Plenary Session: Science Communication and Social Participation

CHANGING LIVES AND LANDSCAPES IN THE PHILIPPINES

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Abstract

This paper discusses the participation of farmers and scientists in landcare in the Philippines. Landcare in the Philippines started as a grass roots movement from local small-holder farmers engaging with scientists from the World Agroforestry Centre (ICRAF) in northern Mindanao in the early 1990s. In the last decade, landcare has spread throughout Mindanao and to the Visayas through the involvement of international research organisations and aid agencies from Australia, Spain and South East Asia. Its success at dramatically increasing the uptake by farmers of conservation technologies and methods can be at least partly explained by the communication methods and approaches used to gain local and widespread interest in and demand for Landcare practices. This paper will explore this case study using a social change model to identify communication practices for successful engagement between researchers and local people in developing countries.

Key words

Social change, landcare, conservation technologies

Context

It is estimated that 65 percent of Asia's 1.6 billion rural population lives and earns their livelihoods in areas with a slope of greater than eight percent (Mercado, 2003). Population pressure has now forced upland families to intensively farm extremely steep slopes, causing rapid soil erosion and land degradation. As a result, Asia is suffering the worst erosion rate in the world, posing a grave threat to regional livelihoods and economies. For example, more than 60 percent of children living in the uplands of Mindanao, an island in the south of the Philippines, are malnourished with the income levels of farm households less than 50 percent of the poverty threshold level.

For many years, international research agencies such as the International Institute for Rice Research (IRRI), the World Agroforestry Centre (ICRAF) and the Australian Centre for International Agricultural Research (ACIAR) have been active in developing farming technologies in the Philippines and other Asian countries. Their research has developed technologies to help overcome problems like soil erosion and soil acidity and assist farmers to maintain their livelihoods into the future.

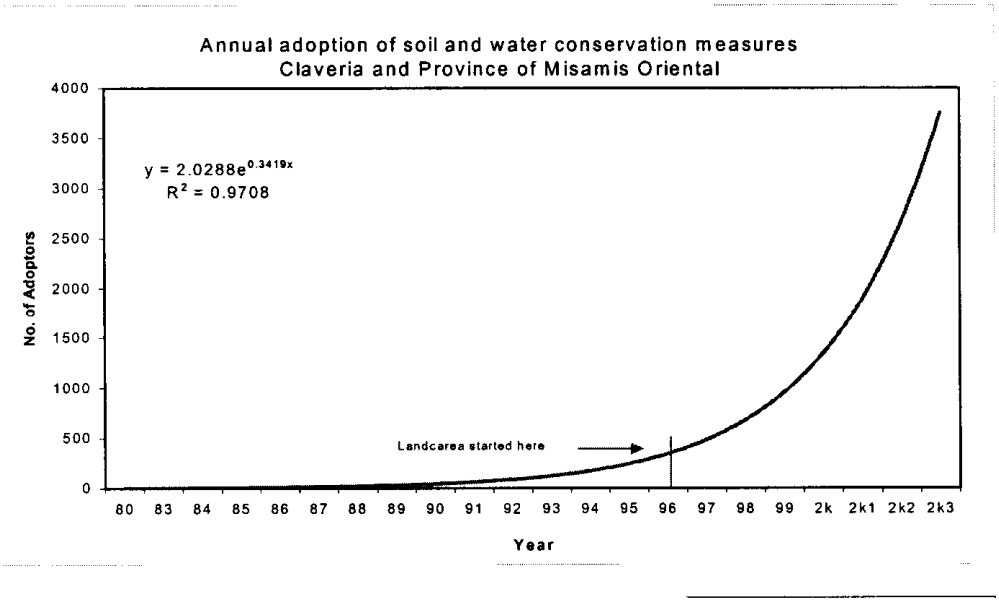
However, adoption rates of these technologies were low and often limited to areas where researchers had direct contact with individual farmers. This was due in part to the

technologies being too costly and labour intensive for poor farmers to implement on their farms. It was also due to researchers having a limited ability to work directly with the many farmers in the remote upland areas.

Some organisations like ICRAF, ACIAR and SEARCA began to realise the limitations of these approaches and decided to explore new approaches, including landcare. As part of ICRAF's new extension direction in Claveria, conservation teams were formed to assist farmers to implement conservation technologies. These teams consisted of an ICRAF researcher, a municipal agricultural extension officer and a leading farmer who had already implemented conservation technologies on their farm.

The high level of demand from farmers for this team's involvement started landcare's evolution in Claveria in the mid 1990s. After the initial formation of the Claveria Landcare Association in 1996, landcare groups rapidly formed throughout the villages (barangays) and small hamlets (sitios) of the municipality and it wasn't long before other adjacent municipalities, like Malitbog, were also calling for help from ICRAF to set up their own groups.

Figure 1. Annual adoption of soil and water conservation measures in Claveria since landcare started in 1996 (Mercardo, 2003)



A visit in 1997 by local government officials from Lantapan in Bukidnon province in central Mindanao to look at landcare stimulated further visits from Lantapan farmers to farms in Claveria. With help from ICRAF, Landcare groups rapidly formed in the steep hills around Lantapan.

About the same time, ACIAR and SEARCA were looking to build on research and extension activities in the remote barangay of Ned in the Lake Sebu municipality of South Cotabato province in southern Mindanao. By linking with ICRAF, an international

project was developed by ACIAR to support the appointment and training of landcare facilitators to develop, promote and evaluate landcare at the Claveria, Lantapan and Ned sites. The project also provided the first link with Australian landcare, with provision for group facilitation training and landcare resource materials from Australia.

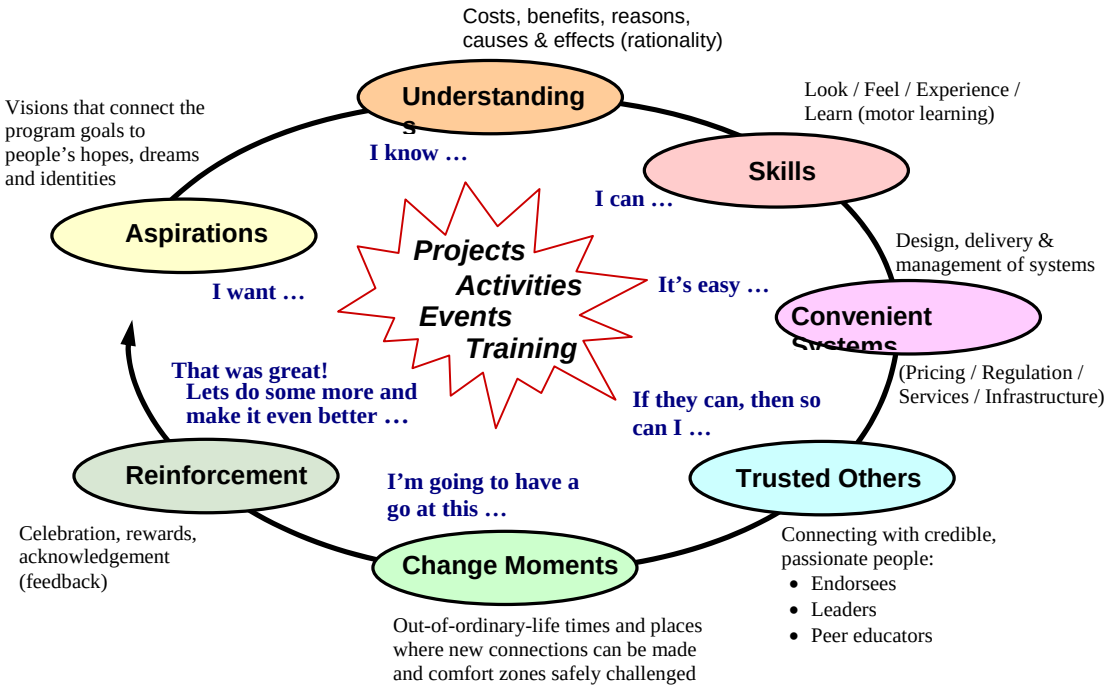
A similar project was subsequently developed by ICRAF and the Spanish aid agency AECI, which further strengthened landcare at the Claveria and Lantapan sites and subsequently enabled its spread to the Visayan islands of Bohol and Leyte. This mix of collaborating organisations and projects became known as the Mindanao Landcare Partnership.

Methods

During 2003, the Mindanao Landcare Partnership decided they would like to write a book about their experiences and successes with landcare. ACIAR agreed to support this project and contracted Jenni Metcalfe to assist the three landcare facilitators (Gerardo Boy, Aurora Laotoco, Eldon Ruiz) to produce this book. It was agreed that the book would be a series of stories from the people directly involved in landcare – the farmers, facilitators, government and non-government representatives, researchers and the people living in the villages. These stories were compiled through a series of interviews, which were then transcribed and edited to produce the book, *Philippines Landcare: People telling their stories* (in press).

This paper further analyses these stories according to how they fit into a social change model, as proposed by Les Robinson (2001). This social change model proposes that seven elements or 'doors' are needed for creating change (see Figure 2 below).

Figure 2. Elements of a social change program (Robinson, 2001)



Results

Aspirations

The first aspect of creating change proposed in Robinson's model is to connect the project's goals with the hopes, dreams and identities of the people, their aspirations. Landcare involved farmers directly participating in research to help them find ways to better farm their smallholder properties. Landcare facilitators also learnt the importance of finding out more information about specific local issues and needs as a first step to landcare.

An indigenous farmer in the highlands of Lantapan, Basilio Decano, is typical of many similar farmers and says (Philippines Landcare: People telling their stories, in press):

> "Before landcare, we were contented with the way we did our farming. We ate a little, sold a little and that's about it. But with landcare, I was able to dream a little bigger than before. It opened my eyes to a future that could be better and more stable. I know now that I have a legacy to give to my children that will not be stolen or burnt down. I feel more secure, knowing that my family will eat more and live a bit more comfortably than before. My grandchildren have something to look forward to and depend upon when they grow up. Landcare means sustainability in terms of food, income and natural endowments".

Understanding

Understanding and sharing of knowledge forms the second part of Robinson's model. With landcare this was achieved through researchers and farmers working together. One of these farmers working in Claveria, accidentally discovered 'natural vegetative strips' (NVS) – a simple low cost technology for retaining natural grass along contour lines and stopping soil erosion. Researchers helped farmers test and further develop this technology and it was rapidly adopted. Adoption of conservation farming technologies was found to be more rapid and widespread when simple technologies:

- are disseminated one-step at a time, rather than complex technology packages;
- fit the local social, economic and physical conditions;
- are easily tested and adapted by farmers to their own individual situations;
- are profitable and low risk;
- have immediate short term benefits as well as long term impacts;
- are low cost and culturally acceptable; and
- are developed by involving farmers in testing and adapting them.

Skills

Farmers need to have the skills and ability to make changes. Landcare was instrumental in helping spread skills in implementing conservation technologies. The group nature of landcare meant a much wider range of people, often in very isolated areas, had access to technology, expertise and training that they previously did not have. After initial assistance from landcare facilitators, landcare groups developed their own farmer facilitator teams who could go further to train other farmers in conservation technologies. Many groups also discovered that training in social or group skills was just as important as technical training. Landcare followed a similar pattern wherever it started in the

Philippines. It initially focused on training farmers in conservation technologies, such as NVS, before landcare groups formed. Rob Cramb (University of Queensland, Australia) was involved in an ACIAR Project evaluating landcare in the Philippines and says (Philippines Landcare: People telling their stories, in press):

> "What we found is that farmers are very aware of soil erosion and land degradation, but are lacking simple practices they can adopt to deal with these issues. They might have even seen contour practices, but until you are actually trained in putting in a contour, there is a barrier to adoption. Training is the single most important factor explaining adoption".

Convenient systems

The fourth element of Robinson's model looks at how convenient change is for people to achieve, given their current social and economic conditions and the support systems in place. One of the barriers to adoption of new conservation technologies, prior to landcare, was the isolation of many upland villages. Such small communities had very little access to the support available through local, municipal, provincial and national government and non-government programs. Landcare provided a critical mass for accessing such support, especially technical support. For example, landcare groups have been able to access funds from the Human Ecological Security Program for their activities.

Another barrier to adoption was that the conservation technologies previously promoted did not suit the needs of farmers for simple, low cost technologies that would still enable them to make a living. The NVS technology promoted through landcare helped to overcome this problem. Local conservation teams made up of an extension expert, landcare facilitator and a leading farmer have helped promote such technology and help individual farmers to implement their desired conservation technologies.

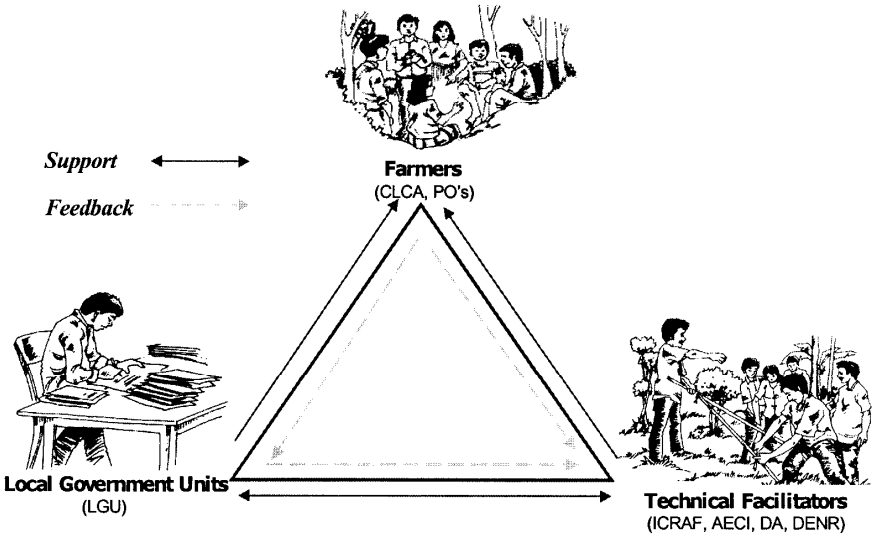
Trusted others

The fifth component of Robinson's model emphasises the importance of leadership, credible advocates for change and peer influence. The partnership between farmers, local government and technical agencies like ICRAF is the basis to landcare, see Figure 3 below. Such a partnership develops mutual trust between the various players, helping to motivate change. Basilio Decano (Philippines Landcare: People telling their stories, in press) says:

> "Landcare brought some sense of truth and faith to us farmers. I saw the sincerity of the people who have shared with me the skills and knowledge that have made me a better farmer. With facilitators coming here two to three times a month, who would not believe that they are serious about truly helping us".

Figure 3. The interdependent and complementary roles of different partners in the landcare triangle (Mercado et al., 2001)

The triadic approach in Landcare enhances participation



The farmer facilitator training program meant landcare acknowledged and relied on peers influencing and training each other in conservation technologies. People learning from each other is a dominant theme of landcare in the Philippines. John Villanueva became a farmer facilitator in the remote Ned region of southern Mindanao. He says he was having trouble in one small village getting people interested in landcare: "…at first no one was interested… so I concentrated on individual farmers and encouraged these farmers through sharing ideas and inviting them to visit my farm. Now three farmers have established contours and have become active with landcare" (Philippines Landcare: People telling their stories, in press).

Change moments

A key feature of landcare's growth in the Philippines have been visits from farmers and community leaders to sites or individual farms where conservation technologies have already been established. It was important for farmers to visit other farmers, sometimes in other municipalities, to see what they had done. This was then followed by short-term, one or two-day practical hands-on-training with a group of farmers who could then go back and help each other implement what they had learned. It was the contact with other farmers, the training and the facilitation that led to adoption of conservation technologies.

Reinforcement

On the aims of the book, *Philippines Landcare: People telling their stories*, is to celebrate the current success of landcare in the Philippines. We decided to tell the story of landcare from the perspectives of people involved rather than from an academic or

technical point of view. In this way, we acknowledged the contribution of the many players in landcare and listened to their own particular perspectives.

Most of the small villages involved in landcare have a meeting place where there are prominent charts outlining the progress and achievement of individual families and farmers.

Throughout the process of landcare, the contributions of people have been acknowledged through visits to other sites, invitations to speak at conferences and local celebrations of achievements.

Conclusion

There are now many active and dynamic landcare groups that have formed amongst the more than 400 groups that have started since the inception of the Landcare Program in the Philippines. These groups are carrying out a wide range of activities and providing a variety of services to their local communities at the sitio, barangay and municipal levels. Active and successful Landcare associations have formed in Claveria, Lantapan and Ned.

The landcare approach has been effective at creating social change in parts of Mindanao by:

1. identifying people's *aspirations* for protecting and sustaining their livelihoods
2. assisting *understanding* about soil conservation issues and technologies
3. developing the *skills* of farmers and their communities in implementing conservation technologies and organising groups
4. promoting simple conservation technologies and providing a critical mass to access funding and support – *convenient systems* for people
5. developing *trust* within partnerships and promoting and supporting farmers to train each other
6. providing opportunities for people to visit sites and farms where they can see conservation farming and landcare in action – *change moments*
7. *reinforcing* people's progress and success

References

Mercardo, A.R. (2003) Landcare approach: Enhancing partnership for sustainable upland development, Paper presented as a poster during *First National Agroforestry Congress*, Leyte State University, Philippines

Mercardo, A.J., Patindol, M., and Garrity, D.P. (2001) The Landcare experience in the Philippines: Technical and institutional innovations for conservation farming, *Development in Practice*, Volume 11, Number 4, pp. 495-508

Metcalfe, J.E. editor (in press) Philippines Landcare: People telling their stories

Robinson, L. (2001) *On making social change*, article found on website: http://media.socialchange.net.au/strategy/