

**ICRAF**

---

**Modalities for Scaling-up  
Technology-Dissemination  
Approaches in Natural  
Resource Management:  
Landcare and NRM  
planning process in  
Northern and Central  
Mindanao, Philippines**

Delia C. Catacutan  
Agustin R. Mercado, Jr.  
Marcelino Patindol

---

DCCatacutan, ARMercado, MPatindol. 2000. Paper presented during the CGIAR-NGO Committee International Workshop on Going to Scale: Bringing more benefits to more people more quickly. International Institute for Rural Reconstruction, Silang, Cavite, Philippines. 10-14 April 2000.

---

## Modalities for Scaling-up Technology-Dissemination Approaches in Natural Resource Management: Landcare and NRM Planning Process in Northern and Central Mindanao, Philippines<sup>4</sup>

Delia C. Catacutan<sup>1</sup>, Agustin R. Mercado, Jr.<sup>2</sup>, Marcelino Patindol<sup>3</sup>

### Abstract

*This paper describes the incremental successes and modalities in scaling up technologies, approaches and processes in natural resource management, implemented as part of the Research and Development (R&D) program of the International Center for Research in Agroforestry (ICRAF), in the provinces of Misamis Oriental and Bukidnon in Northern and Central Mindanao along with partners from the Local Governments and other public and private-institutions. ICRAF has been conducting research on contour hedgerow technologies for the past decade in Claveria, Misamis Oriental. Focus was much on assessing the management strategies that address key technical constrains of the contour hedgerow system, and observed that adoption by farmers was low for many reasons, including, high labor in establishment and maintenance of the hedgerows, resource competition above and below-ground between the hedgerows and associated crops, limited value-added from the hedgerow prunings, and poor species adaptation.*

*In view of this, we refocused our efforts toward finding alternative systems that address the technical and institutional issues of conservation farming. We found that natural vegetative filter strips (NVS) provide simple solutions to the technical constraints of soil conservation on sloping farms. These are buffer strips laid out on the contour in which natural vegetation is allowed to re-grow into thick, protective cover. NVS also provide the foundation for farmers to evolve into complex agroforestry systems with fruit and timber trees. We now see a tremendous surge of adoption of this system, enhanced by a dissemination approach, called "Landcare".*

*Landcare is a movement of farmer-led organizations supported by local governments with backstopping from technical service providers-- that share knowledge about sustainable and profitable agriculture on sloping lands while conserving natural resources. The approach has developed into a dynamic voluntary movement with now more than 5000 farmers involved in 250 groups from five municipalities in northern, central and eastern Mindanao. Today, Landcare becomes the melting pot for farmers and others to discuss issues, share lessons, invest talents, skills and other resources geared towards better land husbandry and protection of the environment from degradation. It threads a path for constructive, long term and practical action at a community level for tackling environment and sustainability issues for the well-being of people and their communities.*

*The challenge to scale-up Landcare was at the height when some farmers, NGO groups and local governments begun to show interest on Landcare. We know, that this is not only rewarding, but critical as well. We have to carefully plan to engage in partnerships with lesser expectation coming from our partners other than, technical knowledge and strategies. We realized that we can't be everywhere doing the same thing at the same time. Although, it is not our explicit mandate, we recognized the responsibility to share our lessons and experiences to others, given the opportunities for doing this. We started, by drawing out a road map for scaling-up and identifying modalities for scaling-up on the basis of the conditions, opportunities and interests of the other sites. This paper describes these modalities for scaling-up the Landcare approach and Locally-led natural resource management planning process.*

---

<sup>1</sup> Natural Resource Management Specialist, International Center for Research in Agroforestry, Lantapan Research Site, Lantapan, Bukidnon, Philippines

<sup>2</sup> Associate Research Officer, International Center for Research in Agroforestry, Claveria Research Site, Claveria Misamis Oriental, Philippines

<sup>3</sup> President, Claveria Landcare Association (CLCA), Claveria, Misamis Oriental, Philippines

Paper presented to the CGIAR-NGO Committee International Workshop on Going To Scale: Bringing More Benefits to More People More Quickly, International Institute for Rural Reconstruction, Silang, Cavite, Philippines, April 10-14, 2000.

## 1.0 Introduction

Demand-driven processes are the breadth of the real “bottom-up” approach to research and development. However, when you begin to scale-up a farmer demand-driven process, you are faced with the issue on “projectization”. It happens when a demand-driven process is corrupted in favor of meeting targets set by the project team under specific time frame. This becomes problematic, because a real demand-driven process is usually slow, process-oriented and evolutionary. However, the outputs have proven successful and the groups are more able to sustain joint actions. When we begin to scale-up, be it a process or a technology, the challenge is much, on how to approach a situation where you would pursue the aim to share the technology or process, without being branded as “top-down” and prescriptive. But, when you introduce a public good to an authority for possible adoption, there is already an inch of ‘projectization’, because you trickle the idea and usually start as a project with pre-set goals, outputs and outcomes targeted in the course of implementation. This is not wrong however, but in practice, this makes the scaling up of demand-driven processes more challenging. In this case, it is difficult to completely effect a “demand-driven” process-- but, we realized that, we can begin by bringing about a stimuli than can create a demand, resulting into favorable response from local people and clamoring for the kind of changes they want out of the demand created. This is where the entry point for scaling-up becomes clear and feasible, and the demand-driven process is compromised.

In our experience with scaling-up Landcare and the NRM process, we identified the following issues as important and critical to the success and failure in scaling up projects. These are:

**Projectization.** Most projects in the past were so project-oriented, rather than, process-oriented. This means, that project implementers were over-conscious about meeting targeted outputs imposed by project management and financiers. Those projects were introduced to communities as projects with external funding and viewed as “outside intervention” for specific targeted beneficiaries. All sorts of support were provided by the project in exchange of targeted desired results. The result was that, once the project is terminated and support were withdrawn, the beneficiaries did not carry on the projects. It was a typical spoon-feeding type of projects.

**Sustainability.** This is closely related to projectization. If the project is viewed as something to be accomplished in a span of time, the tendency is to rush, to comply certain requirements and attain pre-set goals. Once the project is over, project implementers assumed to have accomplished enough for the project—then, pack and go, without the legacy implanted in the hands of the beneficiaries. Some of those projects have no phase-out plans and were not institutionalized at the local level, if there was any, the beneficiaries were not prepared to carry-on the program on their own, because they were treated as “beneficiaries” rather than, participants or partners. Sustainability then, becomes a dilemma.

**Partnership-Building.** Analogous to collaboration, partnership is active correspondence of individuals or groups involved from the onset of the undertaking until its accomplishment. When we say partnership, it would mean both entity have something at stake on a certain project, which could be in the form of expertise, material, financial, physical and many others. Hence, it should be that they both be involved in the process of change and development, enabling them to be wisely empowered towards the protracted desired shift. To develop a partnership is a big challenge when you are viewed an outsider, because the community (LGU for example) may have very high expectations. The issue on ownership is also closely attached to “partnership”. When the terms of the partnership are not clear, the ownership issue becomes a problem—this would sometime result to misunderstanding with the partners pointing fingers to each other, especially when there are unresolved problems. Therefore, at the very beginning, it is important to lay-out the cards clearly and define the scope and terms of the partnership.

**Resources Constraints.** As in many Research Institutions, human and financial resources have always been an issue in scaling-up projects. As a CG Center, we were concerned with how much, and how far we can go, as much as--we want to join the wagon of addressing an increasing demand for extension and development programs. And, if we put our investments in extension, what lessons can we get out of it to avoid costly mistakes for scaling-up purposes? The bottom-line is that, we can

never be at all places at the same time. We, therefore need to locate ourselves strategically in order to maximize the use of our limited resources.

**Deterioration or enhancement of the quality of processes and outcomes.** In scaling-up projects, we are faced with two possible scenarios; either the quality of outcomes are deteriorating and the processes are short-changed or these are enhanced yielding into more positive outcomes.

### *How did we proceed from here?*

First, we underline the existing institutional mechanisms, prevailing working relations and arrangements, and the different pathways by which the project could either be; newly created or implemented independently; integrated within existing projects; or aligned in the mainstream of government's development agenda. We conducted a brief review of their current programs and looked at entry points. Then, we proceeded with defining our strategies and identifying these as modes for scaling-up. Negotiations were made as a protocol with authorized entities. At this level, you can already start a dialogue—and somehow, create the “demand”, and secure your partner's commitment, usually the officials of Local Governments, government agencies and other local champions (can be NGO). It is important to look at different avenues by which the demand can be felt and the synergy is built among the different actors at the locale. We tried to relate the demand from the global perspective (Global Agenda 21), and referred to the provisions of the Philippine Local Government Code and the localization of the Social Reform Agenda. We also engaged as many persons or local offices as possible, so that, when the number goes down, we would still get a substantial size of support for the project. Once this condition is met, the ground-level activities can be designed by the project participants themselves. The project participants usually come in a hierarchy. At the municipal level, the hierarchy begins with local government officials and their organic offices, followed by village officials and finally, the front line participants-- the farmers and communities. We need to deal with this hierarchy to draw a broad-base support.

Our main goal is to scale-up as much, at the least cost-- through partnership-building, knowledge-sharing and transfer. Our investment was much directed to capability-building activities for our partners to enable them to establish and nurture their own Landcare and NRM programs, rather than, putting financial resources for project level activities. The modalities described below reflect a low-level human and financial investment from our side, but provide a promise for wider geographic impact. As we continue to refine, modify and approach our scaling-up efforts based on opportunities, we aim to have minimal participation in scaling-up activities through the synergy developed by those involved in Landcare and NRM in the future.

## **2.0 Background**

### *The Project Sites*

The project sites are located in two adjoining provinces in Northern Mindanao namely; Misamis Oriental and Bukidnon. In Misamis Oriental, the focal site is the municipality of Claveria, where ICRAF has been conducting research on conservation farming and agroforestry. In Bukidnon, the central site is in the municipality of Lantapan. Research in Lantapan is focused on conservation farming, tree species evaluation and watershed management. Both sites have similar biophysical conditions. Although, the province of Misamis Oriental is located in the coast of Panguil Bay, largely covered within the stretch of Cagayan-Iligan Economic Development Corridor, Claveria remains the only landlocked and upland municipality of the province. On the other hand, Lantapan is nestled within the heart of Bukidnon which is entirely a landlocked upland plateau and is a major watershed of central and northern Mindanao.

**In Claveria**, the perception that soil erosion is a serious problem is widespread (Mercado, A et. al. 2000). Most farmers are clearly aware of the reasons for declining crop yields and possible strategies to combat the soil degradation process. Sloping fields in Claveria experience up to 200 t/ha of soil loss (2200 mm/year rainfall). About 95% of the cropping activities (mostly corn and some vegetable) occur on lands of more than 15% slope (Garrity and Mercado 1994, Fujisaka et.al, 1994, Mercado et.al, 2000). As is typical for the majority of cultivated upland areas in Southeast-Asia. Soils in Claveria are degraded and acidic (pH 4.5-5.2) with low available P.

Contour hedgerows of pruned leguminous trees or Sloping Agricultural Land Technology (SALT) had been promoted in Claveria since the early 1980's by the Philippine Department of Agriculture (DA) as a solution to the problems of unsustainable crop production in the uplands. This farming system aimed to provide effective soil erosion control, organic fertilizer to the companion crops, fodder for the ruminants, fuelwood for farm families and restore water quality and quantity in the watershed and others. In spite of these benefits, farmer's adoption were not widespread. After years of conducting on-farm research and working closely with farmers in the area, we identified the following constraints to adoption. These include:

- High labor requirements to establish and maintain the hedgerows
- Limited value-added to the farm income
- Unanticipated problems in soil fertility due to hedgerow competition
- Irregular width of the alley
- Too dense hedgerows in moderately to steeply sloping farms
- Poor species adaptation and lack of planting materials
- Insecure land tenure

While there is still a growing interest on contour hedgerow, we observed some farmers were innovating the technology. Some farmers placed their crop residues in lines on the to contour to form "trash bonds". These accelerates the growth of native grasses and weeds and soon formed stable hedgerows with natural front-facing terraces. Some farmers also tried laying out the contour lines but didn't plant anything. These contour lines eventually evolved into natural vegetative strips (nvs), which we later observed to be superior in soil erosion control and reduced maintenance and labor to a minimum (Garrity, 1993, Agus, 1993, Mercado et. al 2000).

These simple innovations attracted the imagination of many farmers in the area. In 1994, it was estimated that 150 farmers have adopted contour hedgerow systems while the number of pruned tree hedgerow fields decreased after 1990. The new wave of hedgerow system was predominantly NVS and the tillage system have changed from up-down tillage to contour plowing.

ICRAF then, continued to investigate other issues and benefits of NVS. We begun conducting research to find out the cost-benefit of NVS in terms of labor maintenance, efficiency of NVS in controlling soil erosion and crop yields, density and spacing of the NVS, enrichment of the NVS with other perennials, fruit and timber trees, and simple methods of laying-out the contour lines. Since 1996, the adoption of NVS by farmers increased to more than 2000 farmers in Claveria and Lantapan.

**In Lantapan**, farmers predominantly grow corn throughout the landscape. Sugarcane is also becoming an important industrial crop and high-valued vegetables are also grown in high elevation areas. The municipality covers more than half of the northern portion of the Manupali watershed, which was declared critical and a reserved watershed in 1992. The upper northwest portion are the foothills of the protected national park, "Mt. Kitanglad". The headwaters of the tributaries of the Manupali River on the southern boundary come from Mt. Kitanglad. In turn, the river supports a major irrigation system for low-land rice and a reservoir that runs a big hydroelectric plant for the National Power Corporation. Sixty one (61%) of the area have slopes greater than 40% and elevation increases as one proceeds northwest to its highest elevation, determined to be 2,938 masl. Soil erosion has been identified as one of the major causes of declining productivity in the watershed. In a relatively small area, (31,820 hectares) population growth in

Lantapan is high at a rate of 4.18% in the last succeeding census on population. If this trend will continue, the population of Lantapan will double in less than twenty years. In late 1994, we started our research in Lantapan through USAID-funded SANREM CRSP (Sustainable Agriculture and Natural Resource Management-Collaborative Research Support Program). Our research areas include:

- Assembling the elements of a practical social contract for bufferzone management of the Mt. Kitanglad National park
- Development of improved agroforestry systems for the bufferzone through research on tree domestication and conservation farming (NVS and Ridge Tillage System)
- Assemble a natural resource management system for the watershed and the protected area

The municipality is endowed with rich knowledge-based systems from primary data generated from the research of SANREM CRSP and the Department of Agriculture. Results from initial SANREM's impact assessment in Lantapan revealed that there has been significant effects on thinking among people about environmental and natural resource management issues by local officials and other influential community members (G. Buenavista, I. Coxhead, et.al. 1999). Although, a number of farmers have practiced varied types of conservation practices, there remains the challenge of bringing simple and appropriate technologies developed by participatory-research to majority of the farming populace.

By the end of 1995, the town Mayor expressed interest on putting together a Natural Resource Management Plan that would incorporate the research findings into the decision-making process as major basis for their strategic actions. We were fortunate to be part of this planning process, thereby enabling us to advance our goal to share our simple technologies (NVS) and Landcare through the local planning process.

### *The Evolution of Landcare*

In addition to conducting applied research resulting in the development of appropriate technologies for the area and of sites with similar biophysical conditions, ICRAF initiated a technology dissemination program to ensure that derived innovations will reach to user groups (Mercado et.al. 2000). As part of our commitment to disseminate these promising technologies, we developed and put into test, an extension program that rapidly and inexpensively diffuses conservation farming and agroforestry technologies using the group approach. This approach was found effective in strengthening government extension programs and expedite the dissemination process. It also encouraged local governments to provide technical, leadership, logistics and policy support. The groups have grown into a self-perpetuating farmer movement, that is currently attracting other members in the community. The usual eye-watchers realized that, they too can engage in land caring activities by providing support for their activities, or by directly involving in community-level landcare projects.

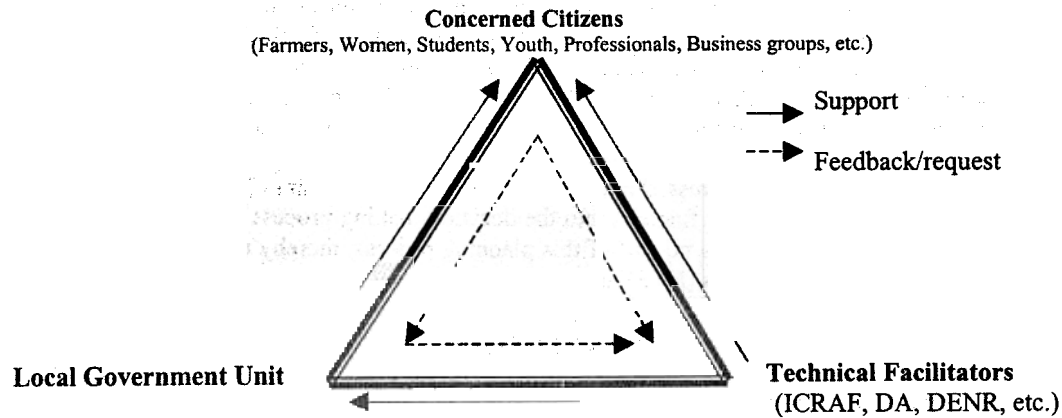
This approach resulted in an unexpected boost in farmer adoption of soil conservation technologies and agroforestry practices. At the beginning, farmers come together to share and learn knowledge and skills on these technologies, but as they come more often, they begun to feel the need to be more cohesive and begun looking at other windows of solving other degradation issues. This group development process now requires leadership skills—so as the interests are becoming broader and the challenges getting bigger and complex. This key institutional innovation for technology dissemination has given birth to “Landcare”---an approach, a process, and a group of farmers and community groups with support from government and technical service providers—all working together, depending on each other and supporting each other for the long term benefit of the land and environment.

### *What is Landcare?*

Landcare as a method or approach, rapidly and inexpensively diffuses conservation farming technologies and agroforestry practices among upland farmers, based on the innate interest of farmers in learning and sharing knowledge about new technologies that earn more money and conserve natural resources (Garrity and Mercado, 1998, 2000). It also refers to 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. It evolved as a community-based approach designed to effect change in complex and diverse situations (Swete-Kelly, 1998, Mercado et.al. 2000). According to Campbell effective local community groups and partnership with local government units is the core of the Landcare model. Grassroots approach is now recognize as key to success in all community development endeavors. Groups respond to issues that affect them and are more likely committed to find and implement solutions on their own ways, than those imposed by external agencies. It is about people and the key to success is based on a mature social capital and a close bond between and among farmers—communities—and governments. The figure below represents the tripartite relationship of key actors in Landcare.

Fig.1: The triangle of Landcare: grassroots Landcare groups, local government units (LGU) and technical service providers and facilitators (ICRAF, DA, DENR, others). The success of Landcare as an approach is dependent on how these 3 key actors interact and work together.



In 1996, we started our technology dissemination program in response to farmers' request for technical assistance in conservation farming. Twenty five (25) requested for training on the establishment of NVS and decided to form a group and share the technology to other farmers. That group of 25 farmers made the history of Landcare in Claveria. Today, there are more than 250 Landcare groups in Claveria Misamis Oriental and Malitbog and Lantapan, in Bukidnon, respectively. Most of these Landcare groups are based in the sub-villages (sitio or purok) and are federated at the village (barangay) and municipal levels. More than 3,000 farming families are involved and have successfully extended conservation farming technologies to more than 2000 farmers and established more than 300 communal and individual tree nurseries (Mercado et.al 2000). Hundreds of thousands of fruit and timber tree seedlings are planted on the NVS, on farm boundaries, on bufferzone of protected areas, on riparian areas, and some were are planted on small-scale tree plantations. Some groups have also linked with other service providers, including the business sector for funding of their nursery activities and livelihood projects.

**Who are involved in Landcare?**

Landcare is a voluntary group that is currently represented by a large portion of farmers. However, interests from other sectors, like women, students, youth and the professionals are emerging. This implies a wider applicability of Landcare for a range of community folks in varying situations.

They are:

- 1 **Concerned citizens in the community who are:**
  - Willing to share their talents, skills and other resources
  - Usually resource poor
  - Want to improve their livelihood

- Willing to learn, share experiences and employ new sustainable farming techniques
- Committed to resource conservation and protection
- Committed to the creation of workgroups that implement sustainable agriculture and natural resource management strategies

Tillers, non-tillers, owners, tenants of the land

## 2 Local Government Units (LGUs) can provide

- Policy support for the institutionalization of conservation farming, agoroforestry practices, other practices for sound environment and natural resource management, and budget allocations through creation of local ordinances.
- Leadership in facilitating the formation of Landcare Groups and their related-activities
- Capacity-building program for the over-all development of Landcare
- Financial support for Landcare activities and projects

## 3 Technical Facilitators (ICRAF and other line-agencies who can provide)

- Appropriate Technologies for sustainable agriculture and natural resource management
- Facilitation for Landcare formation and their activities
- Information, Communication and Education programs
- Network-support for Landcare groups

### *What are the aims of Landcare?*

The issues in Landcare are varied and usually location-specific, and they respond and define their goals on these basis. Generally however, they aim to:

- Protect, conserve and restore the resource-base: soil fertility by controlling soil erosion and employing other conservation technologies that increase and sustain farm productivity.
  - Engage in field level action research that address other issues on sustainable agriculture and natural resource management.
  - Develop marketing strategies for agroforestry and environment-friendly farm products
  - Strengthen and empower local people to think, create and initiate activities that improve livelihood as well as protect the environment from degradation.
- Share technical knowledge among researchers, extension agents, local officials, farmers, students, women, professionals, business sector, civic groups and other members of the community about sustainable agriculture and natural resource management.
- Seek technical and other forms of assistance from government and non-government agencies as well as private companies.
- Draw support from all sectors for the common interest of land care.
- Foster and safeguard the welfare and interest of its members.

### *Steps involved in the Landcare Approach*

During the gestation and evolution of Landcare in Claveria , we identified the following steps in developing this approach as summarized below (Garrity and Mercado, 1998, 2000). We also consider this, an approach for both horizontal and vertical scaling-up from Claveria to Malitbog and other potential sites.

#### SELECT SITES WITH GOOD POTENTIAL

This is to bring conservation farming technologies to where it is most needed—on sloping lands where soils are prone to erosion and degradation. This initial step also involves meeting with key leaders in the local government units, 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 crucial to the success or 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 the activities can be measured through the enthusiasm developed, to adopt the technologies within the community. Exposure activities include:

- Cross visits to the fields of farmers who have successfully adopted the technology
- Training experience for farmers in the target communities to learn about the practices through seminars in their villages; and
- Opportunities for farmers to try out the technologies on their land through unsubsidized trials to convince themselves that it works 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

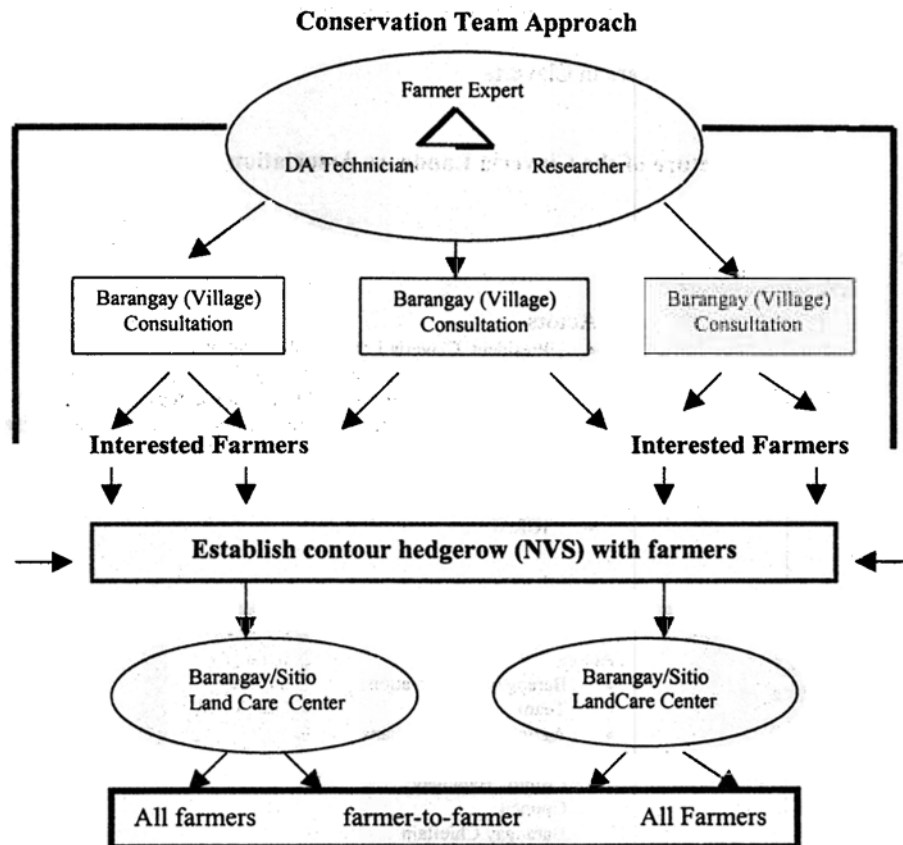
Once it is clear that there is a critical threshold of local interest in adopting the technology and a spirit of self-help to share the knowledge within and among the villages of a municipality, then the conditions are in place to support the implementation of a municipal conservation team. The team is composed of an extension technician from the Agriculture Office and possibly, from the Environment and Natural Resource Office, an articulate farmer who has the experience in the application of the technology, and an outside technical facilitator (see fig.2) The team will initially assist individual farmers in implementing together, desired conservation farming practices. Later, they can conduct seminars and trainings at the village level if sufficient interest arises. During these events, the team can respond for requests in the organization of formal groups, if interests are manifested.

## 4 EVOLVE LANDCARE FARMERS ORGANIZATION

If and when the preconditions are in place for a Landcare farmers organization, 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.. This may involve arranging for special training in leadership and management for the farmer leaders and exposing them to other successful Landcare organizations. Each village may decide to set up its own Landcare Association and a Village Conservation Team. A village may organize Landcare Association sub-chapters in their sub-villages. A sub-village conservation Team usually includes a local farmer technologist, the sub-village leaders and the councilor assigned in that sub-village. The sub-village conservation 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 village and municipal levels.

At the municipal level, the Landcare Association is a federation of all village level Landcare groups. The municipal conservation team is part of support structure, which also includes other organizations that can assist the chapters for the organizational setup of the Claveria Landcare Association (CLCA). It is a people's organization registered as an association with the Philippine Securities and Exchange Commissions (SEC) in 1996.

Fig. 2 : Conservation Team as key component of Landcare approach



#### ATTRACT LOCAL GOVERNMENT SUPPORT

Local governments 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 activities on environmental conservation. These can be targeted to Landcare activities that enhance natural resource conservation. The municipality can be encouraged to develop to a formal natural resource management plan—such as the one in Lantapan which can help guide the allocation of funds.

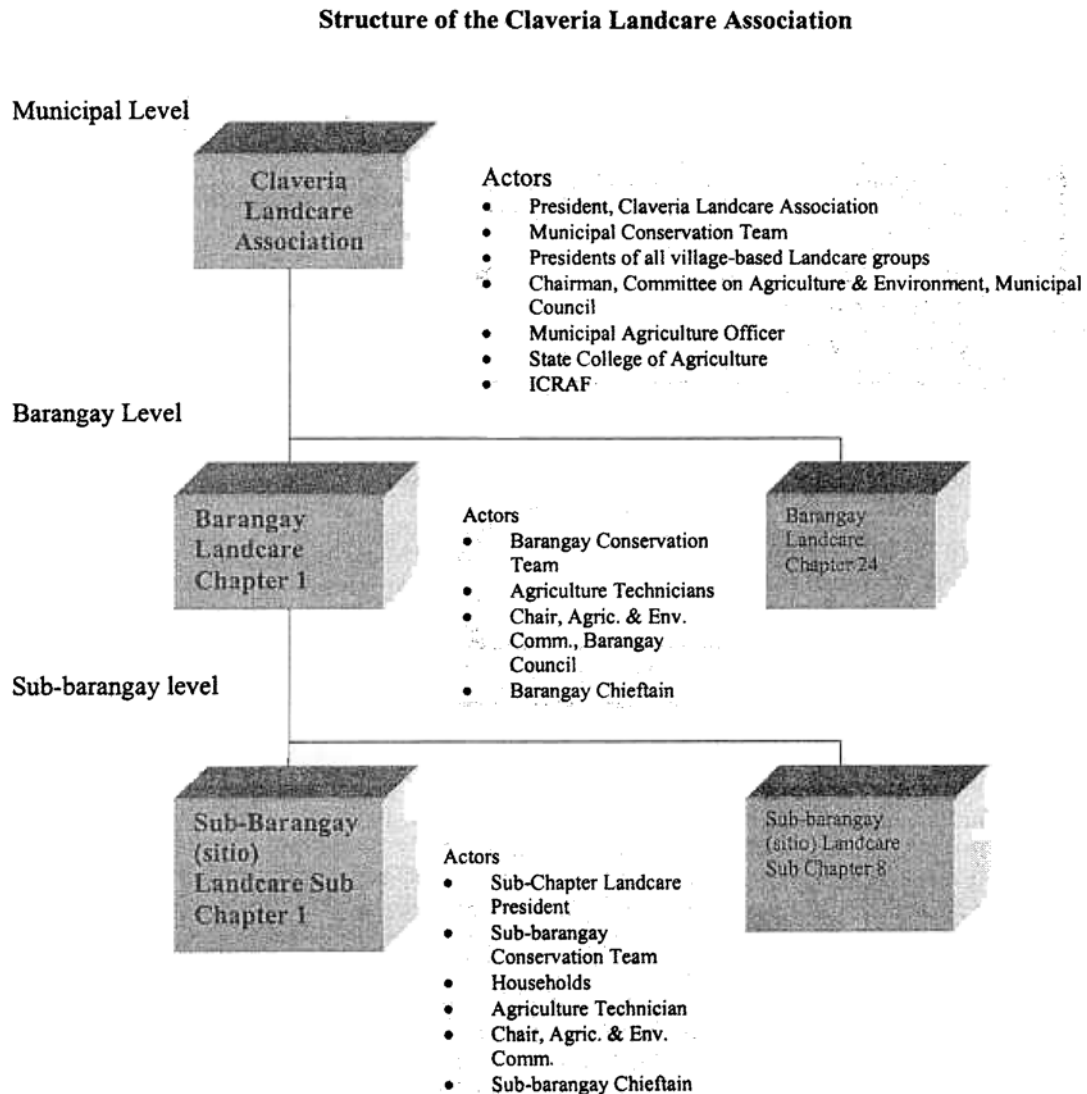
The villages can also allocate financial resource from their regular internal revenue allotment (IRA) through the Human Ecological Security (HES) Program, which represents one fifth of the total development funds of the village. These funds can be used to organize the conservation teams and Landcare Association activities at the village level. The municipality can also compliment HES funds to the villages, just like what happened in Claveria. The municipality allocated 50,000 pesos (about 1,250 US\$) to each village to support Landcare activities. External donor agencies can best support Landcare development by allocating resources for leadership and human resource development, communications equipment and transportation to enable the Landcare leaders to make maximum use of their time.

#### 6 MONITOR AND EVALUATE

Monitoring is a necessary tool to assess the progress of the activity and use outputs for strategizing activities or planning actions to make the program more dynamic and relevant to the needs 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 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 leaders 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 the sub-villages and new CLCA members.

Fig.3: Organizational structure of Landcare in Claveria



### 3.0 Project Focus

The project aims to scale-up horizontally and vertically, conservation farming and agroforestry technologies through the Landcare approach and natural resource management planning processes from Claveria and Lantapan to other municipalities in Misamis Oriental and Bukidnon with vision for regional and national scaling-up. The scaling-up objectives are twofold: first is the dissemination of simple, low-cost and effective soil and water conservation technology, which is the NVS and agroforestry practices---second is, sharing of technology dissemination methods, process and approach which are; the Landcare approach and the Natural Resource Management Planning Process.