PO-NGO-LGU Partnership in Natural Resources Management: 
Landcare Experiences in the Philippines

by

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Abstract

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. From its humble beginning of 25 farmers in 1996, they evolved into a dynamic voluntary movement with now more than 500 farmers involved into 250 groups from 5 municipalities in northern, central and eastern Mindanao. Today, Landcare becomes the melting pot for farmers, professionals, government people, students and the business sector 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 the people and their communities. The success of Landcare stemmed mostly from the strength of a tripart relationship of three key actors: the farmers and other community members, the Local Government, and Technical Facilitators. These three actors depend on each other, finding strength in working together - thus, forming an interdependent relationship to form a solid base for participatory program management.

Although, our experience in Landcare is just recent, we believe that the lessons drawn are enormous and have potential application to a range of development issues. Participation in the triadic approach is fundamental in Landcare, but we also recognized that utopian participation is far below from reality. Participation is not absolute, and may not be necessary in some situations, but it can be, and should be maximized to serve its best purpose and utility. The triadic approach, as has been effectively applied in Landcare is largely applicable to any development program, because the essential elements comprising this approach are simple and basic. Following broad participatory principles, right motivation, trust, identification of common issues and partnership building, are fundamental elements that enhance participation in Landcare. What is perhaps, unique in Landcare, is its flexibility and openness to range of issues and the members ability to adopt alternative approaches and methods that suit local conditions. Landcare started small with tackling soil erosion problems on farmlands, and as they grow, their interests have become broader and their actions are now leading to solving much bigger environmental issues in the community. Landcare enjoys the freedom to choose from a suit of alternative technologies and innovate these technologies to the best advantage of the members.

Participatory project management requires a great deal of hard facilitation work. It is often costly at the beginning, but the perceived benefits can be much higher. It is an investment requiring much human capital, commitment, trust and relationship building. These are basic requisites to participatory project management. Foremost, it should be aimed to address the participant’s needs, rather than, the needs of project management and donors.

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1.0 Introduction

The world vision for development believes that for programs to have lasting impacts, it must have community participation and well-grounded community support. This is typified by projects like Area Development Program (ADP), known for its multifaceted approach (Arnold, L. 2000). For most of the practitioners today, development is best expressed not only in terms of number of things done in the community, but as a learning process by which communities are empowered to recognize and overcome factors that are negatively affecting them. Development people can facilitate, provide advices, develop capacities or lend their expertise, but the communities are encouraged to develop themselves.

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, but observed that adoption of 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 pruning, and poor species adaptation. Moving on this concern, we refocused our efforts toward finding alternative systems that address the technical 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. NVS has been practiced by few a farmer for some time in Claveria. Researchers verified the efficiency of the technology through rigorous on-farm participatory trials. 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 agro forestry systems with fruit and timber trees. We now see a tremendous surge for adoption of this system, enhanced by dissemination approach, called “Landcare”.

From the lessons we distilled from working in participatory research and Landcare, we recognized that participation is crucial in all phases of any project or program development. But, we also learned that participation can never be absolute, it can however, be enhanced to maximize its potential use. Participation is not only about numbers, it is more about the quality of inputs provided by those who participated in any participatory event. It is not only important to engage a range of stakeholders, but also to ensure that their individual contribution would surely reflect the group’s resolution, resulting in then development of a shared vision and sense of commitment and ownership.

2.0 Background

2.1 The Project Sites

The project sites are located in two adjoining provinces in Northern Mindanao namely: Misamis Oriental and Bukidnon. In Misamis Oriental, the local 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 plateau and I 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/yr rainfall). About 95% of the cropping activities (mostly corn and some vegetable) occur on lands 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 area in Southeast Asia. Soils in Claveria are degraded and acidic (ph 4.5-5.2) with low available P.

In Lantapan, farmers predominantly grow corn throughout the landscape. Sugarcane is also becoming an important industrial crop and high valued vegetable area 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 reserved watershed in 1992. The upper northwest portions 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 lowland 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 2,928 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.

2.2 The Evolution of Landcare

In addition to conducting applied research resulting in the development of appropriate technologies for the area and of sites similar biophysical conditions, ICRAF initiated 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 governments 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 the 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 local 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 the environment.

2.3 What is Landcare?

Landcare as a method of approach, rapidly and inexpensively diffuses conservation farming technologies and agroforestry practices among upland farmers, based on the innate interests of farmers in learning and sharing knowledge about new technologies that earn more money and conserve natural resources (Garrity and Mercado, 1998, 200). 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 recognized 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.

![Image of the triangle of Landcare](image-url)

Fig1: The triangle of Landcare: grassroots Landcare groups, local government units (LGU) and technical service providers and facilitators (ICRAF, DA, DENR). 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 farmers. That group of 25 farmers made the history of Landcare in Cleveria. 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 (purok or sitio) 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 on protected areas, on riparian areas, and some were planted on small-scale plantations. Some groups have also linked with other service providers, including the business sector for funding of their nursery activities and livelihood projects. Landcare in Lantapan started early last year, but have gained remarkable accomplishment in terms of the diversity of activities that farmers and communities are working on to address environmental problems and the support they are getting from the business and professional sectors.

2.4 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 Governments Units (LGUs) can provide**
   - Policy support for the institutionalization of conservation farming, agroforestry 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 resources management
- Facilitation for Landcare formation and their activities
- Information, Communication and Education Programs
- Network-support for Landcare groups

### 3.0 Participation: Key Elements of Success in Landcare

Along with rich natural resource endowments, our workplace in Mindanao is also known for its rich socio-political cultural diversity. The rich mix of culture, origin, language and economic conditions all clustered in geographic communities, pose greater challenge amongst different communities in the Philippines, not just in increasing participation, but as well as, in attaining a solid and high quality participation in these communities. While our experience in Landcare is just recent, we begun looking at the essential elements behind any amount of success in Landcare and NRM. Needless to say, “Participation” is the central ingredient for sustaining development, but, there are more than a complex set of elements contributing to participation. Why people participate? How people participate and for what benefit does participation brings? Are some questions we normally contend in any development endeavors. We identified the following elements contributing to the development of a participatory process in developing Landcare:

- **Right Motivation.** Motivation can either be intrinsic or extrinsic- project participants have different motivational drives. Farmers perceived both intrinsic and extrinsic benefits in Landcare and are motivated by these forms of benefits. At the beginning, extrinsic motivation play most part in achieving participation in Landcare. This can be technical assistance, trainings and facilitation provided to Landcare groups. Eventually, when their experiential aims are beginning to be met, they started appreciating their own actions and begin to examine the intrinsic benefits they are getting from being in groups. This resulted to individuals becoming intrinsically self-motivated to do something positive for the larger group.

- **Development of Trust.** Public participation requires a great deal of trust and have to be taken cared, because of the critical danger of distrust that lies ahead within any participatory arrangements. In Landcare and NRM, we build the trust from years of successful research through a collegial approach in on-farm research and by treating farmers as partners, rather than clients or beneficiaries.

- **Identification of common issues and problems.** Identification of one’s problem and relating this with the same problem in another area will help farmers draw a picture, locating themselves in the bigger picture and will let them feel an integral part of potential solutions to bigger problems. It’s about belongingness, ownership and contribution that enhances participation. In Landcare, farmers relate their farm problems within smaller catchments, to municipalities, provinces, regions and globally, recognizing the internal consequences of the overwhelming externalities viz a viz, the potential effects of their practices and problems affecting the wider community.

- **Partnership-building between and among groups, governments and non-governments agencies.** Partnerships in Landcare are base on Equality and equity of
inputs and outputs. This means an equal partnership among all key actors. The cost of every activity is shared by key actors in Landcare and the outcomes are perceived to have benefits to greater communities and society. Nobody owns Landcare, except Landcare itself, and if you take care of Landcare, it will care of you in return.

4.0 Lessons Learned: “Participation in Landcare”

- Participation is not absolute, it can only be maximized. Project participants must be identified on the basis of its potential contribution to the participatory process and their stake to expected project input and outcomes.
- Participation can be in any forms. It is important to determine the type of participation applicable in the project, and this have to be understood by the participants in order that they can best share what is expected of them.
- It is best that the project management team, ideally involving representative from grassroots participants set the level and degree of participation expected from project participants. This will help also in identifying potential project participants.
- Any participatory event is a process, not an activity. Outcomes may take some time to surface.
- Participation is more than just numbers, but the quality of inputs from the project participants.

5.0 Relationship of Participatory Project Planning to Implementation and Evaluation

As always, the relationship of planning to implementation and evaluation follows a particular logical framework or cycle. First, during planning stage, set of reasons for undertaking projects are well-articulated in terms of visions, goals and objective-strategies. To reach the visions and achieve the objectives, the implementation mechanisms have to follow, requiring resources for mobilization. Upon implementation, outputs are expected which should lead to desired outcomes that meet the stated vision, and that which are made known through monitoring and evaluation. Results in the evaluation are analyzed to serve as basis for re-planning and implementation. But, what should strongly bind this relationship is the essential element of “participation”, which is often hardly achievable at an absolute level at different stages in the project life.

Fig. 1 Participatory Project Life Cycle
6.0 General Concepts, Principles and Processes in Participatory Project Planning, Implementation and Evaluation

6.1 General Concept and Principles

Participatory project design, implementation and evaluation should be an iterative, transformative-learning and development process of involving participants in planning, in carrying-out task to meet desired outputs, in monitoring progress and evaluating outcomes. Quite simply, this means having people (stakeholders) who are directly involved or affected by the project participate in the process from planning to evaluation. Participation however, should not be disillusioned by expecting everyone to be involved in all the processes. At the start, it is useful to identify the project participants and define the degree (quantity) and level (quality) of participation expected from each of them. A review of different participatory typology can be helpful, e.g. Participation by Consultation. In participatory project designing, implementation and evaluation, Project Management, Donors and Technical Persons should consider and respect grassroots participants as equal partners, such that, a collegial working environment and trust-building will occur, and to carry-on this process will require special facilitation skills. Any participatory event needs technology in facilitation, rather than prescription.

*Fig. Key Questions in initiating Participatory Event*
Reminders in initiating Participatory Event

- While you may want to involve as many stakeholders as possible, it is difficult to involve everyone. Participation is important, but there is no absolute participation. You need to determine who your most eligible participants based on pre-set criterion reference.
- People have individual differences and will be demonstrated in many ways in any participatory event.
- Participation can come in different forms depending in the nature, drives and motivation of participants.
- Facilitators’ skills are most important in carrying out participatory process.

6.2 Lessons learned from Participatory Project Management

**Project Planning Phase**

- The project plan must be flexible to respond to varying and constantly changing situations
- Participation by farmers in project planning is important starting with community appraisal and needs assessment as perceived by the community itself. This will create enthusiasm, eliminate suspicion about the project and helps validate the plan.
- Statement of objective should be in terms of specific benefits to be gained by project participants. It is important, that the goals and objectives are set by the participants themselves with the project staff as facilitator.
- Plan also for project phase-out mechanism.
- Community organizing, technical and process facilitation is critical as early as this stage.
**Project Implementation Phase**

- Project staff must establish and sustain credibility throughout the project life. If possible, they should live in the area and have regular interaction with the ability to listen and not pre-judge. It is also important that they set their foot on the ground and being open and honest.
- Start the project with precise and deliberate, but flexible steps and start it small.
- Promise something only when you are absolutely sure to deliver.
- Encourage participants to try their own ways or engage in small-scale trials.
- Avoid outright dole-out.
- Organize work-groups for short-term project activities (bayanihan, alayon, etc.). Grouping may be done by sector (e.g. kinship circles, youth group, women’s group, etc.).
- Promote linkages with LGUs, GOs and other NGOs.

**Monitoring and Evaluation Stage**

- Continuously extract feedback from participants done through personal interactions, progress reports, regular meetings/workshop, etc.
- Constantly monitor progress of program activities. This will help developing mid-course actions.
- Maintain tact in getting feedback (farmers are usually shy or not openly critical and therefore, may not be telling the truth).
- “Zero in” on appropriate technology adoption (degree of participation) and technology effectiveness/impact especially on individual areas.
- Involve both internal (by “actors” in the project) and external evaluation (by non-participating individuals and visitors) teams.
- Conduct process documentation (serves as feedback mechanism and as tool for enhancing the “learning” process).
- Use progress indicators in evaluating the project performance.
## 6.3 Participatory Project Planning, Implementation and Evaluation

### Participatory Event

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<thead>
<tr>
<th>Project Planning</th>
<th>Activities</th>
<th>Techniques</th>
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<tbody>
<tr>
<td>1.0 Determine Project Participants</td>
<td><strong>Group Brainstorming by project initiators</strong>&lt;br&gt;<strong>Simple information gathering</strong>&lt;br&gt;<strong>Group brainstorming by project initiators</strong></td>
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<tr>
<td>2.0 Develop a Participants’ Profile</td>
<td><strong>Review of participatory approaches</strong>&lt;br&gt;<strong>PRA tools, Problem Tree Analysis</strong>&lt;br&gt;<strong>Consensus-building and action planning workshops</strong>&lt;br&gt;<strong>Field verification, Focus-group Discussion</strong>&lt;br&gt;<strong>Workshop, Writeshop, Plan Approval</strong></td>
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<tr>
<td>3.0 Determine Participatory Mode applicable for the project (e.g. by consultation, interactive, functional etc.)*&lt;br&gt;4.0 Develop specific tools useful for the participatory mode</td>
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<tr>
<td>5.0 Conduct information gathering using a variety of PRA tools</td>
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<td>6.0 Implement a participatory planning event using technology of participation such as: workshops, action planning and discussion methods</td>
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<td>7.0 Verify the project plan with other stakeholders not included in the planning</td>
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<td>8.0 Review, Refine and Finalize the Plan</td>
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### Project Implementation

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<tr>
<td>1.0 Conduct Stakeholders’ Meeting and Investment Forum (Memorandum of Participation maybe signed by all stakeholders involved in planning to cement the relationship and commitment)</td>
<td><strong>Meeting and brainstorming</strong>&lt;br&gt;<strong>Tasking workshop, Completing a Victory Circle Workshop</strong>&lt;br&gt;<strong>Gantt Chart, Calendar or Activity Matrix</strong>&lt;br&gt;<strong>Progress Monitoring Chart, Diagnostic Cards etc.</strong></td>
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<td>2.0 Assign tasks and encourage the stakeholders to partake in the implementation by streamlining their own activities towards meeting the objective of the plan</td>
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<td>3.0 Prepare detailed program of work of key activities</td>
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<td>4.0 Review of indicated output, performance and outcome indicators (previously identified during planning)</td>
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<td>5.0 Take-off for implementation.</td>
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### Project Monitoring and Evaluation

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<th>Designing the Monitoring and Evaluation Design /Process</th>
<th>Techniques</th>
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<tr>
<td><em>Draw a framework of progress to be monitored and impacts to be evaluated (this include answering questions on why, who, what to monitor and for what? &amp; who will compose the M &amp; E team?)</em></td>
<td><strong>Brainstorming, Consensus Building Workshop</strong>&lt;br&gt;<strong>Action Planning</strong></td>
</tr>
<tr>
<td><strong>Implementing the M &amp; E Design and Process</strong>&lt;br&gt;Pre-field Information gathering (maybe referred to previous site and project characterization study done during PRA at planning stage)</td>
<td><strong>Review of site characterization study</strong>&lt;br&gt;<strong>Quick and informal survey</strong>&lt;br&gt;<strong>Variety of tools can be used e.g. Diagnostic cards, data board, survey</strong>&lt;br&gt;<strong>Tabulation of Results, Current-Reality Dialogue, Decision Tree Analysis, diagramming, matrix analysis</strong>&lt;br&gt;<strong>Workshop</strong>&lt;br&gt;<strong>Group Resolution Workshop</strong>&lt;br&gt;<strong>Decision Tree Analysis</strong>&lt;br&gt;</td>
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**Tips for Community Involvement in Project Management**

- Be clear about what the project aims to achieve and their expected outcomes as a result of implementation.
- Be clear about relationships and the terms of partnership e.g. their roles, equity, responsibility and perceived benefits.
- Keep processes clear, quick and simple.
- Maintain open communication and regular feedback of progress, problems and solution taken.
- Maintain enthusiasm and momentum by always updating them of information relevant to the project. Keep them abreast of rich information.
- Decision-making should be based on the group’s consensus.
- Working in communities involves a great deal of trust- and relationship building. An experienced Facilitator is much needed to build community relations.
- Disseminate timely results, progress and accomplishments.

### 6.0 Reference


