Decentralizing Natural Resources Management: Emerging Lessons from ICRAF Collaboration in Southeast Asia¹

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Abstract

The purpose of this paper is to share some emerging lessons concerning decentralization and devolution of forest management in Southeast Asia, drawing upon the collaborative work being undertaken by the International Centre for Research in Agroforestry (ICRAF) and a wide range of partner institutions.

The first section will briefly highlight recent developments related to decentralized approaches to forest policy and management in Indonesia, Vietnam, Lao PDR and the Philippines.

The second section will present highlights, emerging lessons, and implications for scaling-up from the perspective of three case-studies: 1) the damar agroforests in Krui, Lampung Province, Sumatra, Indonesia; 2) the municipal-level natural resource management planning process in Lantapan, Bukidnon Province, Mindanao, Philippines; and 3) the Landcare approach to conservation farming on sloping lands in Claveria, Misamis Oriental Province, Mindanao, Philippines.

The last section will attempt to draw some general principles and lessons learned from ICRAF collaboration in Southeast Asia, particularly in light of how these may be applied for future scaling-up efforts to generate wider positive impact.

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Introduction and Background

Dynamic trends and processes in Southeast Asia

The global trends toward decentralizing and devolving forest management responsibilities and benefits to local stakeholders – households, user groups, communities, non-governmental organizations (NGOs), as well as the private sector – are resonating very strongly in Southeast Asia.

Some of the key driving forces behind these trends are: renovation of central government bureaucracies; IMF and related pressures to reduce public-sector spending; rapid transition toward market economies in some countries; increasing commitment to community-based forest management; growing concern for more equitable sharing of benefits; and realization that centralized forest management approaches have been ineffective in protecting forest resources during the past several decades.

In Southeast Asian countries, there are several interesting examples of how national and grassroots organizations are experimenting and embarking on their dynamic processes of decentralization and devolution. Underpinning the devolution of forestry responsibilities and rights to the local level are various efforts to:

- > Provide enabling policies and legislations, and remove disincentives.
- ➤ Allocate long-term land and forest use rights to households, communities, indigenous peoples and local organizations.
- Empower local communities through appropriate capacity-building programs and support services.
- > Jointly discover and disseminate technical and institutional innovations that support and sustain effective decentralized forest management initiatives.

Many of these initiatives – while showing much promise – are still in nascent stages. As these dynamic processes evolve, new challenges and problems will inevitably arise.

Organization of paper

This paper will share some emerging lessons from Southeast Asia based on the collaborative work undertaken and supported by the International Centre for Research in Agroforestry (ICRAF) and numerous partner institutions.

The first section will briefly highlight recent developments related to decentralization policies and implementation in Indonesia, Vietnam, Lao PDR and the Philippines.

The second section will present highlights and lessons learned from three case studies: 1) the damar agroforests in Krui, Lampung Province, Sumatra, Indonesia; 2) the municipal-level natural resource management planning process in Lantapan, Bukidnon Province, Mindanao, Philippines; and 3) the Landcare approach to conservation farming in Claveria, Misamis Oriental Province, Mindanao, Philippines.

The last section will attempt to articulate some general principles and lessons, which may be useful in considering how successful pilot efforts, may be scaled-up to generate wider positive impact in the future.

ICRAF SEA

Established in 1977, ICRAF is an autonomous, non-profit organization, and a member of the Consultative Group on International Agricultural Research (CGIAR). ICRAF headquarters are in Nairobi, Kenya, with staff outposted in 13 countries in Africa, Southeast Asia (SEA) and Latin America. The SEA Regional Research Program is based in Bogor, Indonesia, with offices in Chiang Mai, Thailand, Los Baños, Philippines, and outreach sites. About 90 staff members, consultants and fellows work with ICRAF within the region.

The ICRAF mission in SEA focuses on developing alternatives to unsustainable slash-and-burn agriculture and ways to rehabilitate degraded uplands. It works collaboratively with a wide range of partners, not only in the three countries where there are ICRAF staff on ground – Indonesia, Thailand, and the Philippines – but also in Vietnam and Lao PDR through various capacity-building initiatives and projects.

ICRAF is organized into two divisions. The Research Division coordinates three programs: natural resource strategies and policy, domestication of agroforestry trees, and ecosystem rehabilitation. The newly established Development Division, and the first of its kind in CGIAR system, operates two programs: systems evaluation and dissemination and capacity and institutional strengthening.

In SEA, much of the research and development work undertaken by ICRAF and its partners is relevant to the processes underpinning decentralization and devolution of forests and agroforest management. This is particularly true in projects and activities spearheaded by the policy, dissemination and capacity-building programs.

ICRAF in the Philippines

ICRAF-Philippines has 19 staffs who are based in Los Baños and at field research outreach sites in Claveria and Lantapan on the island of Mindanao. The Philippines work is focused on:

Conducting participatory research to develop conservation farming and smallholder tree production technologies.

- > Promoting farmer-driven approaches to the dissemination, and extrapolation, of successful community-based resource management approaches.
- > Developing natural resource management planning processes at various local levels.
- > Supporting partners to build their capabilities and strengthen institutions.

ICRAF-Philippines also backstops various capacity-building initiatives within the region, including the Vietnam Agroforestry Capcity-Building (VACB) project funded by Sida.

Recent Developments in some SEA Countries

Indonesia

Reformasi

Since May 1998, Indonesia has been undergoing a dramatic *reformasi* (reformation) process in virtually all sectors, including forestry. At the macro-level, new structural adjustment policies are being forged in hopes of rescuing the economy. In the forestry sector, the government is in the process of drafting new laws and policies that will redefine the roles of the State and local stakeholders in forest management.

Three draft bills of paramount importance are:

- ➤ Basic Forest law (regarding government regulations on the utilization of production forests)
- ➤ Land Ownership Law
- ➤ Local Governance Law

Key new policies have been drafted for:

- ➤ Nature reserves and conservation areas
- ➤ Idle land

If passed and implemented, these new statutes may profoundly change the way in which Indonesia's vast forest resources are managed, and provide the basis for more equitable community-based management responsibilities and rights.

Preceding these recent developments is the historic decree passed issued in January 1998 (SK No. 47/Kpts-II/1998) by the former Minister of Forestry, Djamaloedin Soeryohadikoesoemo, that provided an official precedent for community-based natural resources management. The decree established a distinctive forest-use classification known as *Kawasan dengen Tujuan Istemewa* (KdTI – zone with distinct purpose), which covers 29,000 ha of damar (*Shorea javanica*) agroforests in Krui, Sumatra. This represents more than half the area of mature damar agroforets in the area and may affect up to 7,000 families who are involved with damar livelihood (*Fay et al., 1998*). Details of this landmark policy decision will be given in the Krui case study in the next section.

On 7 October 1998, the Ministry of Forestry and Estate Crops signed a new decree on community forestry (SK No. 677/Kpts-II/1998) that revises the ministerial decree issues in 1995 (SK No. 622/Kpts-II/1995) (Sirait, 1998). This appears to be quite a progressive policy regarding the role of communities in the management of old growth forests or good secondary forests. However, the new decree may not help much to solve the problems and conflicts on lands

currently being used for agriculture and/or agroforestry that have been classified as State Forest Land without provisions for such activities (de Foresta, 1998).

The civil society voice

The era of *reformasi* has opened up the role of the civil society in the debate on how Indonesia's forest resources should be managed. On 11 June 1998 in Jakarta, a political statement was issued by KUDETA (Coalition for the Democratization of Natural Resources), a group representing 66 Indonesian NGOs, networks, and student organizations (KUDETA Secretariat, 1998).

The statement implored the government to "return natural resources to the people!" It highlighted the mistakes and failures during the 32 years of the New Order regime that caused the systematic destruction of forest resources, which contributed to a prolonged economic, ecological and food crisis. The Coalition called upon the transitional government to take remedial actions to address the undemocratic industrial development of Indonesia's natural resources that largely benefited corporate entities, and to recognize and restore the rights and responsibilities of forest-dependent communities and indigenous peoples.

It is questionable to what degree the government will respond to these demands. However, the strong voice and role of NGOs and the civil society has been firmly established in the process to democratically decentralize and devolve forest resources management in Indonesia.

Vietnam

The sea is silver, the forest is gold.

If you want a good return on your investment over 10 years, plant trees; If you want a real long-term result, you had better care for the people.

Savinas attributed to Ho Chi Minh

With the advent of the *doi moi* ("new change" or renovation) policy in 1985, Vietnam has embarked on an ambitious plan to open up and renovate many of its economic and institutional systems. Since the mid-1980s, central state planning is being gradually replaced by market orientation as the guiding force for the Vietnamese economy. One early component of this transition was the allocation of farmland to households through long-term "land tenure certificates," valid for 50 years and renewable. This greatly boosted rice production. By the early 1990s, Vietnam has surpassed the United States as a rice exporter, becoming second only to Thailand in export volume.

Next, the government initiated allocation of "forest land" – mainly without tree cover – to households. It was estimated that there were about 10 million ha such of land, almost one-third of the total land area in Vietnam. Forestry officials traditionally viewed land allocation as a means for reforesting bare hills. In addition to land tenure certificates, forestland can also be allocated to

households through management agreements (*khe uoc*) or protection contracts (*hop dong*) of up to 50 years in duration, or through joint venture of production-sharing contracts to plant trees on land belonging to State Forest Enterprises (Warving et al., 1998).

In Vietnam, about 17.6 ha, or 54% of the total land area, is classified as "forestland," with the following breakdown:

Category:	Description:	Total Land Area: (in million ha)	Of Which Contains Forest Cover: (in million ha)
Special-use	Mainly nature reserves	2.0	0.9
forestland	and national parks		
Protection forestland	Important watershed	6.0	3.5
	areas		
Production	Natural forests,	9.6	4.9
forestland	plantations, and		
	deforested land		
Totals		17.6	9.3

(Source: Phuong, 1998)

Up to present, the production forestland has been divided and allocated to the following units for management:

Category:	Description:	Total Land Area: (in million ha)	Estimated Forest Cover: (in million ha)
State organizations	412 State Forest	4.7	2.8
	Enterprises		
Farmer households	About 500,000	1.5	0.5
	households involved		
Cooperatives and	Various collective	0.6	0.4
other organizations	bodies		
Unallocated land	Under local	2.8	1.2
	administration and		
	forest inspectorate		
Totals		9.6	4.9

(Source: Phuong, 1998)

In protection forest areas, management boards can make contracts with individuals, households, communities, or organizations to protection, renegerate or establish forests. In return for protecting forests, the contracted parties are supposed to receive VND 50,000 per hectare per year during the first five years, as well as be able to collect dead and fuel wood and non-wood forest products. After the initial five-year period, the household is, in principle, entitled to half of the growth of the forest, with the other half belonging to the State (Warfvinge et al., 1998).

During 1993-1997, households, individuals, and communities (villages, hamlets) received forest protection contracts to:

- Protect 1.9 million ha of natural forests;
- Regenerate 224,000 ha of natural forests; and
- Establish 558,000 ha of new plantations (Phuong, 1998).

Emerging problems and challenges

While the pace and scale of the land allocation process in Vietnam has been impressive, many problems remain. In general, the rights, benefits, regulations, and decision-making of participating households are not clearly spelled out. At present, the State has very limited capacity to provide policy incentives, technical support and investment capital to households (Phuong, 1998). There is also evidence that the rules sometimes do not appear in contracts signed by the farmer and the Head of the Forest Inspection Station, and that the land allocation process and conditions vary widely from locality to locality (Warfvinge et al., 1998).

In December 1997, the 10th National Assembly of Vietnam passed a resolution calling for the establishment of 5 million ha of new forest during the period 1998-2010 in order to increase the country's forest cover to 43% of the total land area. Under Article 2 of the resolution, the government directs the Ministry of Agriculture and Rural Development and other relevant units to:

Complete the decentralization of State management in a way of clearly defined responsibilities and rights; enhance the role of local administration, chiefly at communal level in the field of management, protection, enrichment and new planting and forest development.

In February 1998, a high-level meeting chaired by the Deputy Prime Minister included the following recommendation (Warfvinge et al., 1998):

Rapidly finish the allocation of all forestland to households and other organizations, clearly determining who the "owner" is of the forest of different kinds... Both production and protection forests (except very important ones) should essentially be allocated to households.

The resolution tasks the government to establish 2 million ha of protection forests and 3 million ha of production forest. However, especially in the latter category, many land-use conflicts are likely to arise as farmers view denuded forest areas as potential agricultural lands, but the government will target many of these areas for reforestation (Binh, 1998). Agroforestry approaches may prove to be very valuable in addressing the objectives of the farmers as well as those of the State.

Lao PDR

In the Lao People's Democratic Republic (Lao PDR), over one-third of the population, or about 1.5 million people, practice shifting cultivation. More than two-thirds of shifting cultivators are located in the north. Population and other forces are creating pressures that are destabilizing traditional shifting cultivation systems. Forest cover estimates indicate that from 1950 to present, the country's forest cover has been reduced from 70 percent to 40 percent of the total land area. Shifting cultivation is perceived to be the central cause of deforestation (Pravongviengkham, 1998).

The overall social economic development strategy of the government articulated under eight National Priority Programs, as outlined in the National Socio-Economic Development Plan. One of these, the Shifting Cultivation Stabilization Program, is the main component directed specifically at rural development in upland areas, and the Ministry of Agriculture and Forestry (MAF) has been the agency directly responsible for its implementation since 1976.

Since that time, much emphasis has been put on policies to stop shifting cultivation and associated upland rice production primarily through programs to relocate agricultural activities to lowland and irrigated production areas. However, there has been no convincing evidence that such policies and programs have led to major gains in terms of improving rural welfare, or even in significantly slowing down forest degradation and other environmental problems. Moreover, past and present interventions have not taken into account the complexities of the uplands and upland livelihood systems (Pravongviengkham, 1998).

Since 1989, the government has been carrying out allocation of forestland to communities and households. The primary objective is to control shifting cultivation and reduces pressure on forest by assigning the responsibility to villagers for managing the land and forest resources. The land allocation was implemented following an 8-step process that provides a temporary land certificate, valid for 3 years, to participating households and communities. After that period, those who complied the specified requirements for properly managing the land will be granted permanent land title by the district land management office (Savathvong, 1997).

At present, the MAF is starting to adopt a systems approach to the complex issues involved, and to develop a suitable policy framework to enable the development and diffusion of appropriate technical innovations to households, villages, and watersheds. The Lao upland systems are dynamic, complex and require well-targeted interventions based on local realities. Thus, attention has shifted to an area-based approach that is consonant with the decentralized structure of governance and the diversity of upland agricultural systems (ICRAF, 1998a).

This is accompanied by a shift towards greater flexibility in implementation. In Luang Prabang Province, the 8-step land allocation process was designed to provide only 4 ha of land per household. However, this was found to be unsustainable as it compelled families to use a shortened 4-year follow cycle in order to have at least 1 ha in upland rice production each year. Now, up to 23 ha per household may be allocated depending on factors such as land and family labor availability (Pravongviengkham, 1998).

New Policy Reforms

During 1998, the Leading Committee for Rural Development has been reorganized, with the Minister of Agriculture and Forestry serving as its Vice Chairman, and a series of efforts are being launched to reform the upland program.

The new development strategy for the agriculture and forestry sector up to the year 2020 is articulated in the *Vision 2020* framework, which differs from past strategies in that it seeks to:

- Ensure concerted inter-ministerial development efforts and better harmonization of resource allocations targeted at focal sites in regions of different socioeconomic status.
- Emphasize decentralization of power to the district level of administration, and local empowerment at village level, so that development activities and management of natural resources are taken up directly by local institutions.
- ➤ Consider the practice of shifting cultivation from a more 'friendly' perspective, meaning that improvements of livelihood systems within existing agroecosystems are recognized as more sustainable and more socially acceptable alternatives for upland development.

In order to attain *Vision 2020*, MAF is striving to develop an area-based livelihood systems approach, based on

- ➤ Holism (to deal with complexity and inter-agency coordination);
- > Spatial variation (including decentralization to district and village levels to deal with the diversity of local circumstances); and
- ➤ Greater community participation (requiring more flexibility to establish partnerships that build on existing knowledge and institutions), wherein shifting cultivators are the central actors in natural resource management (Pravongviengkham, 1998).

Challenges ahead

Well-developed human resources capable of implementing an area-based systems approach to upland research and development are still very limited in Lao PDR. For this approach to really take root, the Lao government must put into place appropriate capacity-building and training programs that can effectively reach the provincial, district and village levels, and reorient the concerned technical, administrative and mass organizations.

Philippines

In the Philippines, there is a relatively long history of community forestry development. Since 1971, a series of policies, programs, and projects have attempted - with varying degrees of success - to incorporate and implement community forestry concepts.

During the past three decades, the development of policies underpinning community forestry in the Philippines has supported the following trends (Pulhin, 1998):

- Intensifying efforts towards the democratization of forest access and benefits through the issuance of various types of tenure instruments.
- ➤ Increasing involvement of upland communities in the management of their local forest resources through the use of various participatory techniques and procedures.
- Incorporating key principles such as social equity, poverty alleviation and sustainable resource use in the design and implementation of community forestry projects.
- ➤ Increasing emphasis on decentralization and local governance in forest management through the involvement of people's organizations (POs), non-governmental organizations (NGOs), and local government units (LGUs).
- > Spreading interest and support from different funding institutions.
- Expanding coverage and institutionalization.

The Philippines Master Plan for Forestry Development, a 25-year plan approved in 1990, stipulates that 1.5 million ha of the remaining 2.8 million ha of second-growth forest on land below 50 percent in slope should be put under community forest management over a 10-year period.

Key supporting policies and laws

Three key events that supported the decentralization and devolution of community-based forest management (CBFM) were the enactment of:

- 1. The Local Government Code of 1991 devolving significant functions, powers and responsibilities to local government units. In particular, Section 15 of the code mandates LGUs to ensure the right of their inhabitants to a balanced ecology, and expects them to undertake community-based forestry efforts as well as other initiatives to protect the natural ecosystem (Brillantes, 1996; DENR, 1998a).
- 2. Presidential Executive Order No. 263 (July 1995) adopting community-based forest management as the national strategy to ensure the sustainable development of the country's forest resources, and providing mechanisms for its implementation. This led to the creation of the process and procedures for the CBFM agreement (CBFMA) a 25-year production sharing arrangement entered into by a community and the government to sustainably develop, utilize, manage and conserve a specific portion of forest land (DENR, 1998a).

3. Indigenous Peoples' Rights Act of 1997 (IPRA, Republic Act 8371) establishing definitions, principles and rights related to resource management in ancestral domains. The Act and its implementation rules and regulations strengthened the role of indigenous peoples, and provided participatory guidelines for the recognition, delineation and award of the Certificate of Ancestral Domain Claim (CADC) or Title (CADT) (UNAC/KSP, 1998; Guiang and Harker, 1998).

Emerging problems

CBFM and IFRA are predicated on participatory planning and bottom-up approaches for identifying and articulating the communities' resource development and protection objectives and initiatives. Strong People's Organizations (POs) are the keys to successful CBFM implementation. However, a number of serious problems are evident in the field (Guiang and Harker, 1998), including:

- ➤ Many POs lack the organizational and technical capacity to properly manage commercial aspects related to CBFMAs.
- Many communities lack working capital and have little or no previous financial management experience.
- ➤ POs now need to function as business enterprises, and most have difficulties in negotiating fair market prices, finding affordable transport, arranging payments, assuring quality and scaling standards for forest products, and meeting pre-payment requirements of the Department of Environment and Natural Resources (DENR) for forest charges.
- > DENR field offices are usually unable to provide all the assistance needed by forest communities, especially with regard to cooperative business management.

To overcome these problems, it is essential to strengthen the capacity of the POs and to develop effective partnerships and among DENR, LGUs, POs, and the private sector to make CBFM productive, profitable, and sustainable.

Three Case Studies

I. A policy breakthrough: The case of Krui agroforests⁵

In January 1998, Djamaloedin Soeryohadikoesoemo, Indonesia's Minister of Forestry from April 1993 to March 1998 signed an historic degree that established - for the first time in Indonesia - an official precedent for community-based natural resource management. Base on the minister's concept for a distinctive forest-use classification, 'Kawasan dengan Tujuan Istimewa' (KdTI), the new decree recognizes the legitimacy of community-managed agroforests on a significant area of State Forest Land.

This decree recognizes the environmental and social benefits of an indigenous land-use system (damar agroforests), the role of indigenous institutions in ensuring the sustainability of this natural resource management system, and the rights of smallholders to harvest and market timber and other products from trees they planted. While the new KdTI area still is part of the State Forest Land, this classification is unprecedented in that:

- ➤ It sanctions a community-based natural resource management system as the official management regime within the area of the State Forest Land;
- ➤ It allows local people to harvest timber from within the State Forest Land;
- > It allows limited harvesting of timber from within a watershed;
- ➤ It devolves the management responsibility of State Forest Land to a traditional community governing structure; and
- ➤ These rights are provided without time limit.

The first KdTI area is in the heartland of the Krui damar agroforests in Lampung Province of the Indonesian island of Sumatra. Through a process develop by the Krui people a century ago, these agroforest begin with land clearing and planting of upland rice, which is followed with a succession of tree crops, including coffee, fruit trees, various timber tree species and damar (Shorea javanica), which produces resin as well as timber. Managed by a succession of farmers, these agroforests develop over a period of decades into complex, multi-strata agroforestry systems that replicate a number of forest functions including biodiversity conservation and watershed protection. Satellite images indicate that there are approximately 55,000 ha of these mature agroforests in Krui. The new KdTI area covers 29,000 ha of damar agroforests at various ages that fall within the State Forest Zone, with the balance being on private land.

Adapted from:

Fay, C., de Foresta, H., Sirait, M. and Tomich, T.P. 1998. A policy breakthrough for Indonesian farmers in the Krui damar agroforest. *Agroforestry Today* 10(2): 25-26.

Team Krui-an effective consortium

At the invitation of the Indonesian Minister of Forestry, ICRAF and two NGO partners - the Tropical Foundation of Indonesia and the Family of Nature and Environment Lovers-Lampung - worked closely with Forestry Department counterparts to identify and develop workable option for implementing the Minister's KdTI concept in Krui. This effort benefited greatly from previous research on the ecological, social and economic functions of the Krui agroforests conducted by ORSTOM scientists, come from whom are seconded to ICRAF in Southeast Asia.

Subsequently, a research consortium grew that includes colleagues from the 2 Indonesian NGOs, the University of Indonesia, CIFOR, and ICRAF/ORSTOM. Dubbed 'Team Krui,' this group helped local farmers gain official recognition by documenting the myriad benefits of the damar agroforests as a resource management system. Since 1995, the team has been working with Krui farmers to articulate the environmental and economic benefits of their system. Research and community organizations produced numerous maps and detailed descriptions and analysis of the Krui agroforests.

In March 1997, the research consortium conveyed requests from village leaders to the Ministry of Forestry to begin a dialogue with government about the status of their lands. In June 1997, the consortium helped organize field visits from key government officials as well as a 2-day workshop to present research results and discuss the status of the land. The results of these activities were reported to the Ministry of Forestry and 6 months later, the groundbreaking decree was signed.

Impact of Decree

At least 7,000 families in the KdTI area will benefit directly from the decree's official recognition of their rights. If this pilot effort is implemented successfully, the KdTI prototype may be applied in numerous other locations in Indonesia, with the benefits for hundreds of thousands of households through poverty alleviation, improved resource management and reduction of social conflict.

Indeed, this can be viewed as an effort by former Minister Djamaloedin to address human rights issues arising from conflict over forestlands as well as the pursuit of environmental objectives and poverty alleviation. In a seminar during a visit to ICRAF Headquarters in Nairobi, he said that the opportunity to empower local people was the single most important factor in his decision to change the government's policy (ICRAF, 1998b).

Until this decree was issued, the Krui agroforests were at risk because of the uncertainty of farmers' tenure status in the State Forest Land. A forestry company held the government – awarded right to manage this area, including the right to harvest an estimated 3 million commercially valuable trees planted by local people, who could legally fined or jailed for establishing and managing their agroforests. In addition, local farmers expressed growing concerns over the uncertainty of their rights on the damar agroforests they planted and are currently managing.

Many damar farmers adopted a 'wait-and-see' strategy and chose not to plant damar and fruit trees until they would know for sure that they will be able to harvest the benefits of their work. This uncertainty clearly endangered the very future of the system that is renowned worldwide as a rare example of successful and sustainable management of forest resources by a local community. Thanks to this new decree, damar farmers and their agroforests in the KdTI area should now be safe from such threats.

Implications for scaling-up

The KdTI breakthrough sets an important precedent for community forestry in Indonesia. Former Minister Djamaloedin has pledged to continuing working in his professional capacity to explore how this type of tenure instrument may be extrapolated to other areas in Indonesia where there is well-grounded and effectively community management of forest resources. Numerous ongoing community forestry programs and projects in Sumatra and Kalimantan would be keen partners in this process, and hundred s of thousands of forest-dependent Indonesian families could potentially benefit from new arrangements to provide secure forest-use tenure.

A recent decree on community forestry, signed in October 1998, appears to be quite a progressive policy vis-à-vis the role of communities in managing old-growth forest or well-established secondary forest. This may act as further incentives towards official recognition of the community rights and responsibilities in forest management, and the development of appropriate tenure instruments to legitimize these rights.

Beyond Indonesia, the Krui experience has gained the attention of the researchers working on similar problems as far way as Cameroon, West Africa. African scientists visited the Krui agroforests as part of the activities of the Alternative to Slash-and-Burn Programme and expressed interest in the way the new policy will be implemented in hopes that a similar process can be explored in Cameroon, Uganda and other countries (ICRAF, 1998b).

11. Decentralized NRM planning: The case of Lantapan

Research will play an increasingly important role in providing option and insights for integrated conservation and development approaches. The Sustainable Agriculture and Natural Resource Management (SANREM) Collaborative Research Support Program is a global USAID-funded project that takes a landscape approach with a strong participatory bias.

At the SANREM research site in the Manupali watershed in Mindanao, Philippines, a consortium of partners in working together. The research team comprises scientists and practitioners from many institutions, including ICRAF (which has a field office within the watershed at Songco, Lantapan, Bukidnon Province), NGOs, universities, the tribal community, and local and national government institutions (Lai and Garrity, 1998). The objectives are to:

- > Develop the elements of a practical social contract for buffer zone management.
- ➤ Develop improved agroforestry systems for the buffer zone.

Assemble a natural resource management system for the Kitanglad National Park.

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. 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. And ICRAF's technical contributions to the plan stemmed mostly from research work on soil and biodiversity conservation.

The NRMDP was adopted by the Lantapan Sangguniang Bayan (Legislative Council) in March 1998, and is the first of its kind in the Philippines. It is 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. 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 Claveria Landcare Approach (see the next case study) for dissemination and adoption of conservation farming techniques such as natural vegetative strips (NVS) and improved agroforestry systems.

Innovative features

Some innovative features of Lantapan NRM planning and implementation process - which potentially could be extrapolated to other municipalities in the Philippines and elsewhere - include:

- 1) Organization of a multi-sectoral 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.
- 4) Adopted the 'technology of participation' (TOP) approach developed by the USAID-funded Governance and Local Democracy (GOLD) Project in eliciting information and

- ideas from the planning participants during workshops on envisioning, 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 of 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 a participatory approach. 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 procedure.
- 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 environmental and resource degradation problems.
- The keys to success are: partnerships, collaboration and cost sharing.

Implications for scaling-up

ICRAF will also take a leadership role to help scale-up the Lantapan NRM planning process and the Claveria Landcare approach. It will be important to link the Lantapan plan with the Ancestral Domain Management Plan, the Mt. Kitanglad National Park Management Plan, as well as with other municipalities in Bukidnon and Misamis Oriental Provinces who are currently developing their own plans.

Based on the experiences in Claveria and Lantapan in developing technical and institutional innovations for natural resource management, collaboration will be developed with DENR in the implementation of the Philippines Strategy for Improved Watershed Resources Management. This new national strategy, finalized in August 1998, has incorporated the Claveria Landcare and Lantapan NRM planning approaches into its key institutional elements, in order to recognize and build upon local demand and voluntary action (DENR, 1998b). DENR also recognizes the urgent need for a capacity-building program to support the new implementation of the new watershed strategy, and possible collaboration will be explored by ICRAF.

ICRAF plans to continue action-oriented research on crucial issues and innovations to support decentralized NRM planning and implementation as the key component of the national strategy for watershed management. This would provide an opportunity for ICRAF to advance its mandate and expertise on agroforestry systems approach to resource management in a two-pronged manner in the Philippines:

- > User-perspective approach to natural resource planning and management through agroforestry systems. This will involve site-based research and dissemination activities supported by bottom-up planning and management.
- ➤ Policy and program review in the NRM sector. This will provide working with regional and national governments to meet the needs of both planners and end users, and to elaborate realistic tradeoffs of concern for sustainable natural resource management.

III. Farmer-led and LGU-supported: The case of Claveria

ICRAF has been instrumental in developing a farmer-led approach to technology development and dissemination, 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 Province, and northern Mindanao, Philippines. 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 by local government and technical backstopping from ICRAF.

What is Landcare?

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 farmers' innate interest in learning and sharing knowledge about new technologies that earn more 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.

The core of the Landcare model is two fold: effective local community groups and partnership with government (Campbell and Siepen, 1996). This grassroots approach is generally recognized as the key to success in all community activities. Groups are to respond 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.

Landcare group's 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.

Steps involved in Landcare approach

Based on the gestation and evolution of Landcare during the past several years in Claveria, the major principals and steps in developing this approach have been identified (Garrity and Mercado, 1998) and are summarized below.

1. Select sites with good potential

This is to bring conservation farming technologies to where it is needed most - on sloping land where soils are prone to erosion and degradation. This initial step also involves meeting with key leaders in the local government units (municipal or province), interested farmers, and other stakeholders. Their understanding of the issues that need to be addressed, as well as their willingness to support and complement the program are very crucial to the success of failure of Landcare at a given site.

2. Expose key farmers to successful technologies and organizational methods.

The aim is to develop strong awareness among prospective key actors - especially innovative farmers and farmer leaders - of the opportunities to effectively address production and resource conservation objectives through the new technologies. The success of these activities can be measured through the development of enthusiasm to adopt the technologies within the community. Exposure activities include:

- ➤ Organize cross visits to the fields of farmers who have already adopted and adapted the technology successfully in their farming systems.
- ➤ Provide training experiences for farmers in the target communities to learn about the practices through the seminars in their villages.
- ➤ Provide opportunities for farmers to try out the technologies on their land through unsubsidized trials to convince themselves that it work as expected. If so, these farmers become the core of a 'conservation team' to diffuse the technology in the municipality.

3. Organize conservation team at the local level

Once it is clear that there is a critical threshold of local interest in adopting the technologies and a spirit of self-help to share the knowledge within and among the villages of the municipality, then the condition are in place to support the implementation of a municipal conservation team. The team is composed of an extension technician from Department of Agriculture (DA) or DENR, an articulate farmer experienced in the application of the technology, and an outside technical facilitator (figure 1).

The team will initially assist individual farmers in implementing their desired conservation farming practices. Later, they will give seminars and trainings at the village level if sufficient interest arises. During these events they will respond if there is interest in organizing more formally so as to accelerate the spread of agroforestry and conservation practices.

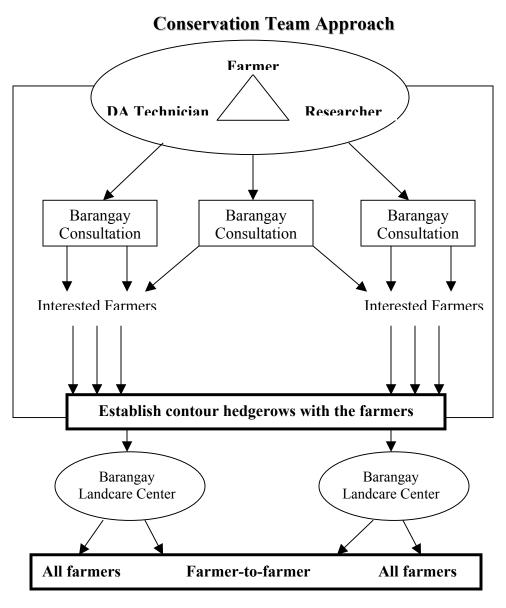


Figure 1. Conservation team as key component of Landcare approach.

4. Evolve Landcare farmers' organization

If and when the preconditions are in place for a Landcare farmers association, then the facilitator may assist the community in developing a more formal organization. A key ingredient of success is identifying and nurturing leadership skills among prospective farmers in vision and organization. This may involve arranging for special training in leadership and management for the farmer leaders, and exposing them to other successful Landcare organizations.

Each barangay (village) may decide to set up its own Landcare Association chapter and barangay conservation team. A village may organize Landcare Association sub-chapters in their puroks or sitios (sub-villages). A purok conservation team usually includes local farmer-technologist, the purok leaders, and the district kagawads (councilors). The purok-level teams are the front-liners in conservation efforts, providing direct technical assistance, training and demonstration to farmer households. They are backstopped by conservation teams at the barangay and municipal levels.

At the municipal level, the Landcare Association is a federation of all the barangay Landcare chapters. The municipal conservation team is part of the support structure, which also includes other organizations that can assist the chapters (e.g., DA, DENR, NGOs). See figure 2 for the organizational setup of the Claveria Landcare Association.

The Landcare Association may opt to be registered as a People's Organization (in a legal form of a cooperative, association or corporation). The Claveria Landcare Association (CLCA) is a PO registered as an association with the Philippines Securities and Exchange Commission in 1996.

5. Attract local government support

Local government can provide crucial political and sustained financial support to the Landcare Association to assist it to meet its objectives. The municipality has its own funds that are earmarked to be spent on environmental conservation. These can be targeted to Landcare activities that enhance the natural resource conservation. The municipality can be encouraged to develop a formal natural resource management plan-such as the one in Lantapan described in the preceding case study - which can help guide the allocation of conservation funds.

The barangay can also allocate financial resources from their regular internal revenue allotment (IRA) through the Human and Ecological Security (HES) Program, which represents one-fifth of the total funds of the barangay. These funds can be used to organize the conservation teams and Landcare Association activities at the barangay and purok levels, and support training and honoraria for resource persons if the required time commitment exceeds voluntary efforts. The municipality can also allocate HES funds to compliment the barangay budget. For 1998, the Claveria municipal government committed 50,000 pesos (about US\$ 1,250) to each barangay to support Landcare activities.

External donor agencies can best support Landcare development by allocating resources for leadership and human resources development, communications equipment (e.g., handheld radio sets) and transportation (e.g., motorcycles) to enable the Landcare leaders to make maximum use of their time.

Structure of the Claveria Landcare Association

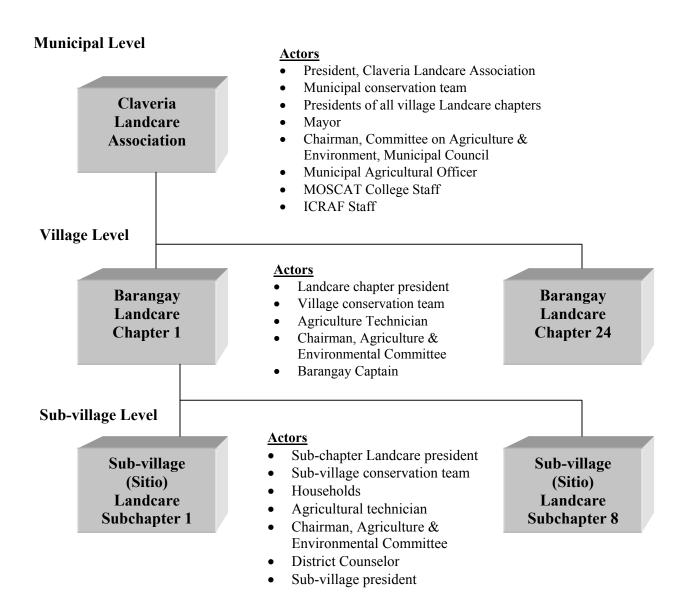


Figure 2. Organizational structure of Landcare in Claveria.

6. Monitor and Evaluate

Monitoring is a necessary tool to assess the progress of the activity, and use outputs strategizing activities or planning actions to make the program more dynamic and relevant to the need of the target community.

For monitoring purposes ICRAF has been keeping records of all those who have attended a training or had been assisted with establishing NVS on their farms, as well as of farmers who requested assistance. Details on farming and conservation practices, training and follow-up needs are recorded on a *diagnostic card*, which is updated on regular follow-up visits by ICRAF staff. The leader of the CLCA chapters or sub-chapters have been supporting this activity by facilitating the distribution and collection of the diagnostic cards to and from then sub-villages and new CLCA members.

As a preliminary evaluation, a survey on an adoption and dissemination progress is being conducted, with an emphasis on farmers' technology modification and the reasons behind their decision-making. This will occur approximately 1.5 years after the start of the extension program (Garrity et. al., 1998).

Conservation farming technologies

The specific activities of the Landcare Association members will vary according to their needs and interests, as well as their biophysical and socioeconomic situations. Some of the many activities that have been or are being developed as focal areas for Landcare Association work include:

- Establishing Natural Vegetative Strips (NVS) along the contour to reduce field or farm-level soil erosion. This was the initial farmer-generated technology that launched the organization of Landcare in Claveria.
- ➤ Planting perennial crops on or just above the NVS to increase the farmers' cash income and enhance soil and water conservation.
- ➤ Planting trees to increase family income through production of timber, fuelwood, and other tree products in farm forests, boundary planting or other arrangements.
- ➤ Planting the high-quality fruit-trees to provide income and better nutrition for the household while enhancing the environment.
- Adopting minimum-tillage or ridge-tillage farming systems. Ridge tillage has been successfully adopted with the existing draft-animal cultivation practices, and is being further tested on farms.

The evolution from simple soil conservation practices to more complex agroforestry system occurs over time as farmers continually experiment, innovate, and adapt technologies that are suitable to their conditions. Generally, farmers start with the establishment of natural vegetative filter strips. Next, they establish communal or individual nurseries, and plant perennials on or above the NVS. Farmers can cultivate annual cereal crop up to the fourth year, particularly if the strips are not too close to each other. When the tree canopies shade out the crops, and it is no longer profitable to grow annuals, farmers graze their livestock beneath the

trees. The trees (mostly *Gmelina arborea*) can be harvested 8-12 years after planting, and farmers then resume annual cropping and begin the cycle. This system earns more income than the traditional practice of monocultural cropping (Magcale-Macandog et. al. 1997).

Impacts, scaling-up and scaling-out

In 1996, ICRAF supported Landcare dissemination activities in Claveria as a direct response to the farmers' request for technical assistance in conservation farming. The technical and institutional innovations led to the formation of the Claveria Landcare Association. Today, there are 56 Landcare groups within the 17 barangays in the Municipality of Claveria. Most of these Landcare groups are based in the purok or sitio (sub-village) where farmers can interact with each other more frequently. A sitio has 30 to 60 farming families.

These Landcare groups have successfully extended conservation farming based on NVS to about 1,000 farmers, and established 143 communal and individual nurseries that produce hundreds of thousands of fruit and timber tree seedlings that are planted on the NVS or along farm boundaries. They were also able to get funding for 75 draft animals for dispersal to Landcare members who have none.

The greatest success of Landcare is changing the mindset of farmers, policymakers, local governments units, and landowners about how to use the land and protect the environment. It is not simply about the total length of the NVS laid out, the number of nurseries established, the number of seedlings planted, or the number of Landcare members. The Landcare movement is renovating the minds, attitudes and practices of the farmers, policymakers, and local government officials on using the land to meet their current needs while conserving resources for future generations. There are now farmers who voluntarily share their time and efforts. There are also policymakers who urge farmers to adopt conservation farming practices, and support these efforts by allocating local government funds and enacting local ordinances. These are the important success indicators of the Landcare approach that enable local people to conceive, initiate and implement plans and programs that will lead to the adoption of profitable and resource-conserving technologies.

Decentralization and devolution of natural resource management to the grassroots level enables local governments to allocate resources and provide policy support to complement farmer and community-led efforts to conserve natural resources for sustained production and use. The Landcare approach provides:

- A vehicle for interested farmer to learn, adopt and share knowledge about new technologies that can earn more money and conserve natural resources;
- A forum for the community to respond to the issues that they see as important;
- > A mechanism for local governments to support; and
- A network for ensuring the ideas and initiatives are shared and disseminated.

Landcare emerging as a method to empower local governments and communities to effectively and inexpensively disseminates conservation farming and agroforestry practices. The

experiences and lessons learned in Claveria provide a strong basis to scale-up to the regional and national levels, and to scale-out to other municipalities (see vision for this National Landcare movement in the Figure 3).

The adjacent Municipality of Malitbog, Bukidnon Province has approach the Claveria team to assist them in developing Landcare activities. Farmer cross visits and trainings were arranged, an ICRAF field extension staff has recently been posted to Malitbog, and the local government has formed a conservation team to help start-up Landcare activities in 3 pilot barangays (Saguinhon, 1998). Based on specific request, various study tour and trainings have been organized for farmers, NGOs, and LGUs interested in the Landcare approach.

The ICRAF-Lantapan team has also started applying the Landcare principles and approach to its work on decentralized NRM planning and implementation, as well as with the farmer agroforestry tree seed association in Lantapan.

As already mentioned, the new *Philippine Strategy for Improved Watershed Resources Management* has incorporated the Claveria Landcare and the Lantapan NRM planning approaches into its key institutional elements and operational framework. As the strategy moves into the implementation phase, this provides a good opportunity to scale-up useful Landcare principles and experiences in other parts of the Philippines. However, this scaling-up process must respect and adhere to the critical, underlying elements - such as farmer voluntary action and LGU partnership - that made Landcare successful in Claveria. Landcare should <u>not</u> be viewed as a technical and organizational model that can be replicated systematically through projects everywhere.

A VISION FOR A NATIONAL NATURAL RESOURCES CONSERVATION SYSTEM

Based on public-private partnerships

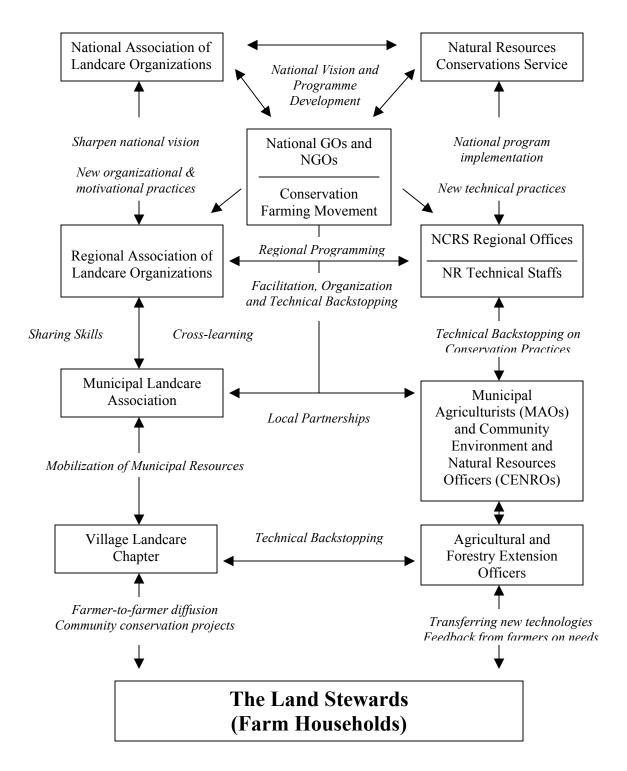


Figure 3. Conceptual framework of scaling-up Landcare into a national movement

Emerging Principles and lessons

ICRAF's collaboration in research and development work related to decentralization and devolution of natural resources management in Southeast Asia is enriching and revealing. The process underpinning decentralization and devolution are dynamic, crosscutting and fascinating, ecological and socioeconomic domains.

Based on some of the recent and rapidly evolving developments that are taking place at national levels as well as in local settings, some guiding principles and lessons learned may be generalized as follows.

- 1) Devolved natural resources management can be cost-effective but requires significant commitment and voluntary action. The key is to find the motivated and committed people who can positively influence and support devolved functions and activities, and who are willing to volunteer some of their time. In Claveria, finding the right leaders to support Landcare, especially at the sub-village level, has been identified as the biggest problem in promoting the Landcare movement (Patindol, 1998).
- 2) Enabling policies can legitimize and stimulate decentralized NRM. The policy breakthrough of issuing a ministerial decree to provide a distinctive forest-use classification (KdTI) that covers 29,000 ha of Krui damar agroforests will benefit 7,000 households living in that area. Moreover, it provides an official precedent that may be useful in other community forestry areas of Indonesia, as well as in other countries and regions of the world. Likewise, the policies that are supporting and refining the land allocation programs in Vietnam and Lao PDR are leading to dramatic and positive changes in the way that households, communities and local authorities are involved in managing forestland and natural resources.
- 3) Secure tenure instruments are essential, but not sufficient. Just having a certificate granting secure tenure on a given area is not enough. The right enabling policies and critical support services must also be available to simultaneously address the production and conservation objectives and needs of households, communities and local governments engaged in decentralized NRM.
- 4) *Scaling up Landcare should not be 'projectized'*. What is meant by 'projectization' is deliberately influencing the farmer processes, through a system of incentives and disincentives, to achieve time-bound physical targets. One inevitable and unfortunate result of the 'projectized' approach is that farmer participation deteriorates (sometimes completely) after the external support withdrawn (Queblatin, 1998).
- 5) Local government must 'buy into' the process, and be willing and able to provide policy and financial support. For decentralized NRM to work, local government must become the chief partner of the State to households and communities. They must contribute to the process through local policy support (e.g., ordinances that act as effective incentives or

- disincentives) and financial allocations (e.g., Claveria municipal government earmarking US\$ 1,250 per barangay to support Landcare).
- 6) Consortium approach to NRM research and development is the most effective. The research consortia or, to a simpler degree, the conservation teams described in the three case studies show the effectiveness of developing multi-disciplinary and inter-institutional teams to provide key technical support and policy advocacy. Different stakeholders bring different expertise and experience to the consortium, and both insiders as well as outsiders play useful roles. The consortium approach also helps to foster networking and linkages with other like-minded groups.
- 7) Civil society can play an important role to democratize NRM processes. As some of the countries in Southeast Asia move toward greater democratization, the role of the civil society including POs, NGOs, professionals associations, student organizations, public interest groups and private concerns is enlarging. This role includes being the voice for the poor, the disenfranchised, and the marginalized sectors of society. In the decentralization and devolution process, civil society can help advocate the rights and responsibilities of communities and indigenous peoples in managing their forest resources in a sustainable manner.
- 8) Community organization and participatory approaches can be effective vehicles for delivering NRM innovations, but... Community organization needs to be grounded in concrete purposes and results that bring direct benefits to community members. Participatory approaches can be used to transfer principles rather than standard solutions, and make available a basket of choices rather than a set package of practices. Community-organizing activities that are too general or without well-defined purposes run the risk of taking up too much of the local people's time, as well as inflating their general expectations.
- 9) Capacity-building is fundamental to decentralizing NRM. From the sub-village up to the national as well as international levels, there are enormous capacity-building needs related to: training in leadership, management, technical and entrepreneurial aspects; information support (including marketing); institutional strengthening and reform; stakeholder analysis and conflict management; and other needs emerging from NRM decentralization work. The challenge is to identify the priorities, the entry points, and the resources needed to mount such an ambitious capacity-building program.

Hopefully, these generalized principles and lessons can be of some use to our partners who are the real front-liners and agents of change in decentralizing natural resources management in Southeast Asia. The process is fascinating, the road is long, and we've just started!

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