount of forest cover remains a matter of some debate<sup>4</sup>, there is widespread agreement that the overall decline in forest cover is alarming<sup>5</sup>. Only 8% of the original primary forest remains and many species are under threat. Deforestation has made many poor communities more vulnerable to natural calamities such as landslides.

Population pressure is stimulating cultivation of fragile upland areas, causing further soil erosion, with 21% of agricultural lands and 36% of non-agricultural lands throughout the country assessed as moderately or severely eroded. Agricultural yields in lowland areas are stagnating, increasingly beset by salinization and water logging.

Roughly 30 million people throughout the country do not have access to potable water through water supply and distribution operations. Overpopulation stresses the pressure on water access. Water demand nationwide is expected to grow from 43 million cubic meters per

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<sup>1</sup> Philippine Development Forum

<sup>2</sup> The estimated population in 2004 was 86 million. The population is growing by about 2.36% a year, giving the Philippines one of the world's highest population-growth rates.

<sup>3</sup> According to other sources, the number of people living in or near forest land reaches 24 million and the number of people directly dependent on forest resources is 25-30 million.

<sup>4</sup> Recent official estimates, based on the 2002 satellite images of the entire country show the country's forest cover increasing to 24% of total land area, but only less than 1/3 of this is closed canopy forest (e.g. primary forest).

<sup>5</sup> It is estimated that in 1930 60% of the country was covered by primary forest. Between 1969 and 1988, 2,000 square kilometres were logged annually on average.

year in 2000 to 88 million cubic meters by the year by 2025. Access to clean water is becoming a recurrent seasonal problem in many areas. Over time the water availability is decreasing.

Population pressure affects also the marine ecosystems. Over-fishing and destructive fishing practices are among the main threats of the marine environment; average catch per day is less than 3 kg down from 10 kg 20 years ago. **Siltation/sedimentation in coastal areas due to unsustainable land use in upland areas are also a severe threat to marine coastal eco-systems.**

#### Environmentally unfriendly agricultural practices

Improper land use in the uplands is reducing soil depths. The accelerated loss of soil has several adverse impacts. For the farmer, it reduces soil fertility and crop yields (the loss of one centimetre can lower yields of corn by almost 100 kg per hectare). To make up for this shortfall in yield, the farmer has to expand the area under cultivation by felling more forest to access fertile soil; or else buy and apply large amounts of inorganic fertiliser. Without the cash to spare many upland farmers prefer to expand the area under cultivation, increasing the problems.

Expanding fertilizer and pesticide use foster nutrient imbalances and groundwater contamination. Over the past twenty years the downside of the 60's Green Revolution became manifest in the Philippines, with important smallholder cropping systems becoming increasingly unproductive and unprofitable. The crops were object to progressively higher applications of agro-chemicals, resulting in declining soil quality, with subsequent effects such as poorer marketing prospects, higher production costs and serious health side effects.

In some places, appropriate land use management systems (agro forestry, *rain-forestation*, etc.) and soil conservation techniques have been developed to minimize land degradation, indiscriminate conversion, and consequent deterioration of land productivity. There are also some pro-organic agriculture initiatives going on, but much has still to be done.

#### Lack of security of tenure in the agriculture areas

The Philippines faces a critical problem of an inefficient and ineffective land-use administration system which discourages sustainable management of resources. There is a complex situation of overlapping of agencies and laws. There are also multiple standards for land valuation, which offer ample opportunities for corruption. The problem on inefficiency and improper utilization of lands, such as incompatible land uses, are partly attributed to outdated land use plans and the non-observance of zoning ordinances at the local level.

There is a broad consensus on the need to overhaul the country's land administration and management system. Addressing these problems would require consolidating all the functions of several land registration and administration agencies.

Under the Local Government Code, LGUs are mandated to continuously prepare and update their comprehensive land use plans (CLUPs), and enact these through zoning ordinances as bases for their development directions. **These plans if LGUs have them are mostly prepared through a top-down approach and hence not always internalised/accepted by field level stakeholders.** Various hundreds of Municipal LGUs still do not have land use plans. **Probably Thousands of barangay LGUs have none. While land use plans of barangay LGUs, prepared in a participatory manner involving all stakeholders, should actually be the basis for making**

**CLUPs.** Many LGUs proceed with their development initiatives without due consideration on the level of their available resources and without proper co-ordination.

### Complex regulatory framework

Government addresses environmental and natural resource management through a rather comprehensive legal and regulatory regime for the sector with some sophisticated approaches. The environment regulatory frame in the Philippines is very progressive, but reality is very far from this policy and legal picture. In practice, some of the mechanisms are complex to implement and political will is insufficient.

### Lack of clearly defined mandates

The DENR is the primary government agency responsible for the conservation and proper use of the natural resources. DENR is prone to outside pressure and suffers from internal conflicts of interest between having to protect certain areas and granting mining or logging permits.

Functionally, there are overlaps in the delivery of services by DENR, DA and DLR. The DENR is mandated among others to be responsible for the management of all public lands. This includes that all the areas with slopes of 18% and above<sup>1</sup>, or those classified as public forest. The DA, on the other hand, is tasked to promote agricultural development mainly focusing on areas classified as alienable and disposable (i.e., not part of the public domain, and therefore outside of DENR jurisdiction). On top of these spatial divisions of responsibilities between public lands and alien and disposable, the DAR's main areas of operation involved agricultural lands subject to land reform, and parts of the public lands subject to titling, and more recently, parts of the public land occupied by indigenous peoples. Although titling of public lands is a responsibility of DENR, it is also part of the overall agrarian reform programme led by DAR.

The DENR develops and implements environmental policies which affect agricultural development and property rights allocation; the DA provides agricultural support to areas considered part of the public lands (forest lands, if so no DA service delivery there I think except in UDP areas may be), while DLR provides agricultural and environment and natural resources management support services packages to its agrarian reform beneficiaries. In providing such services, the DA and DLR have to recognise the policies of DENR on management of specific areas of the public domain. For example, there are different policies that govern management of watershed areas, parts of the residual forests granted community management rights, protected areas, and even timber harvesting in privately owned lands.

### Limited allocation of resources

Environmental and natural resource management in the Philippines receives a small share of the national budget. In 2004, it was only 0.8%. DENR is able to cover their basic expenses only, mainly salaries<sup>6</sup>, and no investments at all, making it impossible to fulfill the mandatory tasks.

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<sup>6</sup> According to the revised organizational structure, in 2005 more than 22,000 staff works in the DENR and its respective bureaus and regional offices in the 13 administrative areas of the country.

The ability of LGUs to finance environment programs and projects is severely constrained not only by the lack of total resources but by the allocation of most of their resources to recurrent expenditures for salaries and regular operating expenses. In the past, national government provided additional subsidies to local governments for environmental projects and coastal resources management.

The international cooperation in the environment sector is now less than in the past. Confronted with GOP's own lack of commitment and even more so of its weakness in effective implementation of environmental laws and programmes, various donors have been reducing their funding allocations to the environment sector.

<b>Country environmental indicators</b>					
<b>Indicator</b>	<b>Indicator Value</b>	<b>Indicative Threshold/Std</b>	<b>Index Rating</b>	<b>Index Rating Class</b>	<b>Sustainability Rating Class</b>
Forest Cover <sup>1</sup>	34	50%	2	Poor	Low Sustainability
Live Coral Reef <sup>2</sup>	30	50%	2	Poor	Low Sustainability
Mangrove Cover <sup>3</sup>	27	50%	2	Poor	Low Sustainability
Seagrass Beds <sup>4</sup>	50	50%	3	Fair	Fair Sustainability
Fish CPUE <sup>5</sup>	1.17	1.0-1.5 (mt/hp)	3	Fair	Fair Sustainability
Wildlife Endangerment <sup>6</sup>	50	40%	2	Poor	Low Sustainability
Protected Areas Degradation <sup>7</sup>	50	40%	2	Poor	Low Sustainability
Soil Erosion Extent <sup>8</sup>	46	50%	3	Fair	Fair Sustainability
Solid Waste Disposal <sup>9</sup>	65	80%	2	Poor	Low Sustainability
Land Conversion Rate <sup>10</sup>	3,500	2,000 has/yr	2	Poor	Low Sustainability
Extent of Water Pollution <sup>11</sup>	36	20%	3	Bad	Very Low Sustainability
<b>Overall Index Rating</b>	-	-	2.07	Poor	Low Sustainability

Source: DENR Study for ENR Framework Plan (2004)

- 1 % forest cover in total forest lands;
- 2 % live cover remaining in good to excellent condition or with 50-100% cover;
- 3 % cover remaining;
- 4 % cover remaining;
- 5 CPUE: Catch Per Unit Effort. Ratio of latest CPUE with average of last 5 years;
- 6 % of endangered wildlife (50% of 283 endemic species of mammals & birds);
- 7 % of Protected Areas degraded .
- 8 % of total eroded areas suffering from moderate to severe erosion;
- 9 % of solid wastes in Metro Manila that is collected and properly disposed;
- 11 % of total number of water bodies surveyed which are polluted