World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

NRM POLICY BRIEF

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In this issue, we cover the topic on education and advocacy on natural resources management.

This was identified by the Working Group No.2 led by Ms. Dulce Elazegui of ISPPS-UPLB during the Policy Workshop on the First Bukidnon NRM Policy Forum, 8-9 November 2001, Valencia City.

Land literacy improvement: Key to sustainable natural resources management

The Policy Issue

Why do we need to increase our knowledge about the land?

The history of environmental degradation can be traced with changing economies and cultures associated with rapidly changing societies. For most of human history, the ability to read and interpret the signs of nature has been an art or craft crucial for survival, but since the agricultural revolution, humans have become progressively more insulated from the immediate need to be able to read and understand nature in order to eat, be clothed and find shelter (Campbell, 1995). The changes occurring at rapid pace is unprecedented in the history of mankind.

Many development projects implemented in developing countries have identified some factors contributing to project failures. These include low literacy rates in most rural areas, complacency in the attitude of citizens, inadequate background on technical knowledge to support a deeper understanding of people and land relationships, and untapped indigenous knowledge systems. Nonetheless, it is argued that, local residents are the most effective resource managers—they are the key to reverse land degradation, if they understand better the conditions of, and their relationship to the natural-resource base. This understanding of nature refers to a level of literacy—that is, beyond the ability of reading and writing, but the interpretation of nature's signals on its capacity to provide a healthy and sustainable ecosystem for humans to survive (Catacutan, 2000). There is an urgent need to encourage citizen vigilance in natural resources management (NRM) through massive implementation of a Land Literacy Program— a foundation for positive transitions and long-term sustainability. In general terms, literacy is about being able to read, write and comprehend. The formal education system begins with basic learning goals— reading, writing and mathematical skills. But, land literacy skills aim to transcend beyond reading and writing, to comprehension, analysis and problem solving.

The humility and respect for nature and the development of a stewardship ethic resides in a day-to-day encounter and involvement of people in understanding and interpreting environmental information. This could be invigorated by direct contacts between and among land users, managers, planners, policy makers, the industry and the urban people. Such a stewardship ethic is built upon information, that lead a way for changing decisions and actions.

Environmental policies: big in words, small in implementation?

In the Philippines, a good number of people-oriented programs have been implemented to arrest the burgeoning challenge of harmonizing the broader economic goals and welfare of mankind and the integrity of the environment. Among others, the Forest Occupancy Management in 1971, Communal Tree Farming in 1978, Family Approach in 1981, Upland Development Program in 1981, Integrated Social Forestry Program in 1982, and then finally, the Community-Based Forestry Management Program in 1995 as the national strategy for sustainable upland resource management. There are also countless environmental policies supportive to local NRM including: the National Integrated Protected Areas System, the Water Code, the Philippine Mining Act of 1995, the Indigenous People Rights Act, the Philippine Environment Code of 1996, the Clean Air Act, the Solid Waste Management Act, the Cave Management Act and the Biodiversity and Wildlife Conservation Act.

On these bases, the dismal state of the environmental could still be reduced to tolerable levels while continuously extracting resources from the natural capital. However, the lack of effective communication and interaction impinge upon the way local leaders respond to these policies. At best, there is limited understanding and internalization of these policies, and at

worst, poor implementation at various levels. During the First Bukidnon NRM Policy Forum in 2001, government participants confronted the issues impinging upon local NRM and recognized two important policy issues needing concurrent and urgent attention. These are: 1) Enhancing the local technical capability for NRM; and 2) NRM Advocacy Program through continuing IEC. The participants recognized that the key to success is a virtual overhaul in the way of thinking and acting. This implies a greater need for a rigorous and unbounded education for all stakeholders, to awaken their consciousness, ignite their interest, improve decisions, and provoke actions.

The investments made so far, to achieve socio-economic gains have always been intensively and extensively directed to specific projects that deliver direct benefits and goods in public health, education, nutrition, social welfare, infrastructure and livelihoods. While failures of these projects are attributed to several factors at the micro and macro level, within and external to the receiving communities, we raise the hypothesis, that communities continue to have complacent, if not a reactive attitude towards achieving sustainability. This is due to lack of clear understanding and motivation on their own relationships with the basic land resources upon which depend their livelihood and the well-being of families and communities.

The urgency of Land Literacy Improvement is to bring closer the whole society to the promise of sustainability. It is addressed not only to those who are directly dependent on the land but, as well as, those who are tasked to orchestrate and deliver the broader development goals of society— they are the governments and the private industry sector. Land literacy is the key to sustainability.

Information, Education and Communication (IEC): A strategy to successful NRM

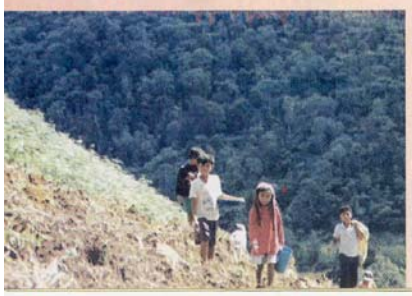
A survey conducted among 11 successful LGUs around the country revealed that there are various factors that sustain NRM initiatives and innovations. One key finding is that successful environmental programs identify IEC as a major strategy in increasing awareness level of local constituencies. They implemented massive information campaigns to elicit public participation, which resulted to volunteerism in initiating community-based activities. The review of local innovations and exemplary practices on local governance likewise revealed that one main component of successful environmental undertakings is Comprehensive IEC Campaigns.

It can be done through collaboration among various sectors that have a stake in the sustainable management of these resources.

The Policy Actions

Why the need for a National Land Literacy Program?

There is a need for a program designed to generate and disseminate environmental knowledge to the broader society, so that



people can better understand issues, interact and make informed decisions for the long-term health of the land, for more production of food, and for better livelihoods of families. It is dynamic, interactive, culturally sensitive, and locally adapted—its ultimate goal is to improve people's understanding of their connection and relationship to the earth's resources, so that the future of the next generation is not compromised for the benefit of the present.

Examples of Land Literacy Initiatives

Land literacy initiatives can be in various forms, and can be carried out formally, informally or non-formally. The most common non-formal types of land literacy initiative include: production of posters, flyers, brochures, calendars, primers, charts, billboards, stickers and other publications. These materials are commonly used by projects for promotion, information and PR (public relations) purposes. These are very handy and attractive materials particularly in rural areas where communication materials are very limited—the limitation however, is that, these are less-interactive type of materials.

Radio programs, community theatre, video and slide shows are more formal because, they are more structured, constantly improved and more interactive. However, these are uncommonly used, since the production cost could be too high for projects.

The better types of land literacy initiatives which are highly interactive, more formal, structured with more measurable outcomes are: field visits, workshops, forum, classroom-type and hands-on training, as well as, environmental monitoring activities. Australia's land literacy program has been very successful in these types of initiatives. A Saltwatch began in 1987, where 900 schools and 50 Landcare groups in 1992 were involved in gathering and analysing thousands of water samples from creeks, rivers, reservoirs and irrigation channels. The groups collected the data and sent them for analysis to the central agency. The results were returned in computer-generated maps and these were displayed in public places to send signals of the conditions and health of water sources in the communities (White, 1992: Campbell, 1995).

The **Tigbantay Wahig Inc.**, a community-based citizen waterwatch in Lantapan, Bukidnon has been monitoring the water quality of four major river systems in the municipality. The data collected were utilized to provide feedback on the health of the river systems as input to the municipal planning and decision-making (Lantapan NRMDP, 1998).

Tapping stakeholders' support for NRM

Mayor Jesse Robredo of Naga City

Naga City is known for taking the initiative in developing its Naga River Watershed Plan. It covers a total land area of 5,445 hectares where about 3,665 hectares falls within the political boundary of Naga City. To support the plan, the city government enacted an Ordinance saving the aquatic life of Naga River where the annual Fluvial Procession of Sra. Peñafrancia is held.

One major component of the plan is social marketing support, implemented through IEC, which involved various sectors in the city like the NGOs, academe, civic organizations and business firms. The aim was to educate the people, and mobilize them to participate in the implementation of the plan.

With proper motivation, the city government was able to extensively mobilize the business firms' participation. As such, it contributed significantly through financial and in-kind donations, and facilitating the IEC campaign themselves. For instance, a private institution donated an Audio-Visual Van. It serves as the IEC vehicle, brought to different barangays, agencies and schools for various info-drive activities.

The LGU can also create a local group, composed of specialists from various government functionaries, who can provide and articulate information on different issues and concerns in the locality, including NRM.

Initiating a localized Speakers' Bureau

The Municipal Government of Quezon, Bukidnon launched a Massive Tree Planting and Greenbelt Buy-Back Program in 1992 to restore its damaged bio-ecological environment due to logging activities years back.

To ensure widest dissemination of the project, and among others, the LGU organized its Speakers' Bureau. It is composed of local department heads such as the BIR, MAO, and MEO among others headed by the Vice-Mayor and the SB Chair on Environment. Members are trained by the LGU (locally-self-trained) to provide information, and serve as resource speakers during Barangay Assemblies on various issues and concerns in the locality, including environmental issues that affect major sources of their livelihood. These assemblies also served as the venue for settling conflicts and expressing opinions between the LGU and the community people.

As for local communities, a common complaint of field workers is their poor cooperation in environmental undertakings, and poor adoption rate of farming technologies introduced to them. This occurrence in the field should not be entirely the fault of farmers, but the extension services, as well as because of introducing inappropriate technologies and/or employing inappropriate extension approaches and learning processes.

Even when implemented with the best of intentions, extension program sometimes leaves a gap between the implementer and the local community. It weakens self-confidence to resolve their on problems. Hence, alternative approaches have emerged. These include the concepts of local ecological knowledge and participatory approach – planning that considers indigenous systems and implementing activities that are led by communities.

Landcare Literacy Program

Landcare is a community-based and multi-sectoral approach to a rapid and inexpensive adoption of conservation farming and agroforestry practices among upland farmers. This approach led to the evolution of a Landcare movement of autonomous farmer-led organizations that aims to work together for the long-term health of land.

The Local Government of Claveria, Misamis Oriental and Lantapan, Bukidnon support this dynamic voluntary movement. There are now over 350 Landcare groups that have successfully shared conservation farming technologies with more than 5,000 farmers, and established more than 300 households and communal nurseries for fruit and timber trees.

In solidarity with the cause, government agencies and NGOs assisted Landcare by providing appropriate information, technical, financial and local policy support. Today, Landcare continues to spread in neighboring provinces in Northern and Southern Mindanao, and in the Visayas.

What can government agencies & public officials do?

- Invest in land literacy initiatives. Sponsor a radio or tv program, cross-visits, training, environmental monitoring, or produce communication materials such as posters, billboards, brochures, etc.
- Make these initiatives a central organic part of the local development agenda.
- Look for partner agencies or communities that share your values on land literacy improvement for sustainability and foster joint initiatives.
- Personally organize and convene these initiatives.
- Enjoin private sector support (corporate sponsorship has high potential).
- Support the development of initiatives that lead to National Land Literacy.
- Provide policy support to encourage land literacy initiatives.

The public sector must take this challenge—those who hold the power and ability to transform systems must dare to change it now.

LGUs and local communities' optimism is very important. They should understand that in their own small way, they are capable of changing the local situation and achieve their desired direction. They will just have to take in mind that local responsibility is not created overnight (not ready made)– it is developed overtime. It can be done as exemplified by an emerging number of LGUs in the country. They can do it no matter how immense the problems seem to be.

Readings

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"I am the farmer and I am the watershed. If you want to see real development of the watersheds, you have to develop me first", says an Indian farmer (Rao, 2000).

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