Reinventing Protected Area Management: From Curing to Preventing[1]

By

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1.0 Introduction

Traditionally, forest degradation (deforestation, erosion) has been viewed in terms of what is happening and treating the symptoms (reforestation, soil conservation). The classical method of preserving a natural area has always been to declare it off-limits and to enforce exclusion. Boundaries were delineated and guards patrolled. Unsurprisingly, this often resulted in conflicts of interest and hostility between the enforcement agency and the local communities. Enforcement just didn't work in most countries, either because population pressure on the land was too great or the costs of enforcement were too high (Garrity, D.P., 1995). The methods used by the public sector during the past decade to implement watershed management, as well as, protected area management projects have tended to be top-down in which residents are passive recipients of external interventions. Current thinking looks at why degradation is happening and tackling the underlying causes. Today, it is better appreciated that natural resources within individual watersheds can be used for economically productive purposes while maintaining its ecological functions. Degradation does not have to be a consequence for using land for agriculture and forestry. Farmers can engage in farming and management of natural forest resources in both a productive and resource-conserving manner.

Here in the Philippines, the passage of the National Integrated Protected Area system (NIPAS) Act in 1992 has been heralded as one of the most progressive attempts in the tropical area to embody into law scientifically-advanced principles of establishing protected areas that have wide scientific support. The NIPAS Act aims to remedy past deficiencies by focusing on scientific development of resource management plans for 100 priority sites and mobilizing resources at the local level to implement them and resource profiles and management plans have been developed for each protected area.

As this enormous efforts gets underway, DENR, national and local NGOs, local governments and other stakeholders are grappling with ways to proceed in utmost success. Historically, park management has emphasized a policing role aimed at excluding local people. This led inevitably toward a "militaristic defense strategy" that was guaranteed to escalate conflict and frustration.

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Gradually however, the conservation community came to realize that communities near protected areas frequently bear substantial costs as a consequence of their proximity to these areas and yet gain little in return. Local residents are usually poor and quite remote to normal government services and their perception is that, protected area restricts their ability to earn a living and they often see encroachment as a means to rectify this (Garrity, D.P, 1995). Better yet, two new paradigm shift on protected area and watershed management are gaining acceptance. These are:

1) evolution of a demand-driven and community- based approach that allows local people to actively participate in management and sustainable utilization of their resources for multiple purposes; and

2) extending national park management beyond its limited area of jurisdiction towards the surrounding larger communities whose livelihood activities are causing more pressure into the protected area.

It is increasingly accepted that in the future local government units will need to assume more responsibility for planning, implementation and evaluation of these activities within their areas with the guidance and support of national institutions.

2.0 The first paradigm shift in protected area management

Recently, focused attention has been on evolving a demand-driven and community-based approach to natural resources management and sustainable utilization of their local resources for multiple purposes, with the aim of providing optimal benefits to the greatest number of people living in, or downstream of, individual watershed areas. This approach exemplifies a 'bottom-up' management, but this does not conclude however, that 'bottom-up' approach is the only best way to do it. Neither "top-down" or a "bottom-up" approach is likely to work on its own: they are mutually dependent. The development of sustainable upland farming systems that are consistent with natural resource conservation likewise requires a different problem-solving and adoption process from that of adoption of single technical practices that may enhance production. Land degradation can only be solved ultimately by the land users. It involves the adoption of complex inter-related activities. Success depends upon enhancing rural people's inherent abilities to apply and adapt new and indigenous technologies, and to involve and evolve local institutions that manage and conserve resources better.

Examples of locally-led and community-based efforts towards natural resource conservation:

1. Local Government-led mechanisms

In 1996, a unique, local-level natural resource management (NRM) planning process began in the municipality of Lantapan. This process was supported by research-based information and technical assistance from the consortium partners, even though

such a plan was not conceived as an initial objective of SANREM (USAID-funded Sustainable Agriculture and Natural Resource Management-Collaborative Research Support Program). At that time, the Mayor of Lantapan felt that the municipality would benefit from having a plan that could incorporate all the scientific and research outputs that had been assembled (Garrity and Amoroso, 1998). The SANREM partners made significant contributions to the planning framework and the technical contents of the municipal Natural Resource Management and Development Plan (NRMDP). ICRAF helped to influence the perceptions of local planners, that indeed, natural resource conservation and management can be profitable. ICRAF's contribution to the plan stemmed mostly from research work on soil and biodiversity conservation. One remarkable feature in the NRM process in Lantapan is the creation of a local multi-sectoral body---the Natural Resource Management Council (NRMC) which is a representation of community-sector groups combined with technical persons and legislators that serve as the local planning team.

2. Farmer-led and community-based efforts

ICRAF has been instrumental in developing a farmer-led approach to technology development and dissemination (Lai, Catacutan and Mercado, 1998), which has resulted in an unexpected boost in farmer adoption of soil conservation technologies and agroforestry practices at its outreach site in Claveria, Misamis Oriental. The key institutional innovation for effective conservation farming technology dissemination is the Landcare approach: a process that is led by farmers and community groups with support from local government and technical backstopping from ICRAF.

The most well-known Landcare movement originated in Australia, where it has evolved as a participatory community-based approach and grounded model designed to effect change in complex and diverse situations (Swete-Kelly 1998). Landcare is a method to rapidly and inexpensively diffuse agroforestry practices among upland farmers, based on the farmer's innate interest in learning and sharing knowledge about new technologies that earn money and conserve natural resources (Garrity and Mercado, 1998). It is a group of people, concerned about land degradation problems, who are interested in working together to do something positive for the long-term health of the land. Today, there are more than 2,000 farmers in Claveria, Misamis Oriental who are members of the Claveria Landcare Association. These farmers are maintaining more than 200 fruit and timber tree nurseries and are actively doing extension work to disseminate conservation farming technologies to fellow farmers.

The core of the Landcare model is two-fold: effective local community groups and partnership with government (Campbell and Siepen, 1996; Lai, Catacutan & Mercado, 1998). This grassroots approach is generally recognized as a key to success in all community development activities. Groups respond to the issues that they see as locally important, solving problems in their own way. In other words, landcare depends on self-motivated communities responding to community issues, not issues imposed by any external agency. Approaches that use well-grounded theory (where participants

determine the key issues rather than these being pre-determined) are more likely to effect permanent and positive change (Mercado, et.al., 1998).

Landcare groups are supported by government and are networked to ensure ideas and initiatives are shared and disseminated. This is a partnership between local communities and the government---working together to change the way the land is used is an important feature of Landcare.

3.0 The second paradigm shift in protected area management

Current arguments about protected area management have successfully reverted the view that human settlements are incompatible with the conservation objectives of the protected area-- that people can become effective resource users and managers. This gave way to a number of social forestry programs, the latest---the Community-based Forest Management (CBFM) Program. However, success of these programs are under critical test of time. Impact and success analysis have yet to be seriously considered by concerned agencies to weigh the costs and benefits of these programs. Nevertheless, despite flaws and challenges to implement current innovations in forest and protected area management, DENR remains committed to people oriented and community-based approaches to managing natural areas within their jurisdiction.

The conventional management practice of protected area management is that of curing the symptoms of resource degradation and rehabilitating those that were already degraded. The recognition of forest occupants and resource users as potential co-manager of the area is a recent milestone from the conventional practice. However, these innovation is still confined in the context of the park's jurisdiction.

While concerned agencies work hard to control forest encroachment through guard patrolling and providing livelihood activities to bufferzone families, much less attention are provided to the larger community behind the bufferzone that pauses more threat for encroachment and further degradation to the protected area.

These communities outside the bufferzone can be the larger private owners and smallholder farmers or entire population of a given municipality where very intense agricultural production and natural resources utilization is on-going. This is the very pressure that continuously pauses threat to the integrity of the protected area. Forest management in its very essence is situated within the complex and broader system of intertwined networks of social, economic, physical, biological and political linkages that is the watershed and as such, it generates sensitive vested economic and political interests and demands (Elmer Mercado, 1998). But, little attention was focused to factors affecting the conditions of watershed and protected area that are external to them. The conditions of the protected area reflects the exigencies or circumstances external to the protected area. The pressures come from outside the park and not from within. The reasons are; farmers cultivating their lands unsustainably for a long time and depleted their land resources (eg. degraded soil and nutrients depleted) will tend to move uphill

environment and thus, attain sustainable development. This approach can then be called, "Preventive and Participatory Protected Area Management". There is a saying that goes---" an ounce of prevention is far better than a thousand doze of treatment".

Example of local government-led Natural Resource Management Planning and Implementation

The municipality of Lantapan initiated an incremental step toward sustainable development by way of developing a 5-year Natural Resource Management and Development Plan (NRMDP). The NRMDP was adopted by the Lantapan Sangguniang Bayan (Sangguniang Bayan) in March 1998 and is the first of its kind in the Philippines. It is a five-year indicative plan with the following vision (Local Government of Lantapan, 1998).

A Stronger community partnership towards a well-managed natural resources and ecologically-balanced environment for a sustained development in Lantapan by the year 2002.

The plan is now being implemented by the new LGU administration and this experience is telling us, that indeed, some good things really last---and that we are able to surpass traditional constraints in local politics. ICRAF is maintaining a strong partnership with the local government to help achieve mutual goals and benefits for the farmers of Lantapan, through collaboration with the LGU in institutional development and working directly with the farmers on technology development, dissemination and adoption. ICRAF is currently leading a major dissemination effort under the NRMDP's soil conservation component, using the Landcare approach for dissemination and adoption of conservation farming techniques such as natural vegetative (NVS) and improved agroforestry systems.

Innovative features

Some innovative features of the Lantapan NRM planning and implementation process---which potentially could be extrapolated to other Philippine sites, as model for local and participatory natural resource management planning, include:

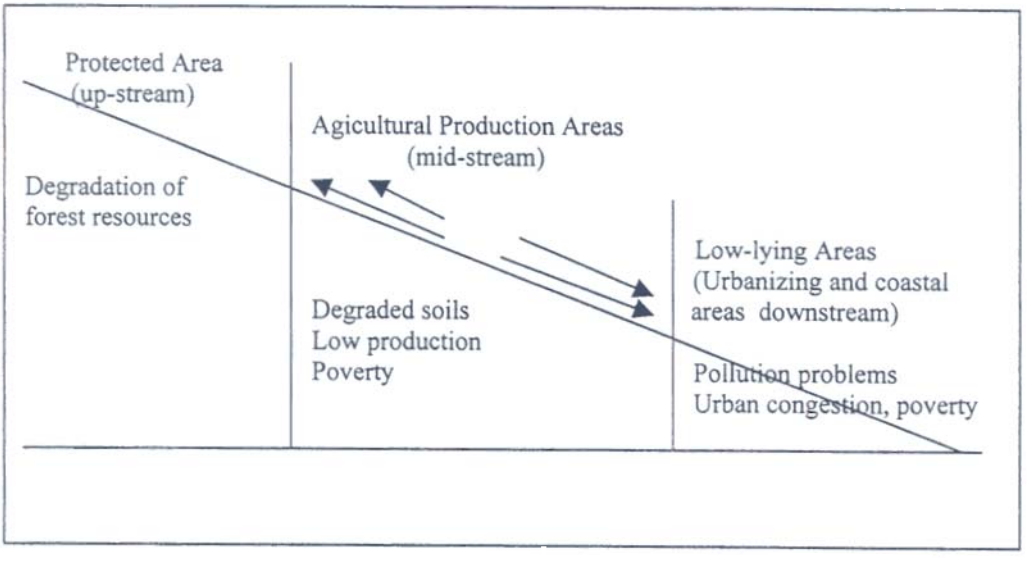
1. Organization of a multisectoral Natural Resource Management Council (NRMC), which represents a cross-section of community groups, local legislators and municipal and provincial government line agencies that, by goodwill, serve as voluntary local planners.

2. Backed-up by research -based information and technical assistance from different local, national and international stakeholders and partners.

3. The NRMC underwent capacity-building activities, which is also a way of leveling-off the council members' expectations and roles and to address the information needs and planning skills of the diverse members.

towards the protected area, thus, putting more pressures into the forest; or downhill, resulting into some social, economic and environmental unrest in urbanizing areas. Both ends of the loop will have to be affected by the pressures created at the center. The possible way to solve this, is to minimize movement of farmers upstream or downstream, and keep farmers on their place, wherever they are now-- and stay their productively and sustainably. If farmers can be prevented from moving uphill and stay productive on their land by using sustainable agriculture practices, further displacement could be minimized and a diaspora can be avoided. This can be effectively achieved through local governments' leading a proactive role in natural resource management planning and implementation on a scale that captures their constituents' interests and welfare alongside the conservation objectives of natural resources.

Fig.1 Impacts of pressures created midstream to the lower and upper environments



Much for this concern, we proposed a preventive approach to "Protected Area Management" that extends beyond the boundaries of the park, and that enjoins, the larger communities in the privately-held lands to do their share of sustainable natural resource management for the short term benefits and long term security of their land and future. This can only be done by a strong and committed partnership of the Protected Area Management Team and the Local Government Units of the municipalities that surrounds the protected area. The MT. Kitanglad Nature Park have come up with their management plan and is presently implementing some parts of the plan and there is also an evolving Ancestral Domain Plan. The municipalities around Mt. Kitanglad also need to develop their own natural resource management plans that is in harmony with the management objectives of the protected area and the indigenous communities (see appendix of diagrammatic representation of relationship of three types of NRM plans). All sectors of the civil society must join hands--everyone has a role to play. Communities midstream and downstream should put in their conservation investment along with the investments upstream-- in the park, in order to achieve a balance and stable socio-ecological

4. Adopted the 'technology of participation' (TOP) approach--developed by the USAID-funded Governance on Local Democracy(GOLD) Project---in eliciting information and ideas from the planning participants during workshops on visioning, strategic directions and action planning.

5. Systematic verification and consultations with local government officials at the barangay (village) and municipal levels, and with local people during public assemblies. The different barangays passed a resolution to manifest their approval and support to the plan.

6. The plan was legitimized by the Sangguniang Bayan (Legislative Council) and executive support is assured through the approval of the Municipal Ordinance that set forth the implementing guidelines of the plan.

7. The plan is implemented using the principle of "public-private partnership". The approach utilizes the presence and participation of various GO and NGO partners in the area by inviting them to focus their work towards achieving the objectives of the plan. A formal partnership was forged by the LGU and various stakeholders in implementing the plan through a Memorandum of Understanding signed by all concerned parties.

8. The LGU is contributing financially to the implementation of the plan from the budget allocation for its Human and Ecology Security (HES) Program, as mandated in the implementing guidelines.

Some lessons learned

While the Lantapan NRM planning experience is quite recent, some important lessons are already emerging. These include:

- Local NRM planning and implementation may not require large sums of money and a highly structured bureaucratic procedures. LGUs must understand that environmental programs may not be an "expenditure" activity.

- Many local governments in the Philippines have the potential to manage their own natural resources. Therefore, forest management, authority, functions and responsibilities can be decentralized, just as municipal agricultural offices have been devolved.

- LGUs can tap the resources of different external programs and coordinate, channel and focus them to help resolve local environment and resource degradation problems.

- The keys to success are: partnership, collaboration and cost sharing.

4.0 Conclusions

This paper discussed two important changes in the paradigm of protected area management. The first one is on the increasing interest on community-based and locally-led institutions whether, farmer groups or local government units that form part of a participatory approach for natural resource management. Locally-led institutions are deemed to be the key for addressing local issues and problems with some guidance from external agencies. The second one, is on the view that protected area management should not limit its concerns and good intentions only within their area of jurisdiction, but must extend their efforts beyond and work with the larger communities outside the protected area that is pausing more pressure into the park. This can be done by working closely with local governments surrounding the park's periphery and facilitating them if possible, the task of developing their respective natural resource management plans, so that, there will be a unified effort among all sectors of society as a strategy to prevent encroachment and forest degradation and maintain a sound protected area management. This is based on the hypothesis that, keeping farmers from leaving their farm for the forest, and stay on their farms productively for the rest of their lives, greatly minimizes pressures external to the park, thus maintaining the integrity, not only in the protected area, but the over-all environment (upper-middle-lower ecosystems).

There is much legal space for local governments to undertake environment and natural-resource related programs. They are the potential force for the ultimate resolution of natural resource degradation. Both national agencies and non-government agencies can only be there to guide them and perhaps, facilitate an iterative learning process, but the ultimate role is in the hands of local people side by side with strong local government leadership. The problems of environmental degradation are enormous and complex compared to the modest resources available to solve them, but we are confident, that this is not an expenditure activity, it's a people's activity and therefore, these problems can be largely solve by people themselves.

5.0 References Cited

Andrew Campbell, 1994. *" Landcare: Communities Shaping the Land and the Future"* 9 Atchison Street, St. Leonards, NSWE 2065 Australia.

Chun K. Lai, Delia Catacutan, Agustin Mercado Jr., 1998. *"Decentralizing Natural Resources Management: Emerging Lessons from the International Center for Research in Agroforestry Collaboration in Southeast Asia"*. Paper presented at the International Seminar on Decentralization and Devolution of Forest Management in Asia and the Pacific, December 1998, Davao, Philipines.

Dennis P. Garrity, 1997. *"Improved Agroforestry Technologies for Conservation Farming: Pathways Toward Sustainability"*. Paper presented to the International Workshop on Conservation Farming for Sloping Uplands in Southeast Asia. International Board for soil Resources and Management, Bangkok, Thailand.

Dennis P. Garrity, 1995. *"Buffer Zone Management and Agroforestry: Some Lessons from a Global Perspective"*. Paper presented to the national workshop on Bufferzone Management and Agroforestry, Central Mindanao University, Musuan, Bukidnon, August 8-11, 1995.

Elmer S. Mercado, 1998. *"Decentralization and Devolution of Forest Management in the Philippines: Uneasy Steps to Institutional Maturity"*. Paper presented at the International Seminar on Decentralization and Devolution of forest Management in Asia and the Pacific, December 1998, Davao, Philippines.

Guidelines for Watershed Management and Development in the Philippines, DENR, PCARRD, Department of Agriculture and the University of the Philippines, Los Banos, Manila, Philippines.

Jeffery A. Sayer. *"Science and International Nature Conservation"*, Inaugural lecture for the Prince Bernhard Chair at the University of Utrecht, Department of Ecology and Evolutionary Biology, the Netherlands.

The Local Government Of Lantapan, 1998. *"Natural Resource Management and Development Plan"*, Lantapan, Bukidnon, Philippines.

The Philippine National Watershed Management Strategy, DENR, Manila Philippines, 1998.

5.0 References Cited

Andrew Campbell, 1994. *" Landcare: Communities Shaping the Land and the Future"* 9 Atchison Street, St. Leonards, NSWE 2065 Australia.

Chun K. Lai, Delia Catacutan, Agustin Mercado Jr., 1998. ***"Decentralizing Natural Resources Management: Emerging Lessons from the International Center for Research in Agroforestry Collaboration in Southeast Asia"***. Paper presented at the International Seminar on Decentralization and Devolution of Forest Management in Asia and the Pacific, December 1998, Davao, Philipines.

Dennis P. Garrity, 1997. ***"Improved Agroforestry Technologies for Conservation Farming: Pathways Toward Sustainability"***. Paper presented to the International Workshop on Conservation Farming for Sloping Uplands in Southeast Asia. International Board for soil Resources and Management, Bangkok, Thailand.

Dennis P. Garrity, 1995. ***"Buffer Zone Management and Agroforestry: Some Lessons from a Global Perspective".*** Paper presented to the national workshop on Bufferzone Management and Agroforestry, Central Mindanao University, Musuan, Bukidnon, August 8-11, 1995.

Elmer S. Mercado, 1998. ***"Decentralization and Devolution of Forest Management in the Philippines: Uneasy Steps to Institutional Maturity"***. Paper presented at the International Seminar on Decentralization and Devolution of forest Management in Asia and the Pacific, December 1998, Davao, Philippines.

Guidelines for Watershed Management and Development in the Philippines, DENR, PCARRD, Department of Agriculture and the University of the Philippines, Los Banos, Manila, Philippines.

Jeffery A. Sayer. ***"Science and International Nature Conservation"***, Inaugural lecture for the Prince Bernhard Chair at the University of Utrecht, Department of Ecology and Evolutionary Biology, the Netherlands.

The Local Government Of Lantapan, 1998. ***"Natural Resource Management and Development Plan"***, Lantapan, Bukidnon, Philippines.

The Philippine National Watershed Management Strategy, DENR, Manila Philippines, 1998.

Diagrammatic representation of the linkages between three types of NRMPs