

Chapter 9

Scaling Up Landcare in Multiple Sites: A Cross-Case Analysis

9.1 Introduction

The Landcare Program in Claveria achieved its results due to a favourable environment, in which locally adapted technologies had emerged, the local government unit (LGU) was supportive of grassroots initiative and had the desire to work with farmers and other agencies, and ICRAF provided a long-term research and extension presence. The actors were in the right circumstances to become effective catalysts for making wider change that met community aspirations. The initial success of Landcare in Claveria raised the question of how it might work in various locations with similar or differing conditions. This chapter compares the implementation of the Landcare Program in the scaling up sites. Specifically, it presents the different modes of scaling up, the resources used, the outcomes, the issues and challenges met, actors' perspectives, the factors enhancing and limiting success, and the characteristics that made the Landcare Program capable of scaling up. The chapter concludes with a discussion of the preconditions for effective scaling up.

9.2. Modes of Scaling Up the Landcare Program

ICRAF did not have a deliberate plan for scaling up at the start. The scaling up effort was incidental to the initial success of the Landcare Program in Claveria. The different modes of scaling up were conceptualised in response to new opportunities and ICRAF's underlying goal to understand how the Landcare Program could be scaled up at the least possible cost.

Without a detailed scaling up strategy, ICRAF began at its research site in Lantapan, and in Manolo Fortich where it had an on-going research activity on natural resource management (NRM) planning with the municipal governments. In Malitbog, the Municipal Agricultural Office (MAO) was approached by ICRAF about Landcare based on the interest of farmers who had earlier visited Claveria. ICRAF researchers were confident that the promoted technologies were relevant to the biophysical and socio-economic conditions of the farming

communities, and that the landcare approach was appropriate for agricultural extension and NRM. The hypothesis was that the landcare approach could be adopted in different sites with progressively fewer requirements for technical and institutional input from an external agency. Thus ICRAF had a universalist view of farmers' need for technologies and of the broad relevance of the landcare approach. However, notwithstanding this universalist perspective, ICRAF considered local specificities, and found a way to contextualise Landcare in Lantapan and Manolo Fortich through "integration" in the municipal NRM plans, rather than imposing it as a new initiative with a project nomenclature. Comparing these sites to Malitbog, however, the latter was more internally driven in that a number of farmers had initially expressed their interest, and ICRAF was being responsive of this interest. Hence, both universalist and contextualist perspectives were implicitly considered in scaling up. In brief, the bases for scaling up were (1) the initial success in Claveria, (2) a universalist view of the broad relevance of the promoted technologies and the landcare approach to upland conditions, and (3) a contextualist principle emphasising local demand.

The pathways, strategies, nature of activities, and varying levels of technical and institutional input constituted the different modes of scaling up at each site (Table 9.1). Municipal governments were the most common pathway for scaling up. With decentralised governments, LGUs have a legitimate stake in NRM and sufficient autonomy to act on their decisions, hence their support was actively sought. Integration of Landcare within their existing programs (e.g., NRM plans, agricultural extension program) was a common strategy of the three modes of scaling up. Uvin et al. (1994) say that integration is desired by an increasing number of non-government organisations (NGOs) because it offers the fastest possibility for significant scaling up. However, this required the LGU to adopt the principles of the Landcare Program (e.g. participatory, farmer-driven) and, at the same time, ICRAF needed to adjust to the LGUs' administrative and political systems, sometimes even to a politician's personal whims. For instance, in Manolo Fortich the structure of Landcare from the sitio to the municipal level as developed in Claveria was modified because the mayor pursued the idea of training barangay facilitators, which was insufficient in terms of generating support at various levels (sitio, barangay, and municipal levels). Clearly, the interaction and relationship of the key actors was crucial, sometimes resulting in painful compromises and tradeoffs.

Table 9.1 Components of ICRAF's modes of scaling up Landcare in the study sites

Mode	Site	Year Started	Pathway	Strategy	Type of Activities	ICRAF Support	LGU Support
1	Lantapan	1997*	Local Development Planning	Integration in the Municipal NRM Plan	Direct impact activities	Full staff support but less than Claveria	Low level financial and human resources
2	Malitbog	1998	Agricultural Extension	Integration in the Agricultural Extension Program	Combination of direct and indirect impact activities	1 full time Landcare facilitator	Low to medium level financial support; High level human resources
3	Manolo Fortich	2000	Local Development Planning	Integration in the Municipal Comprehensive Plan	Indirect impact activities	1 part time Landcare facilitator	Low level human resources

*Landcare was introduced to the LGU in 1997, but on-ground activities started in 1999.

The three main types of scaling up activities were: (1) direct impact activities, where an ICRAF staff member was engaged to work directly with farmers, with implicit goals of influencing the institutional partners; (2) a combination of direct and indirect impact activities where an ICRAF staff member worked with farmers and the LGU to demonstrate and train the technicians to facilitate Landcare; and (3) indirect impact activities such as conducting training sessions and hosting farm visits to influence the partners to implement their own activities. In one sense, the Claveria case followed the first type when it scaled up Landcare within the municipality. The Lantapan site also followed the first type, while Malitbog used the second type, and Manolo Fortich used more of the third type.

According to Uvin & Miller (1996), indirect impact activities enable scaling up without necessarily expanding the organisational base of the supporting institution and is a common approach among NGOs. However, they add that there is a great potential for synergy between direct and indirect impact activities. In ICRAF's case, working directly with farmers and the LGU helped to build its track record, and made it more confident to enter into indirect impact activities with partners in other sites. Figure 9.1 illustrates the three types of scaling up activities in the study sites.

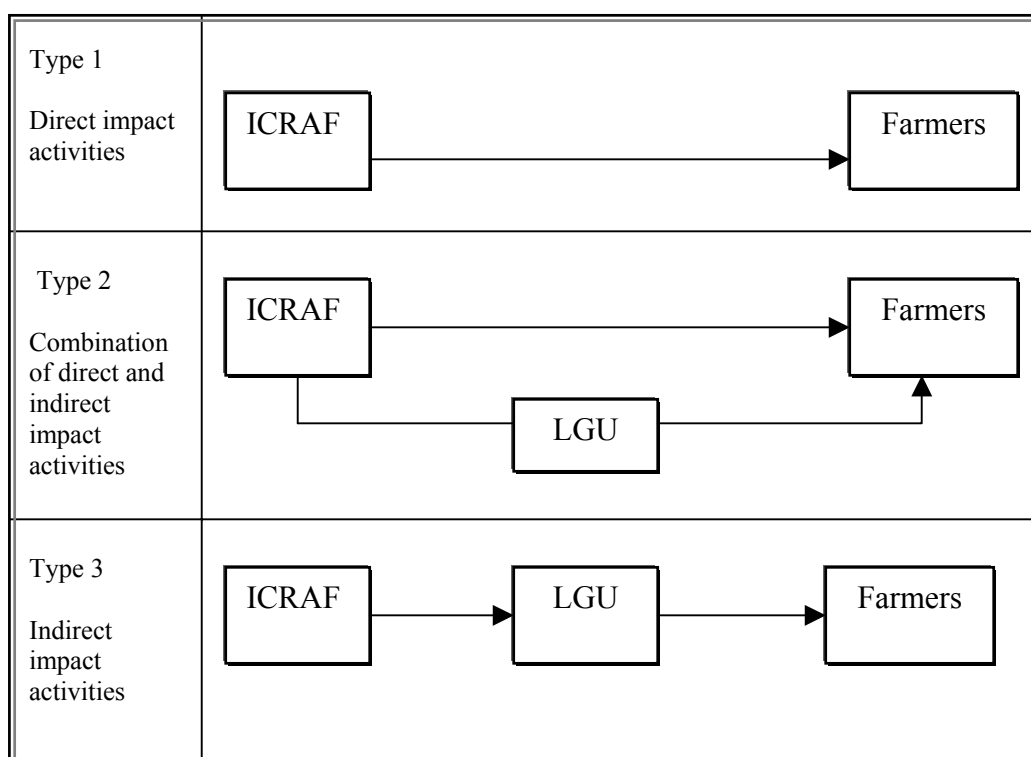


Figure 9.1 Types of scaling up activities

9.3. Resources Used in Implementing the Landcare Program

As mentioned earlier, ICRAF researchers hypothesised that the Landcare Program can be scaled up at lower cost with fewer requirements for technical and institutional input than had been provided in Claveria. Hence, Lantapan had fewer facilitators than Claveria, while Malitbog had one full-time facilitator and Manolo Fortich had a part-time facilitator (Table 9.1). Although ICRAF provided additional resources to cover the scaling up sites, the cost of scaling up per site was low relative to the outcomes. Also, the LGUs had different levels of investment ranging from modest to almost none. Thus, the Landcare Program was implemented through varying levels of technical and institutional support, depending on the mode of scaling up and the resources available to the actors involved (Table 9.1).

9.3.1. ICRAF's Resources

Figure 9. 2 shows the annual direct costs incurred by ICRAF in implementing Landcare in the study sites. This was principally due to the employment of Landcare facilitators and operating expenses at its core sites, which averaged, 1,500,000 pesos per year for Claveria

and 1,000,000 pesos for Lantapan. This was equivalent to about 40 per cent of the MAO's annual budget in these municipalities. In the case of Malitbog, ICRAF's annual direct costs were lower (334,500 pesos), equivalent to five per cent of the MAO's average annual budget, and much lower in Manolo Fortich (95,600 pesos), equivalent to about two percent of the MAO's annual budget.

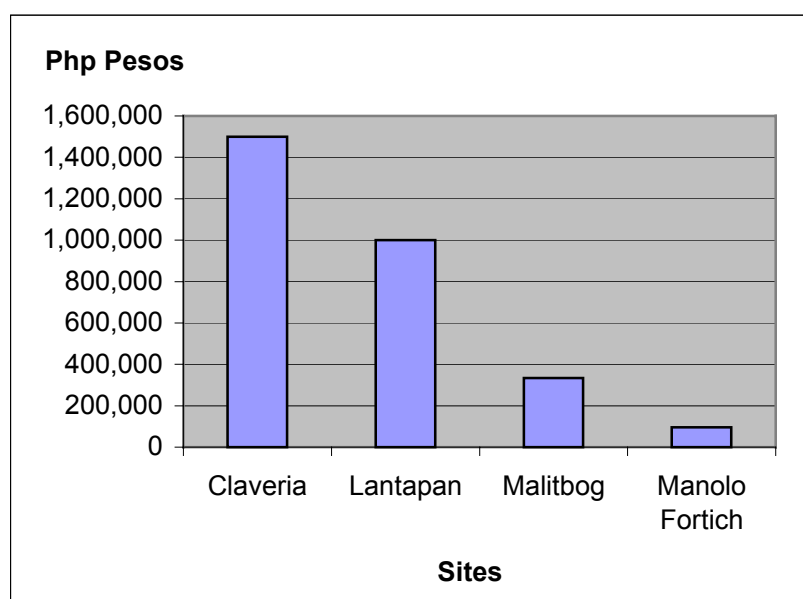


Figure 9. 2 ICRAF's annual costs for the Landcare Program in the study sites

The budget for Landcare in Claveria and Lantapan had started to decrease in 2001 and was mostly for improving institutional capacity (e.g., staff mobility, developing training programs) than directly funding on-ground activities, since the local actors (e.g., LGUs, farmers) had taken up the responsibility for funding on-ground activities such as training and meetings. By 2002, the number of staff had also decreased, even if scaling up efforts continued. With limited staff, greater emphasis was placed on building strategic partnerships, engaging in indirect-impact activities (e.g., training, hosting project visits, etc.) and training the Landcare facilitators. The staff had established horizontal links with local agencies, and vertical links with provincial governments and national and international agencies. Hence, large amounts of funding were not essential for scaling up.

9.3.2. LGU Resources

As shown in Table 9.1, the level of LGU support to the Landcare Program varied as much as ICRAF's support. For instance, the LGU's direct cost for Landcare in Claveria was 1,200,000 pesos per year.¹ This was only 20 per cent less than ICRAF's direct costs. Meanwhile, the LGU's contribution for Landcare in Lantapan was hard to trace, though it was estimated to be much lower than ICRAF's costs. In Manolo Fortich, the LGU had almost no direct financial cost, but the involvement of personnel was significant and was considered the key resource. In Malitbog, the LGU's costs (444,000 pesos) were due to staff salaries and support for training and cross-farm visits, which was 14 per cent higher than ICRAF's costs. The contribution of the barangay government in various landcare activities was also significant.

From a purely financial perspective, the LGUs had the financial capacity to implement a Landcare Program. The majority of LGU informants in the study sites agreed this view. Nonetheless, it would be necessary to top up the current budget of the MAO with new funding if they were to launch a Landcare Program. This would be needed for training the technicians in facilitation skills and new technologies, for producing quality extension materials, and for increasing the technicians' travelling allowance. Additionally, it would be desirable to recruit better-qualified staff or technicians, since the number of technicians was in any case limited at each site. Alternatively, the LGUs could start by re-aligning their existing budget to support Landcare or leverage funding to acquire external support.

9.4. What Aspects of the Claveria Landcare Program Were Scaled Up?

What was it about Landcare that ICRAF was trying to scale up? The key to understanding this lies in unpacking the Landcare Program that had evolved in Claveria. As conceived by ICRAF, the Landcare Program involved technical and institutional innovations, described as the "landcare approach", with three cornerstones, namely, appropriate technologies, institution building, and partnerships. Technical innovations were based on natural

¹ This was the annual allocation of the municipal government to support the establishment of nurseries and other Landcare activities at 50,000 pesos per barangay (see Chapter 5). It was learned, however, that this amount was not fully utilised for this purpose. Some less-active barangays diverted these funds for other purposes.

vegetative strips (NVS) and branching pathways for agroforestry development typically starting with nursery establishment. The three-way partnership of farmers, LGU, and technical facilitators (in this case, ICRAF) was described as the landcare triangle, and was considered an institutional innovation. Another institutional innovation was the formation of landcare groups and associations. Activities included training, cross-farm visits, slide shows, formation of landcare groups, and farmer extension of conservation technologies, among others. Facilitating these activities was a major component of the Landcare Program. Volunteerism, participation, and self-help initiatives were important values of the Landcare Program. Ultimately, scaling up both technical and institutional innovations was envisaged, however some aspects were modified to adapt to the local situation.

Technical innovations were more easily disseminated because of their adoptability across the different sites. The implementation of simple technologies such as NVS was well within the farmers' own capabilities. Some farmers went on establishing NVS without the assistance of a facilitator or technician, or of a fellow farmer. Apparently, many qualities of the NVS technology satisfied Rogers' (1995) criteria for the adoptability of an innovation, as discussed in Chapter 2. The development of community tree nurseries has also proven to be quite practical through volunteer effort. Hence, the technical aspect of Landcare was more easily adopted, supported with training and facilitation.

As seen in the cases of Lantapan and Manolo Fortich, the process of partnership building and group formation that had evolved in Claveria was modified to meet local circumstances, whereas in Malitbog these were more easily replicated due to a favourable political climate. Specifically, the involvement of local officials from the sitio to the municipal level was replicated in Lantapan and Malitbog, while Manolo Fortich "reinvented" the approach by relying on trained barangay facilitators and the municipal Landcare Coordinator, rather than the sitio and municipal structures. Hence, the adoption of the institutional innovations in their original form was less assured. In general, the technologies were easily adopted than the Landcare process.

Clearly, scaling up requires adaptation because local situations have a life of their own, which means that different decisions are taken about how the same program is put into

practice. Schorr et al. (1999) say that scaling up requires flexibility, as a single model cannot be expected to work everywhere. The literature suggests that “adaptation” is the way forward, but the caveat is that the program could turn out to be significantly different from the original model. This issue was becoming apparent in the study sites, and ICRAF researchers were now challenged to articulate the fundamental elements of Landcare and to establish certain criteria of effectiveness in order to maintain the distinctive characteristics that made it successful even when adapted to new situations. Oudenhoven & Wazir (n.d.) and Pretty (1998) also argue that, in scaling up, the essence of a successful intervention should be kept while adapting many of its components to local circumstances.

Institutionally, ICRAF employed a combination of the features of Oudenhoven & Wazir’s (n.d.) pathways to scaling up, namely concept replication and endogenous replication. The notions of concept and endogenous replication do not require strict adherence to specific strategies or activities. ICRAF researchers and facilitators embraced local complexities as far as possible by employing flexible strategies rather than imposing standard procedures. Additionally, the demand for Landcare, particularly in Malitbog, came from below, and the information about Landcare was accessed through informal contacts.

9.5. What Were the Benefits and Impacts?

While complete evaluation of the impacts of the Landcare Program was beyond the scope of this study, an attempt was made to assess the progress of the Landcare Program in terms of meeting its goals in relation to the resources used, and considering different timeframes at each site at the time of this study (Table 9.2). The Landcare cornerstones, namely, technology adoption, partnership building, and institutional development, were used as indicators to reflect the progress of the Landcare Program in the study sites.

Table 9.2 Timeframe of the Landcare Program in the study sites at the time of study

Sites	Timeframe
Claveria	1996-2003
Malitbog	1998-2003
Lantapan	1999-2003
Manolo Fortich	2000-2001

9.5.1. Rate and Extent of Technology Adoption

Since the Landcare Program did not start at the same time in the study sites, it was important to examine the rate and extent of technology adoption in relation to number of years in which the Landcare Program was implemented, the number of potential adopters, and the potential cropped area on which conservation technologies could be applied. In this case, the total number of farming households was considered the upper limit of potential adopters. Relatedly, the total cropped area was assumed to be the upper limit of the potential area to be applied with conservation technologies. These assumptions were made due to lack of data on potential adopters, and assuming that agroforestry can be applied to both flat and sloping lands.

The rate of technology adoption was unprecedented in the study sites. On average, 60 per cent of initial NVS adopters had moved on to include agroforestry, which involved planting timber and fruit trees and perennial crops such as banana or coffee along the NVS, on farm boundaries, and in small woodlots within a farm unit. Because of the growing interest in agroforestry, the number of trees planted by farmers in the four sites had reached 472,000 by the middle of 2003, with Claveria the highest, followed by Lantapan and Malitbog, and Manolo Fortich the lowest (Figure 9.3). The survival rate of planted trees, however, had not been accounted.

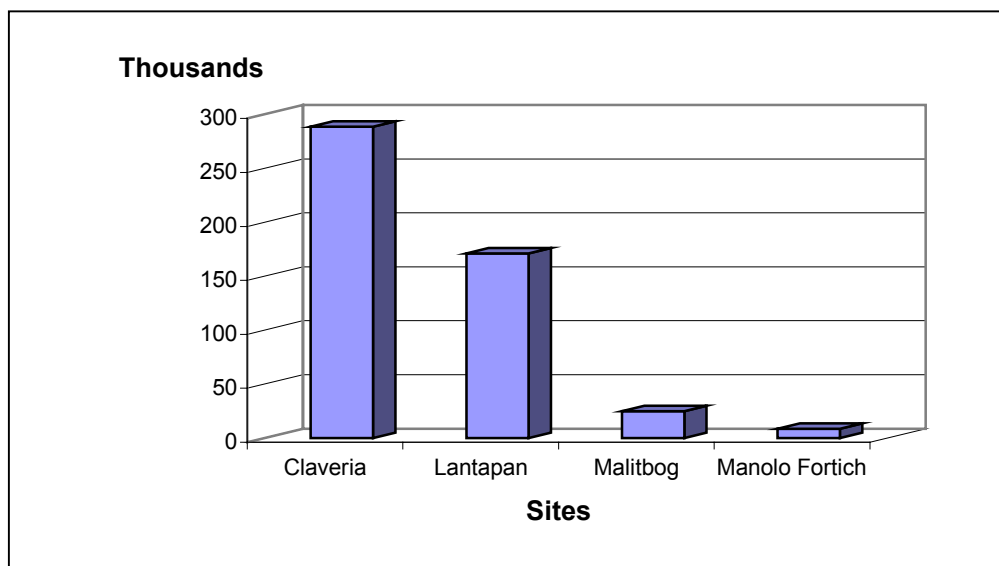


Figure 9.3 Timber and fruit trees planted in the study sites, 1996-mid 2003

During the Landcare Program (from 1996 to 2003), the total number of farmers who had adopted NVS and agroforestry (or conservation technologies) in the four sites was nearly 3,000 with Claveria the highest, followed by Lantapan and Malitbog, and Manolo Fortich the lowest (Figure 9.4). The total area on which these technologies were applied was 3,448 hectares (Table 9.3).

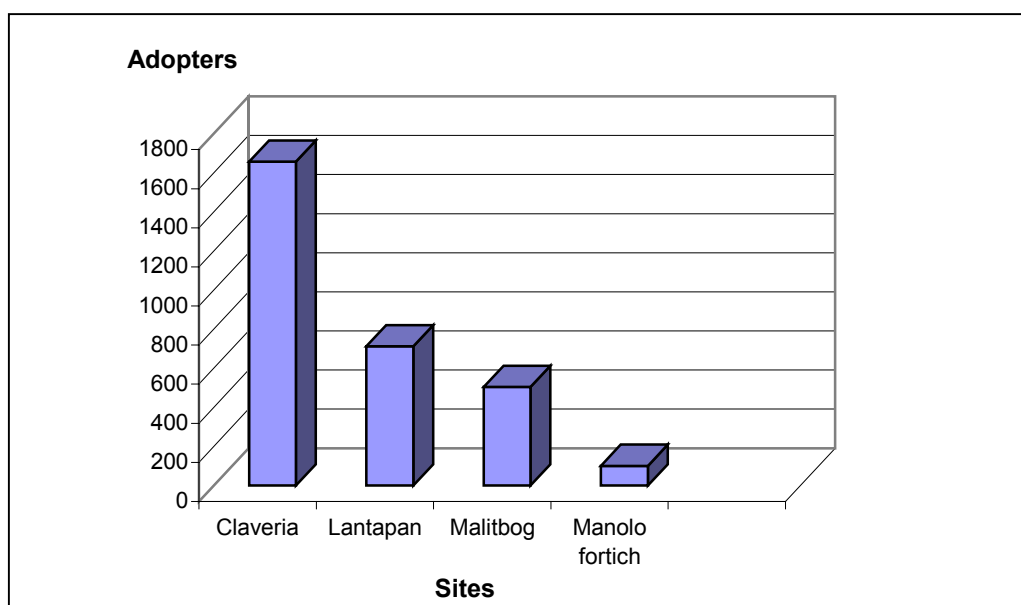


Figure 9.4 Cumulative adoption of NVS and agroforestry practices, 1996-2003

Table 9.3 shows the extent of adoption in relative terms, enabling a better comparison between sites. The percentage of total cropped area applied with conservation technologies was 11 per cent in Lantapan and Claveria and 8 per cent in Malitbog, but negligible in Manolo Fortich. Thus, where Landcare was successfully scaled up, the area and extent of adoption was quite similar despite large differences in the total cropped area. The proportion of actual adopters to potential adopters was much higher in Claveria (27 per cent) than in Lantapan (13 per cent) or Malitbog (15 per cent). However, it should be considered that the number of potential adopters in Lantapan may have been much lower than indicated in Table 9.3, since the number of farming households had decreased due to employment in agribusiness firms. The average rate of adoption was also higher in Claveria (236 per year) than in Lantapan (178) or Malitbog (100).

Table 9.3 Rate and extent of technology adoption in the study sites, 1996-2003

Sites	Period covered (years)	Total cropped area* (ha)	Total cropped area applied with conservation technologies (ha)	Per cent of cropped area	Total number of farming households**	Total number of adopters	Adopters as per cent of farming households	Average number of adopters per year
Claveria	7	16,543	1,820	11	6,233	1,656	27	236
Lantapan	4	10,797	1,229	11	5,550	712	13	178
Malitbog	5	4,983	390	8	3,274	504	15	100
Manolo Fortich	1	14,566	9***	.06	3,872	100	3	-
Total			3,448			2,972		

*Upper limit of potential area on which conservation technologies could be applied

**Upper limit of potential adopters

***Assuming that 9,000 trees were planted on farms with a density of 1000 trees/hectares.

The longer-term impact of the adopted technologies makes it difficult to accurately reflect larger trends of environmental and or economic benefits. However, farmers' perceived benefits of the adopted technologies were significant. Some cases of farm improvements have been documented by ICRAF. Considering that some farmers continued to adopt NVS, and had applied more complex agroforestry systems, i.e., livestock integration, bee-keeping, and tree-farming, and were involved in wider conservation efforts, such as water quality monitoring, riparian stabilisation, and tree planting in public places (e.g. streets, playgrounds), environmental and economic benefits would be expected. The benefits of these efforts had not yet been systematically documented but were likely to be important. This however, needs more attention to provide an estimate of the benefits of conservation technologies, although a World Bank (1989) study of conservation practices in the Philippines found that the productivity and environmental benefits of increased adoption of conservation technologies are potentially substantial even in the absence of quantitative estimates.

Except for Manolo Fortich, technology adoption in the study sites followed an S-shaped adoption curve with an increasing rate in the first two years and a declining rate in subsequent years. The early phase was associated with training, cross-farm visits, and group formation, suggesting the influence of these activities on technology adoption. The declining phase may have reflected the reduction in these activities or simply reflected a ceiling to adoption. Nonetheless, the following years saw a diversification of activities that farmers were engaged in, a type of functional scaling up in Uvin & Miller's (1996)

taxonomy of scaling up. As mentioned earlier, some farmers had moved on to other productivity-enhancing and community-wide conservation efforts. In Claveria and Lantapan, some farmers were involved in seedling production and marketing, while others were involved in training and research and community projects (e.g., riparian stabilization, water quality monitoring). Hence, to some extent, the decline in the rate of technology adoption, particularly NVS, was offset by other activities. However, some farmers clearly dropped out of their involvement with Landcare after adopting NVS, as in the case of Lantapan.

The lower rate of adoption in the scaling up sites coincided with the decreasing level of ICRAF's technical and institutional support. However, it would be overly simplistic to conclude that there was a causal effect between the degree of external input (technical and institutional) and technology adoption, without considering the time element, the number of potential adopters and the potential areas for conservation at each site (as discussed earlier), and the socio-economic and political factors unique to each site. For instance, while the potential reason for the short-term existence of Landcare in Manolo Fortich was ICRAF's limited input, the inconsistency of LGU support and the low level of human and social capital of farmers were also limiting factors. Also, it was important to consider the adoption ceiling at each site as suggested by the S-shaped adoption curve. In some cases, the adoption ceiling might be high but low in the others. In the case of Lantapan, despite the strong presence of ICRAF, the adoption ceiling of NVS was approached quickly due to rapidly rising off-farm employment.

Nevertheless, it could be argued that the rate and extent of technology adoption in the study sites had been significant with the Landcare Program. Hence, the Landcare Program was "better" than the status quo.

9.5.2. Impacts on Institution Building

In Claveria, the contribution of the Claveria Landcare Association (CLCA) to the success of Landcare was indisputable. The CLCA helped in recruiting members and promoting adoption, and represented a voice in policy decision-making and resource allocation. As

discussed in Chapter 5, the CLCA was influential in the passage of local policies that supported the activities of Landcare.

The Lantapan Landcare Association (LLCA) developed into a strong and enterprising organisation despite limited LGU support. It is likely that the complacent attitude of the LGU towards Landcare had pushed the LLCA to become a more resourceful and self-reliant organisation. For instance, with facilitator motivation, a Landcare office and training centre was established using solicited funds from the LLCA members and from friends and supporters. It was also able to network with tree growers in Mindanao for the marketing of tree seeds and seedlings through its affiliated group, the Agroforestry Tree Seed Association of Lantapan (ATSAL). At the time of this study, the CLCA and LLCA were actively involved in training Landcare clients from different parts of the country and internationally.

The Malitbog Landcare Association (MLCA) continued supporting and coordinating group activities in the barangays, though its own activities were rather limited. Technicians, barangay officials, and the Landcare facilitator helped to support the activities of the MLCA. On the other hand, the sudden decline of the Landcare Program in Manolo Fortich due to a hostile political situation immobilised the Manolo Fortich Landcare Association (MFLCA).

Such organisations as the CLCA, LLCA, and MLCA have played critical roles in the development of the Landcare Program. For Cramb (2004), they helped to build social capital encouraging bonding within the landcare groups and bridging them to a wider network of supporters and service providers. They took on the characteristics of secondary level organisation which, according to Hinchcliff et al. (1999) and Scherr et al. (2001), can help to manage common property resources, regulate private resource management to protect community interests, organise community investments to improve natural resource conditions, share knowledge, cooperate to market products or environmental services, or advocate for community interests with policymakers and other influential external actors. Uphoff (1994) adds that such local institutions are more likely to be successful in natural

resource management if they belong to an identifiable group or community with its own authority and structure.

The strong institutional support provided by ICRAF and the LGU helped to promote the process of institution building in Claveria and Malitbog. Conversely, the low-level of institutional support from ICRAF and from the LGU inhibited this process in Manolo Fortich, while ICRAF took on much of the task of institution building in Lantapan. The message here was that local organisations under the right circumstances could be effective institutions for resource management, but even if local groups were strong, other actors, particularly LGUs and committed external agencies (e.g. ICRAF) were needed to help mobilise local groups.

9.5.3. Impacts on Partnership Building

Partnership was central to the Landcare Program. In Claveria, it was evident that the partnership between ICRAF, the LGU, and the farmers flourished over time. The notion that success was dependent on this three-way partnership of actors was based on the Claveria experience, and subsequently became a key hypothesis for testing in the scaling up sites. Apart from the LGU, the CLCA had successfully established partnerships with other community sectors and outside stakeholders, including national-level NGOs and international organisations (e.g., Philippine-German Fund).

Political transition and factionalism were common denominators in Lantapan and Manolo Fortich. As discussed in Chapter 6, efforts to establish a partnership with the LGU in Lantapan were generally hampered by on-going political factionalism, hence ICRAF's efforts were directed to building partnerships with local groups, and NGOs and project staff. Similarly, in Manolo Fortich, LGU partnership did not succeed when the political leadership changed a year after Landcare had started. Political transition and administrative changes generally aborted the Landcare Program. However, between the two sites, Landcare thrived more in Lantapan because ICRAF had a longer-term presence and more focused institutional and technical input than in Manolo Fortich. This indicates that in the absence of strong LGU support, a more focused partnership from an external agency is necessary to offset the weakness of the LGU.

Meanwhile, there was evidence of effective LGU partnership in Malitbog manifested through the support provided for training, technical, and livelihood projects. However, horizontal or vertical linkages between landcare groups and other agencies were weak due to the limited number of project interventions; hence partnership was limited to the LGU.

9.5.4. Related Impacts

In connection with efforts to scale up Landcare from 1996 to 2003, ICRAF had established partnerships or linkages with at least 30 local, national, and international organisations, including funding agencies. The Claveria and Lantapan sites were serving as learning nodes, hosting a significant number of farmers, government officials, technicians, development practitioners, and researchers who had approached ICRAF to learn about Landcare. Farmers had been providing training and site visits for outside clients. The study of Sabio (2002) revealed that social capital is embedded in the landcare approach and transformative learning has taken place between and among the actors involved. However, the value of these outputs is hard to measure. Some benefits have also been accrued from investment by the LGUs into Landcare activities, especially training and nurseries. In 2003, the Landcare Program was recognised as an Outstanding Agroforestry Dissemination Program by the Philippine Agroforestry Network, raising its profile to the national level.

9.6. What Were the Issues and Challenges Met?

Issues and challenges accompanied the apparent success of Landcare in most sites, including “demand” issue, philosophical and operational issues, and questions about institutional capacity.

9.6.1. Demand Issue

The issue of demand has been central in the scaling up literature because, in practice, scaling up begins with the universalist perspective that there is a product or an innovation worthy of expansion that is applicable to a wide range of situations (Oudenhoven & Wazir n.d.). In this perspective, an external actor assumes there is latent demand for this innovation.

As mentioned earlier, the Landcare Program in Malitbog was more internally driven, which led to a greater sense of ownership and commitment, manifested through the support of the LGU. In contrast, Landcare was more externally driven in Lantapan and Manolo Fortich, where ICRAF had first approached the LGU. In the case of Lantapan, although the ICRAF staff endeavoured to establish a local demand by conducting surveys of interested farmers, and the LGU was initially interested, the level of local demand particularly on the part of the LGU, was not as strong as in Claveria and Malitbog. In Manolo Fortich, there was evidence of a lack of strong demand at the farmer level, even when the LGU was initially supportive. Samoff et al. (2001) examined the scaling up efforts of education reforms in Africa and concluded that lack of local interest and demand explained why scaling up efforts failed. The message here is that a balance must be found between the universalist and contextualist perspectives to ensure that sufficient demand for the Landcare Program is present in scaling up sites.

9.6.2. Philosophical and Operational Challenges

There were philosophical and operational challenges related to the notion of adaptation in scaling up. It is widely agreed in the literature that successful scaling up depends on adapting a model program to site-specific conditions. In relation to the universalist and contextualist perspectives, Oudenhoven & Wazir (n.d.) say that the former has been fairly successful only when the innovation is applied in relatively homogeneous populations, but less successful in the case of multi-dimensional innovations applied in highly mixed populations, such as in the highly interactive social arena of technology dissemination. Since the Landcare Program involved both technical and institutional innovations, scaling up was more challenging, and required adaptation to the local situation.

Berman & Nelson (1997) maintain that, with adaptation, fidelity to the original model is less important than the outcomes. This, however, created a dilemma between process and outcomes. For instance, ICRAF had an underlying goal to promote wider adoption of technical innovations (NVS and agroforestry) but it was also committed to institutional innovations (group formation) and the attributes of the landcare approach, notably participation, volunteerism, and being demand-driven. This led to the question whether technology adoption, or landcare membership was more important, or both were necessary.

ICRAF adopted an inclusive approach, in that it did not require landcare membership to access the technology through training, nor did it require technology adoption for a landcare membership. As a matter of principle, ICRAF maintained that technology adoption and participation in landcare groups should be based on farmers' choice. This explained the ambivalent relationship between landcare membership and adoption; there were adopters who were non-members of landcare groups, and members who were non-adopters. Clearly, increasing the adoption of technologies while preserving these attributes was challenging.

Relatedly, ICRAF wanted to preserve, as far as possible, the demand-driven nature of Landcare, and to minimise the risk of "projectising" Landcare that is, implementing the Landcare Program on a top-down basis without regard for local demand. Hence, as mentioned above, the ICRAF staff in Lantapan went out of their way to conduct an extensive survey to determine local interest and establish a demand for Landcare, subsequently focusing on those communities where interest and demand appeared greatest. In Manolo Fortich, the activities were initially slow because the barangays were not pre-selected. This was to encourage the barangay facilitators to initiate the activities on their own and to promote local initiative. Nonetheless, in both cases, there was an element of "projectisation" as Landcare was an introduced concept, supported in part by funding agencies who expected results. This bothered the Landcare facilitators as it implied a dilution of the landcare approach that had evolved in Claveria.

The inconsistency of LGU support for Landcare in Lantapan and Manolo Fortich due to political hostilities also posed some operational challenges. There was a need to consistently negotiate with local officials. The less sympathetic attitude of the municipal government towards Landcare due to political factionalism and administrative issues required more of the social skills of facilitators than their technical skills. In Malitbog, the challenge was more to do with good site characterisation and diagnosis. It appeared that, although there was an explicit demand for Landcare, it was insufficient in reflecting local realities. Based on the contextualist principle, a comprehensive site characterisation and diagnosis is desirable for reflecting local realities to guide subsequent scaling up efforts.

In brief, preserving the philosophical and operational bases of the landcare approach, while adapting to local conditions was enormously challenging for ICRAF. These challenges have been also reported in the literature. Two key questions are raised by Uvin et al. (1994): (1) How can a development initiative move beyond the local level while continuing to foster participation? (2) How can the organisation managing it scale up without losing flexibility and effectiveness at the local level? There are no straightforward answers to these questions, as different levels of external input and the unique conditions of every other site result to different outcomes. However, the case studies indicate that the use of different modes of scaling up, greater flexibility, and commitment to value-based effectiveness would help to address these issues. In general, these questions constitute a research agenda in scaling up.

9.6.3. Institutional Capacity

The literature reports that scaling up is essentially an institutional process. According to Berman & Nelson (1997), organisations most likely to institute model programs are those with sufficient organisational capacities. Institutionally, ICRAF was challenged to consolidate and sustain the progress of Landcare. As seen in the case studies, the nature of the Landcare Program required more facilitation than with straightforward technological interventions, involving a high level of technical inputs and human resources. Given the dedication and energy put into facilitation, there was a concern within ICRAF on balancing the energies of the staff. As the demand for training outside clients increased, Landcare facilitators needed to cope with pressures between scaling up efforts and facilitating landcare groups, and were feeling “burnt out”. The ICRAF Site Coordinator in Claveria was concerned that ICRAF was spreading its limited resources thinly over a wider area. Bodily (2002) notes that these issues are common as organisations constantly adjust to change within and outside their organisations.

9.7. Actors’ Perspectives of Landcare

The perspectives of different actors were varied, but there was a consensus that Landcare was primarily about conservation farming technologies for controlling soil erosion and improving farming systems to increase production and income. This highlighted the strong

technical dimension of Landcare. The advantages of promoted technologies were validated through ICRAF's on-farm research, and farmer-adopters were observing these on their farms. In the more advanced sites (Claveria and Lantapan), responses such as "farmer education", "empowerment", and "partnerships" also carried the implication of a social dimension. In addition, LGU respondents particularly perceived Landcare as a process that helped LGUs perform their devolved functions in agricultural extension and natural resource management.

However, farmers and LGU respondents differed in their expectations of Landcare. Except for Manolo Fortich, the LGUs expected that Landcare would help them implement their environmental programs and improve the delivery of extension services, whereas farmers' expectations were more to do with learning new farming techniques for improved production and income. In the case of Manolo Fortich, this could be because Landcare practically operated only for one year, and expectations were probably not established at the outset. The differences in expectations were based on the perceived usefulness of Landcare to the actors.

On the other hand, facilitators considered Landcare a community development process, focusing on improved agricultural production with foreseeable environmental and economic impacts resulting in an overall improvement in the well-being of people. Based on their educational backgrounds, they found it easy to understand the concept, though the majority felt that implementation was difficult without strong LGU support and genuine farmer interest in conservation farming. Accordingly, facilitators needed a firm grasp of farmer realities beyond the local level. Hence, a combination of technical, social, and interpersonal skills was important for Landcare facilitators.

LGU informants agreed with facilitators that Landcare was an easy concept to assimilate because of its broad relevance to the current notion of local environmental governance and rural development. They concurred that it was an affordable undertaking, requiring minimal capital outlay, though implementation was more challenging because process-oriented activities take time to be fully appreciated. They added that Landcare required an attitude of willingness to change, a longer-term vision, and strong political will. In short, a

change in political and administrative culture was needed. However, this change would be harder than just instituting policy reforms because it required cultural change to understand that the exercise of power, authority and responsibility is shared and that public officials are accountable for their actions.

In the Philippines, the need for political transformation has been frequently stated, but remains daunting. Wurfel (1991) describes Philippine political development as having gone through periods of both development and decay in terms of political and cultural processes. He adds that Filipino politics is engrained in its political economy with reference to land ownership patterns, labour unions, and economic forces represented by political elites. Hence, to transform political culture at the local level would be untenable without an analysis of its roots and the strong forces that continue to shape the overall polity. This issue was beyond the scope of this study, but the responses of the LGU officials showed that politicians were aware of the necessary political transformation, but felt unable to achieve it. On the other hand, this implies the need for understanding local political dynamics, local governance, and local policies in order to better plan a scaling up strategy.

The differences in perceptions and expectations held by the different actors can be viewed in utilitarian terms where each actor perceived or expected something in return for their investment. Nonetheless, their views coalesced on the broad impacts on Landcare to the larger community, and they were optimistic that the Landcare Program would continue with increased support from the LGU and other partners. This accords with the actor oriented view of interventions, which stresses that the actors confront, make decisions, and act according to their respective biases to build consensus on a common agenda. This implies that successful scaling up of the Landcare Program hinges upon harnessing the perspectives and actions of different actors.

9.8. Factors Affecting the Success of the Landcare Program

9.8.1. Integral Factors to Success

At the personal level, farmers identified several factors that encouraged participation, but the promoted technologies were the dominant factor. At the group level, several factors

contributed to success, but cooperation and unity, effective communication and leadership, and the members' knowledge of promoted technologies (human capital) were common across groups, and across the study sites. At the community level, the LGU and ICRAF support, effective coordination and partnership, the promoted technologies, and the training and facilitation provided were identified as important factors for success.

These factors were all embodied in the landcare approach, described by the three cornerstones, namely, promotion of appropriate technologies, institution building, and partnerships. The initial concept of ICRAF about the cornerstones of the landcare approach was thus confirmed in the case studies. Hence, the landcare approach was integral to the success of the Landcare Program, without which it could easily disintegrate. Manolo Fortich was a good example, where the limited input from ICRAF, the inconsistent LGU support, and the weakness of the landcare groups undermined the landcare approach and inhibited the development of the Landcare Program. In the case of Lantapan, the limited LGU support was offset by ICRAF's strong presence and effective partnership with the LLCA, sustaining the Landcare Program despite the challenges it faced. The implication is that the degree of partnership, or the strength of the landcare triangle varies from one site to another depending on the resources available to, and the circumstances of the actors involved, affecting the viability of the landcare approach. In other words, the success of the Landcare Program was related to the viability of the landcare approach.

These findings are consistent with those of Pretty & Hine (2001) regarding the factors for the success and spread of sustainable agricultural practices, based on 208 cases in 52 countries. They identified the following factors: (1) appropriate technologies adapted by farmers; (2) social learning and a participatory approach between projects and farmers; (3) good linkages and partnerships between local initiatives and external agencies; and (4) the presence of social capital at the local level.

While the cornerstones of the landcare approach were integral to success of the Landcare Program, particular features of the local context enhanced or limited success. For purposes of this study, the local context is viewed as the sum of the socio-economic, institutional, and political features of the study sites. As Biggs (1990) emphasised, technology

generation and promotional activities take place in a historically defined political, economic, agroclimatic, and institutional context. The influence of these contextual factors is crucial in determining the outcomes of a particular project (Cramb 2000b). In addition, success was promoted by effective implementation strategies, the relevance of Landcare to the actors involved, and the institutional capacity of the sponsoring agency that is ICRAF's catalytic role in the Landcare Program. These aspects are now considered in turn.

9.8.2. The Local Context

a. Socio-Economic Context

Landcare tended to thrive in areas that had limited economic activities, where farmers had more time to look after the condition of their own land and to cooperate in wider conservation efforts, than in areas with rapidly growing economies, where farmers had more economic options and were less considerate of conservation goals because of competing economic interests with large holders and the agribusiness sector.

In Lantapan, a decline in technology adoption was observed when the agribusiness sector absorbed about 60 per cent of the labour force of the entire municipality a year after Landcare had started.² Commercial vegetable farming aggravated this because financiers controlled the farmers, creating a volatile farming system that was unsupportive of conservation goals. Also, the expansion of sugarcane plantations promoted dependence of smallholders on medium-scale sugarcane planters. Similarly, multinational companies and other commercial establishments in Manolo Fortich had taken prime agricultural lands away from smallholder production. The rapid pace of urbanisation had resulted in rapid change in land use, with farmers reverting to unsustainable practices or giving up their lands to rich businessmen as smallholder production become unprofitable.

On the other hand, the farming systems in Claveria were free from the influence of large-scale corporate farming, though market development for diverse products was emerging due to the demand for food and raw materials from adjacent urban areas. However, comparing Claveria to Lantapan and Manolo Fortich, the former had fewer off- and non-

²Based on estimates made by key officials and staff of the Lantapan LGU in 2002 (Chapter 6).

farm economic activities, leaving farmers with more time to look after their own farms. Similarly, the farming system in Malitbog was free from competing economic interests of large investors due to poor accessibility, the rugged topography, and poor market development. Just as in Claveria, livelihood activities were less diverse, and farmers were more focused on farming for their livelihood. Under this situation, farmers were more interested to learn new farming techniques to improve production and income. Farmers had more incentive to invest in conservation practices if they had to depend solely on the land to survive.

Clearly, the demand for new products in rapidly growing economies promoted the conversion of lands to intensive commercial agriculture in the uplands. Although growing rural economies could push up land values and the value of tree products, there was more evidence of pervasive land conversion by rich farmers and private corporations, where small farmers were either pushed to engage in land-degrading practices, or pressured to sell their lands and to seek employment in rural industries (e.g., Lantapan and Manolo Fortich). In general, the existence of large-scale corporate farming in rural economies puts competitive pressure on smallholder farming.

The study of Templeton & Scherr (1999) on the microeconomics of land management in developing countries helps to explain the above observations. They found that better non-farm income opportunities associated with economic growth can both encourage and discourage landscape investments. On the one hand, better non-farm income activities are likely to discourage land improvements if policies and programs have made the profitability of production in rural areas artificially low. On the other hand, better non-farm income sources are more likely to encourage investments if a household member can earn the income during slack periods of production or does not provide most of the labour for production (Templeton & Scherr 1999). In the case of Lantapan and Manolo Fortich, many farmers were not only discouraged from applying better land management practices, but were pushed to give up farming to find off-farm employment because the price for corn and other crops had been generally low, and there is no incentive mechanism for land improvements. An important consideration is that resolving resource degradation problems does not depend entirely on the behaviour of farmers or even the attitudes of

LGU officials in the affected area. Broader economic forces, such as the markets of agricultural products, government price policies, and urbanisation influenced local decisions (Blaikie & Brookfield 1987; Coxhead & Buenavista 2001; Coxhead & Rola 1998). In relation to Long's (1992) view of intervention as a transactional process, the Landcare Program therefore needed to be negotiated by a range of local and external actors within the context of the broader political economy.

Since the pattern of upland development seems irreversible, that is, rapid population growth, improvement in infrastructure, and the opening up of development investments and linkages to the national economy, a more optimistic view of the situation suggests the need for Landcare to broaden its scope to embrace partnerships with other sectors, such as agribusiness. The potential involvement of the agribusiness sector in Landcare has not been well explored in the study sites, but the trend in rural development suggests the need to consider the involvement of this sector. As previously discussed, the existence of agribusiness in Lantapan and Manolo Fortich was considered to be a constraining factor to sustaining landcare activities. On the other hand, the experience of "sustaining landcare groups" in Lantapan, and the claims of Landcare membership by interviewed farmers in "disbanded landcare groups" and their willingness to re-organise when necessary indicate that Landcare may continue to be viable despite the pressures of uneven rural development. Further, if Landcare values are internalised, farmers will continue to use sustainable management practices and become more resilient to the negative impacts of uneven rural development. However, the engagement of community landcare groups with the business sector requires a different level of facilitation. Such partnerships could be explored, for example, with MKAVI and Dole Skyland in Lantapan, both of whom are now major players in rural development in that municipality. As discussed in Chapter 2, the Australian Landcare experience provides a model for broader partnerships in the business sector through corporate sponsorships of Landcare projects. Learning from the Australian experience would be useful in involving agribusiness companies in the Philippines. Unless this is considered, scaling up Landcare or promoting a similar type of program will be more challenging in rapidly growing rural economies, dominated by large holders and the agribusiness sector.

b. Cultural and Institutional Contexts

The analysis of the socio-institutional landscape was limited to the human and social capital of farmers and technicians, the latter expressed in terms of the capacity of the MAO to implement conservation programs.

First, with regard to farmers, community awareness of environmental issues and local capacity for leadership pre-dated Landcare, going back to the 1980s in Claveria and Lantapan. Farmers' environmental consciousness and their willingness to coalesce for conservation efforts were evident. Thus human and social capital were already at a level that promoted the development of landcare groups, and the landcare approach then strengthened that stock of human and social capital. As Cramb (2004) says, the activities of the LLCA reinforced social bonding within sitio and barangay landcare groups and developed bridging social capital in the form of a broader network.

In contrast, farmers in Malitbog were seen to be lacking in human and social capital due to their limited exposure to past interventions. Even so, farmers' involvement in Landcare was comparable to that in Claveria and Lantapan. Apparently, there was a stock of bonding social capital, which enabled farmers to link up with Landcare. This reflects the general socio-cultural context in rural areas. Neighbourhood cooperation and cohesion still animate the cultural life of Filipinos, particularly in remote rural communities. For instance, *bayanihan* (voluntary group work) and *hunglos* (shared labour) are still practised to carry on farming activities within neighbourhood groups. As mentioned by Narayan et al. (2000), this neighbourhood concept plays an essential part in the social cohesion of rural communities, especially those that are socially and economically marginalised. Since Malitbog was relatively remote and underdeveloped compared to the other study sites, communities were inherently cohesive with culturally embedded social bonds, which the landcare approach was able to build on. This paralleled the evidence in Lantapan, showing that culturally embedded social bonding in indigenous communities was key to the sustainability of landcare groups. These groups were mostly remote and had strong existing socio-cultural structures, making it easier for facilitators to promote collective action. Relatedly, it was found easier to promote Landcare in remote barangays of Claveria than those closer to the economic centre of the municipality.

Based on this argument, farmers in Manolo Fortich were lacking in close social bonding because of their diverse economic activities and given the rapid urbanising development in the municipality. In addition, both farmers and the LGU had limited exposure to NRM interventions, which started only in the late 1990s. The human and social capital required for a successful Landcare Program were low. Hence, local groups tended to disintegrate easily in the absence of systematic follow-up and strong external support.

There is thus a plausible link between the socio-economic and cultural and institutional contexts. Rural areas with growing economies tend to urbanise rapidly, with an increased range of economic activities. In these areas, changes in economic patterns stimulate changes in social structures, and communities struggle to find a basis for mutual solidarity and support systems. According to Narayan et al. (2000), interest-based living has limited collective action in urbanising areas. In contrast, remote communities with fewer economic activities have strong social relations, which make it easier to develop collective action. However, it could also be argued that farmers with better access to markets and livelihoods are not necessarily individualistic but locked in exploitative relations (e.g., contract farming) that impede their involvement in collective action. Either way, the landcare approach, which relies on volunteerism, collective action, and social capital, will be more difficult to propagate in urbanising areas than in remote rural communities, or will require a different strategy.

Second, with regard to LGU capacity, LGUs were generally found to have low or modest investment in agricultural development compared to that in physical infrastructure and social welfare services. This problem had several origins. First, local politicians usually gave priority to activities with short-term tangible outcomes (i.e., roads, bridges) to secure votes for the next election. Second, LGUs were dependent on aid from the Department of Agriculture (DA) and from politicians for agricultural projects. Third, this could be partly attributed to flaws in the Local Government Code. As reviewed in Chapter 3, the devolution of functions for agricultural extension and NRM to LGUs was not matched with the funding needed to perform the devolved functions. LGUs were swamped with salaried personnel who had to be paid locally, soaking up local funding. Even so, the ratio of technicians to farming population was low. Hence, lack of staff and funding to implement

extension activities was a common complaint among technicians. Furthermore, promotion of conservation technologies was often ignored by many LGUs due to the priority given by the national government to production technologies that were inconsiderate of conservation goals. Hence, while the institutional arrangements were in place at the local level, the issue was one of institutional capacity in terms of the number of available technicians, their expertise, and funding. In other words, the human and social capital of the technicians to enable them to work effectively with farmers was an important consideration in scaling up.

In sum, an initial level of human or social capital was essential for success, and hence desirable for effective scaling up. This confirms Sayer & Campbell's (2003) view that adequate social capital is a precondition for the scaling up of process-oriented NRM innovations. Pretty & Ward (2001), however, point out that while institutional maturity is likely to be related to the availability of social capital locally, appropriate inputs from government and voluntary agencies are needed. This implies the need for on-going investment to enrich the existing human and social capital of the actors involved in the Landcare Program.

c. Political Context: Political Dynamics and Administrative Challenges

It is widely recognised that LGUs play an important role in local development. This role presupposes effective democratic structures for local self-administration. However, the delivery of local government functions has a strong political dimension; in fact, the decisions for planning and implementation of programs are largely influenced by political considerations in the form of the patron-client politics reviewed in Chapter 3.

In Claveria, the LGU's contribution was crucial for success. The connection of local influentials with politicians paved the way for instituting LGU support. The shift in political leadership was held almost exclusively in the hands of a strong political family, providing for a stable political environment. Similarly, the LGU of Malitbog played a critical role, substituting for the physical presence of ICRAF. Just as in Claveria, the political transition was held entirely in the hands of one political family. Hence, both sites had a stable political environment that was supportive of the Landcare Program.

In contrast, Landcare received marginal local government support in Lantapan and Manolo Fortich because of political instability. In both sites, political transition, factionalism and administrative issues affected the Landcare Program. Clearly, the landcare triangle, referring to the three-way partnership of key actors, was strong in Claveria and Malitbog, and weak in Lantapan and Manolo Fortich. However, as mentioned earlier, despite the weakness of the landcare triangle in Lantapan, Landcare succeeded because of ICRAF's strong presence, offsetting the weakness of the LGU. In Manolo Fortich, administrative changes created a vacuum for Landcare, eventually dissipating farmers' interest and, with ICRAF's limited presence, the partnership collapsed.

The case studies revealed just how the dynamics of local politics had positively or adversely affected program implementation. The power and control of political families has been criticised as detrimental to the exercise of democracy. According to Baguiro (2004), this limits the choice of the voters and the pace of democratisation because public office is treated like a family heirloom, handed down to the next family generation. However, the cases of Claveria and Malitbog showed that political families engendered political stability, which promoted the sustainability of the Landcare Program. Although political stability is not only achieved with political families, this case demonstrated that locally initiated programs could be more sustainable where political families provided political stability.

In contrast, the cases of Lantapan and Manolo Fortich demonstrated how political rivalry resulted in political and administrative factionalism, and created implementation problems. It is reported in the literature that the Philippine administrative system is constantly subjected to modifications when a new political leader comes to office distrusting the old administration. According to Varela (1996), this distrust, often bordering on hostility, creates political instability and tension, which in turn affects the continuity and stability of public service. Hence, scaling up Landcare will be challenging in politically sensitive areas, where the level of political commitment and support that made Landcare successful in the original site is absent. Ultimately, politics can either be a positive or a negative factor; the political dimension of environmental governance is thus an important consideration in scaling up.

9.8.3. Implementation Strategies

The case studies indicated that effective training, facilitation, group formation, and information dissemination were important factors for success. Some of these were common to conventional extension, but improved practices in the landcare approach contributed to success.

The Landcare training sessions facilitated technology adoption, not only because they were effective in information dissemination, but also because they fostered social bonding and networking among participants, they were less formal, and they focused on practical hands-on exercises. Technology adoption was found to be generally associated with such training events, though training in itself was insufficient in some cases. There was a need to facilitate technology adoption after training. For instance, in Lantapan, the immediate uptake of technology was observed in only half the training participants, requiring systematic follow up and facilitation. One interviewed technician maintained that farmers participated in Landcare because of facilitator influence, confirmed by farmers in interviews and FGDs. Hence, effective technical facilitation was an important factor for success.

Technology adoption was also associated with landcare group formation. Although there were non-Landcare members who were adopters, it was evident that the network and leadership of sitio-level landcare groups and their networking at the municipal level promoted farmer-led extension of conservation technologies. As mentioned in Chapter 5, the CLCA helped in training farmers at the sitios and represented a voice in local budgeting and policy. The LLCA helped to augment farmers' income through an established network for marketing seeds and seedlings. Likewise, the MLCA maintained social bonding with individual groups through monthly meetings and social bridging by lobbying for municipal government support. As discussed earlier, the formation and activities of apex bodies or secondary level farmer associations, helped to strengthen the human and social capital that resided in individual landcare groups, and thus were important factors for success. Hence training, facilitation, and group formation could be considered important requirements for scaling up Landcare.

9.8.4. Relevance of Landcare to Different Actors

The case studies demonstrated that the perceived relevance of Landcare was important for success. As Racine (1998) emphasises, a program that is perceived as irrelevant to the intended user is not worth replicating at all. The actor-oriented approach leads us to expect that the actions of different actors will hinge upon their view of the relevance of such actions. As mentioned earlier in this chapter, the Landcare Program involved both technical and institutional innovations that, in different ways were relevant to the actors involved.

First, there was a need for technologies that worked best for poor upland farmers. Farmers found the relevance of Landcare based on the adaptability of NVS and agroforestry practices to their own situation in that, through the adoption of these technologies, economic, social, and environmental benefits could be achieved. This was consistent with farmers' expectations and reasons for joining a landcare group, highlighting the strong technical dimension of the landcare approach. This perception shaped farmers' decisions and actions towards Landcare. Hence, the relevance of NVS and agroforestry as effective soil conserving and profitability-enhancing technologies was essential in the scaling up process.

Second, the LGUs saw the relevance of Landcare based on their limited capacity to provide improved extension as mandated by law. This was well founded since most of the MAO's activities were limited to the promotion of production technologies directed by the national government, and promoting conservation farming technologies was considered an additional task needing more funding. Nonetheless, the perception that, "Landcare provides training, empowers the farmers, and uplifts living conditions" also provided social and economic relevance. More broadly, the Landcare Program was relevant towards meeting local and national development goals for productivity enhancement and environmental management, emphasising community participation and partnerships.

In summing up, the issue of relevance is important in scaling up. Where the perceived local need and relevance of Landcare that mobilised and energised participation in successful sites do not emerge in other sites, the Landcare Program will be unlikely to succeed.

9.8.5. Institutional Capacity to Scale Up: The Role of ICRAF

The global experience suggests that “development entrepreneurs” within or outside a particular community are needed to catalyse change (Binswanger & Aiyar 2003). The catalytic role of external agencies has been widely recognised in large-scale programs, but even homegrown programs are not without external influence. However, this catalytic role should be exercised with care to avoid imposing rules and standards that might limit local participation.

In the literature, scaling up is recognised as an institutional process requiring institutional capacity (Berman & Nelson 1997; De Leener 2000; Korten 1980; Senge et al. 1999). This capacity includes the ability to adapt to, and manage change within and outside the organisation. In this case, funding was an important resource, but human resources and expertise were more important. As elaborated by Biggs & Smith (2003), human factors play a critical role in project cycle management (PCM), as personal characteristics and organisational culture influence the use of approaches, tools, and techniques. Hence, the role that individuals play because of their socio-political or professional status, or because of their specific personalities, needs to be better understood. Essentially, scaling up needs champions or program entrepreneurs who has the charismatic leadership qualities required to design program strategies, promote its achievements and secure funding (Oudenhoven & Wazir n.d.).

It was clear that ICRAF, particularly its key staff, played a catalytic role in the development of Landcare in the study sites, even in Manolo Fortich where its physical presence was limited. Personalities and human behaviour in organisations were beyond the scope of this study, but as noted in Chapter 5, the personalities of the ICRAF staff involved in conceptualising the landcare approach were important; otherwise things could have been done differently. Consistently, farmers in the study sites profusely acknowledged the efforts of the ICRAF staff. As mentioned in the previous chapters, farmers were motivated by the attitudes and commitment of Landcare facilitators. Relatedly, the LGUs felt that it was important to partner with ICRAF or with other external agencies, even if Landcare was an affordable investment. According to the Mayor of Claveria, this was important since public service could be easily politicised, as governments were seen to provide “dole outs”

to citizens, promoting dependency and political clientilism. In the Mayor's view, an external third actor in the social arena would inhibit the perpetuation of patron-client ties between politicians and the citizens. NGO roles have been seen as central to this type of public-private partnership (Bebbington & Farrington 1993; Kaimowitz 1993), but public research institutions like ICRAF have also become actively involved (Bebbington & Farrington 1993).

In Claveria and Malitbog, the LGU acknowledged that ICRAF had influenced NRM policy making and budgeting, which would otherwise have been given low priority. ICRAF's comparative advantage in agroforestry research and development was seen to complement the technical gap of LGU staff. Hence, the role of ICRAF as an external agency was crucial, particularly in filling resource gaps. This complementation of expertise and resources among public research institutions, NGOs, and governments has now been widely promoted in NRM, and rural development in general (Bebbington 1997; Kaimowitz 1993).

Institutionally, ICRAF's tradition was less bureaucratic, encouraging staff to cross organisational boundaries. Support for adaptation and active learning encouraged the staff to experiment with different ways of implementing Landcare. ICRAF also shared information and opened up options for partnerships. One advantage was that ICRAF had the flexibility to use different approaches, employing an adaptive type of management, which was not as target-driven as a purely development agency. According to Sayer & Campbell (2003), adaptive management is key to scaling up, as repeated learning cycles ensure improvements in program strategies. Although financial capacity was important, emphasis on functional teams, professionalism, consolidation, and ability to institute systemic personnel and structural changes were more important. According to Berman & Nelson (1997), this is important to improve the organisation's ability to systematically transmit its values in constantly changing situations. Thus the personalities of staff and ICRAF's organisational culture were underlying factor for success, despite their limitations and the challenges they faced.

9.9. Discussion

9.9.1. What characterised the potential for Landcare to be scaled up?

Racine (1998) argues that the potential of a program to be scaled up can be determined through some identifiable characteristics. He said that by identifying these characteristics, one would know whether there is value for replicating or scaling up a program. As discussed in Chapter 2, he identified a range of characteristics that affect the replicability of a program, and described these as a set of criteria for replication. For this study, characteristics that enabled the Landcare Program to be scaled up were identified, and these correspond to those of Racine's (1998) criteria: (1) flexibility, adaptability and dynamism (2) effectiveness, (3) relevance and significance, and (4) affordability.

a. Flexibility, adaptability and dynamism

The scaling up of Landcare was undertaken with flexibility, using different modes to adapt to specific conditions. In the process of adaptation however, some aspects of Landcare were changed to fit to the local conditions, just as Landcare itself changed the local situation. It was hard to juggle the tradeoffs between process and outcomes, especially where Landcare involved both technical and institutional innovations. For instance, the promoted technologies were more easily adopted because they were less complex and easier to implement than was the Landcare process. The degree of importance given to scaling up just the technical innovations or the institutional innovations could be a matter of institutional choice, but in this case, ICRAF had no clear stand and was rather free flowing, because it was not locked to a fixed scaling up strategy, and the Landcare Program itself was not target-driven. Also, because the local conditions were dynamic, the Landcare Program was compelled to employ different strategies, including scaling up activities within and beyond the individual sites, broadening its scope by increasing the repertoire of technologies, emphasising capability and leadership building for farmers, and establishing linkages to access other support.

The implementation of Landcare was met with a myriad of challenges and issues, such as demand issues, philosophical and operational issues, and issues of institutional capacity, participation and sustainability. How well ICRAF fared in scaling up while maintaining a

strong commitment to the philosophy and practice of the landcare approach is a matter of opinion, but it was clearly prepared to adapt to program implementation based on the circumstances in each location.

b. Effectiveness

The effectiveness of the Landcare Program was viewed in terms of the advances it made towards meeting its goals. By any measure, there was little doubt that the overall outcomes of the Landcare Program were impressive. The most important impact was on the improvement of human and social capital, enabling farmers to adopt conservation technologies and agroforestry practices with foreseeable improvements in natural and financial capital. The program had, in one way or another, reoriented the extension system and effected changes in local budgeting and policy formulation. At the farmer level, it harnessed the culture of volunteerism and cooperation and fostered community participation. Relative to the varying levels of investments of the actors involved, and with varying timescales at each site, the extent to which the goals were achieved (e.g., technology adoption) and the positive spillover effects demonstrated cost effectiveness.

c. Relevance and significance

It was evident that the Landcare Program had a broad relevance to upland conditions. The technologies were widely adoptable, and the local government context provided a basis for integrating Landcare into its programs and local structures. As an approach, Landcare was relevant to improved agricultural extension, and to many aspects of the Philippine Local Government Code (LGC), emphasising local environmental governance through civil society participation and public-private partnerships. As a social process, it was relevant to building the capacity of farmers, and to community development in general. More broadly, it was relevant to meeting both local and national development goals.

d. Affordability

Scaling up the Landcare Program in multiple sites was possible with varying levels of technical, institutional, and financial input from the actors involved. Each actor played

important roles, investing their own resources, and continuously negotiating, collaborating, and coordinating efforts to achieve individual and collective goals.

The Landcare Program was found to be affordable with investments directed to knowledge and capability building, although small donations for projects and livelihood activities made a difference. The notion of “affordability” does not, however, dispense the idea of project funding, but emphasises co-investment of resources by the actors involved, thus lessening the financial burden to one actor. As shown in the case studies, the LGUs were not lacking funding to support Landcare or to improve extension services. From a purely financial perspective, they had the capacity to pursue a Landcare Program if conservation goals were integrated in mainstream extension activities. However, initial funding would be necessary for training the technicians in facilitation and new technologies, to equip them for the role of Landcare facilitators. Initial funding could be also used to leverage partnerships with a committed external agency; in fact, cost sharing would be a real advantage, in that it builds common ownership and accountability to the program thus promoting lasting development.

Relatedly, it was found that scaling up could proceed with fewer requirements of institutional and technical input from an external agency. For ICRAF, implementing Landcare required more human and technical resources, rather than purely financial support. Although the latter was important, the fiscal cost was cut down significantly through consolidation of gains, decentralising training at the farmer level, and testing different modes of scaling up to create alternative knowledge on this aspect. The different modes showed that ICRAF’s cost of scaling up per site could be significantly reduced, but with different results. Landcare outcomes were affected by the progressive reduction of ICRAF’s input at each site, as seen in the case of Manolo Fortich, but some limiting factors should be also considered such as political and socio-economic factors. To claim a direct relationship between external input and Landcare outcomes would be a gross generalisation, as there were inertial forces prevailing in local systems that undermined the attributes of the Landcare Program. The implication is that appropriate external support should be provided to where it is most needed and likely to be most effective.

9.9.2. Nature of the Landcare Scaling Up Process

Institutionally, ICRAF undertook a scaling up process which, according to Uvin & Miller's (1996) taxonomy, was quantitative, functional, organisational, and political. However, these processes were not mutually exclusive but supportive at each particular stage of the scaling up process. In practical terms, ICRAF's scaling up efforts involved two major strategies: (1) relative expansion of organisational size and function; and (2) letting go of the landcare approach to influence other actors and creating more knowledge through action research of different scaling up modes. The second strategy sparked widespread interest locally and nationally, hence, as mentioned earlier, more than 30 local and national government and non-government agencies had been, in one way or another, involved or linked with the Landcare Program.

This fits well within two paradigms of scaling up that Uvin et al. (2000) identified in their study of scaling up NGO initiatives in India as discussed in Chapter 2. The first one, which was considered the old paradigm, was scaling up through expansion and becoming larger institutions. The second was scaling up through multiplication and mainstreaming activities with partners. The latter was considered a new paradigm that was measured not in terms of the growth of the material assets of an organisation but, also more importantly, with the networks formed, established credibility, and alternative knowledge created (Edwards & Hulme 1995;1997; Uvin et al. 2000). Brown & Ashman (1998) add that the impacts in this latter approach include locally-developed capacity, improved intersectoral contacts, strengthened norms of trust and cooperation, and reinforced democratic space and social diversity. However, Uvin et al. (2000) say that these two paradigms are not mutually exclusive, and NGOs can choose to move forward either simultaneously or successively.

It can be also said that ICRAF followed Korten's (1980) "Learning Process Approach" to program development, although the stages of learning to be effective, learning to be efficient, and the expansion stage overlapped. The Landcare Program was flexible, adaptive, and evolutionary, and the scaling up of Landcare was considered action research.

9.9.3. Success Factors and Preconditions for Scaling Up

Important factors for success were identified in the case studies, of which some were site specific but many were common across sites. The integral factors to success were embodied in the landcare approach, namely, appropriate technologies, institution building, and three-way partnerships, without which Landcare was perceived to easily disintegrate. Ultimately, implementing a Landcare Program came down to finding a balance between community efforts, local government partnership, and support from external agencies.

Taking stock of the enhancing and limiting factors for success as identified in this study, some broad generalisations can be made about the preconditions for successful scaling up, with the relative importance of each precondition depending on local realities. These preconditions are suggestive of potential Landcare sites and could be utilised as initial criteria for site prioritisation.

- First, the wide adoptability of NVS and the flexibility to evolve into complex agroforestry systems was an advantage in scaling up Landcare. Hence a set of widely adoptable technologies is desirable for effective scaling up. Where a proven set of technologies is absent, a locally adapted technology could well be a starting point, as in the case of Claveria.
- Second, it appeared that Landcare succeeded in areas where farmers were wholly focused on farming, where conservation efforts were promoted and supported, and farmers were freed of the adverse effects of uneven rural development. Where these conditions are absent, Landcare should be implemented with an expanded scope to include NRM-based livelihood options, and greater involvement of large holders and the agribusiness corporate sector.
- Third, Landcare has better prospects where local politics are stable, allowing the landcare triangle to prosper, but in cases where LGU support is limited or where the political situation is indifferent or hostile, a committed and highly competent external agency is an essential ingredient, temporarily offsetting the immediate need for LGU support.

- Fourth, and in connection with the above, a highly competent external agency is desirable not only for offsetting the weakness of the LGU, but also for providing the necessary technical expertise and longer-term presence to explore different strategies and adopt a step-wise development approach. Obviously, this requires high levels of institutional capability that might be uncommon even with experienced NGOs and with other research and development (R&D) institutions.
- Fifth, an initial level of pre-existing human or social capital is desirable, but a certain degree of social bonding is sufficient at the initial stage, as Landcare involved investments for maintenance and expansion of human and social capital. This should not exclude investment for improving the human and social capital of technicians to enable them to work better with farmers.
- Finally, effective training, communication, and facilitation are essential ingredients for scaling up, without which the essence of farmer-based extension embodied in the landcare approach will not be feasible.

9.10. Conclusion

The Landcare Program was scaled up in multiple sites with flexibility, employing different modes of scaling up, and adapting to local situations. The outcomes of scaling up efforts were generally impressive with increased human and social capital for farmers to adopt conservation technologies and agroforestry practices, though there were also failures and setbacks. Related outcomes were seen with scaled up activities, such as on farmers' involvement in wider conservation efforts, in training and knowledge-sharing, in farmer-extension, and in livelihood activities. As a development initiative, it relates to Chamber's (1993b) paradigm of "new development", where development itself is viewed not as progress in a single direction, but a process of greater flexibility and problem-solving, and the movement is not towards strict adherence to fixed goals but continuous adaptation to maximise well-being in changing situations. The Landcare Program also met the key criteria put forward by Racine (1998) for replicability, indicating its potential to be scaled up.

However, scaling up did not come easily. The case studies show that Landcare could only be partially scaled up where the conditions of the original site were not fully replicated. As Lovell et al. (2003) say, scaling up research in NRM is challenging because the rules or relationships that hold at one scale often do not transcend scales. The challenge in scaling up process-oriented grassroots initiatives was enormous. On the part of ICRAF, it had demonstrated competence in scaling up, but it could only scale up the Landcare Program to a limited extent. ICRAF succeeded in scaling up Landcare within a region (roughly, northern Mindanao), but scaling up beyond this region probably requires other committed and competent agencies to create new nodes of diffusion.

Berman & Nelson (1997), Schorr et al. (1999), and Samoff et al. (2001) stress that successful scaling up depends on replicating the conditions where the program has worked rather than replicating the program itself. Thus the greater challenge in scaling up further would be to replicate the conditions that made the Landcare Program work in northern Mindanao in other geographic locations. Identifying the preconditions for effective scaling up permits the potential for such conditions to be in place, enabling scaling up issues to be addressed at the pre-implementation phase. The implication is that these preconditions should be considered in planning for scaling up the Landcare Program, as they define the mode, strategies, and scope of the scaling up process.

This chapter has described the enhancing and limiting factors to success of the Landcare Program in the study sites and concluded regarding the preconditions for effective scaling up. To address the remaining questions of this study, the next chapter examines the potential for scaling up Landcare beyond northern Mindanao, including the challenges to be faced and the environment necessary to promote such scaling up.