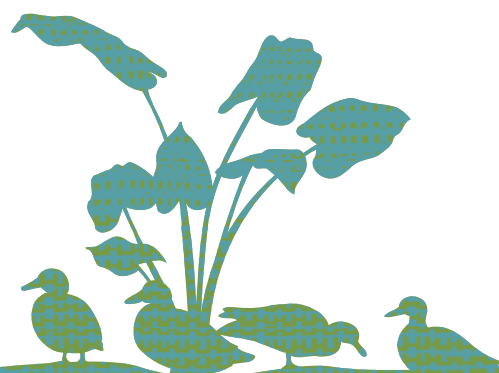
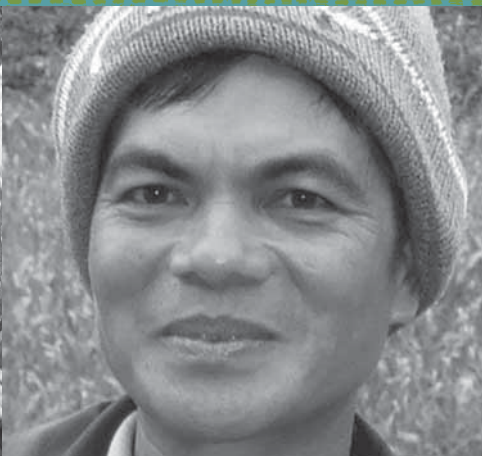


Landcare in the Philippines



A practical guide to getting it started and keeping it going



Australian Government

Australian Centre for
International Agricultural Research

LANDCARE
FOUNDATION
PHILIPPINES

Landcare in the Philippines



A practical guide to getting it started and keeping it going

Landcare Foundation of the Philippines, Inc.



ACIAR

Research that works for developing countries and Australia

www.aciar.gov.au

**LANDCARE
FOUNDATION
PHILIPPINES**



Australian Government

AusAID

ecconnect
communication



**THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA**



World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES



Queensland Government
Department of Primary Industries and Fisheries



The Australian Centre for International Agricultural Research (ACIAR) was established in June 1982 by an Act of the Australian Parliament. ACIAR operates as part of Australia's international development cooperation program, with a mission to achieve more productive and sustainable agricultural systems, for the benefit of developing countries and Australia. It commissions collaborative research between Australia and developing-country researchers in areas where Australia has special research competence. It also administers Australia's contribution to the International Agricultural Research Centres.

Where trade names are used, this constitutes neither endorsement of nor discrimination against any product by the Centre.

ACIAR MONOGRAPH SERIES

This series contains the results of original research supported by ACIAR, or material deemed relevant to ACIAR's research and development objectives. The series is distributed internationally, with an emphasis on developing countries.

© Commonwealth of Australia 2009

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran offices, National Circuit, Barton ACT 2600 or posted at <http://www.ag.gov.au/cca>.

Published by the Australian Centre for International Agricultural Research (ACIAR)
GPO Box 1571, Canberra ACT 2601, Australia
Telephone: +61 2 6217 0500
Email: aciarc@aciarc.gov.au

This book has been produced by the ACIAR–AusAID Philippines–Australia Landcare Project (ASEM/2002/051), a partnership of:

- Landcare Foundation of the Philippines, Inc.
- World Agroforestry Centre
- Catholic Relief Services
- University of the Philippines Los Baños
- Southeast Asian Regional Center for Graduate Study and Research in Agriculture
- Queensland Government Department of Primary Industries and Fisheries
- The University of Queensland.

The Landcare Foundation of the Philippines, Inc. (LFPI) was established in 2003 by the World Agroforestry Centre (International Centre for Research in Agroforestry) under a project funded by the Agencia Española de Cooperación Internacional (AECI). LFPI's initial mission was to operate a Small Grants Program to landcare groups in northern Mindanao through a special Landcare Trust Fund provided by AECI. Since then it has broadened its mission to supporting the development of landcare throughout the Philippines.

Landcare Foundation of the Philippines, Inc. 2009. Landcare in the Philippines: a practical guide to getting it started and keeping it going. ACIAR Monograph No. 138. Australian Centre for International Agricultural Research, Canberra. 144 pp.

ACIAR Monograph No. 138, 144 pp.

ISBN 978 921531 55 2 (print)
ISBN 978 921531 56 9 (online)

Copy editing: Mary O'Callaghan

Design: See-Saw Illustration and Design

Printing: Platypus Graphics, Brisbane, Australia

Photos: Except where stated otherwise, all photos were taken by the contributors and remain the copyright of the individual contributors.

Illustrations: Joselito T. Jimenez

Foreword

Research agencies, including the Australian Centre for International Agricultural Research (ACIAR), have been involved in developing and adapting farming technologies in the Philippines for many years. Much of the work has focused on overcoming problems such as land degradation while attempting to simultaneously improve the livelihoods of farming families.

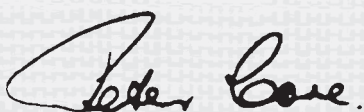
While landcare has been at the forefront of this work for more than a decade, its focus now extends well beyond natural resource management issues to encompass all aspects of people's livelihoods, including health, income, cash flow, access to markets, and education. Initiated in Claveria in northern Mindanao in 1996 as a partnership between the World Agroforestry Centre, local farmers and the municipal local government unit, it has achieved change in the adoption of conservation farming technologies and improved livelihoods at a rate rarely observed in the Philippines.

ACIAR is proud to have been involved as a research partner in this effort since 1999, for the last 5 years in conjunction with the Australian Agency for International Development (AusAID). During the 10 years of Australian agency involvement, landcare has grown to involve more than 8,000 farmers in more than 20 municipal sites throughout Mindanao and the Visayas. This has involved partnerships with more than 60 research, government, non-government and academic agencies. In the process, landcare has helped reshape thinking and practice towards a more participatory research and extension model, where everyone has a more active role in achieving beneficial outcomes relevant to their community needs.

This change in thinking and practice has highlighted the important role of facilitation—working with farmers and others in rural communities to facilitate change 'from the inside out'. It is a skill that has relevance not only to landcare but also to any community development process demanding long-term sustainable change.

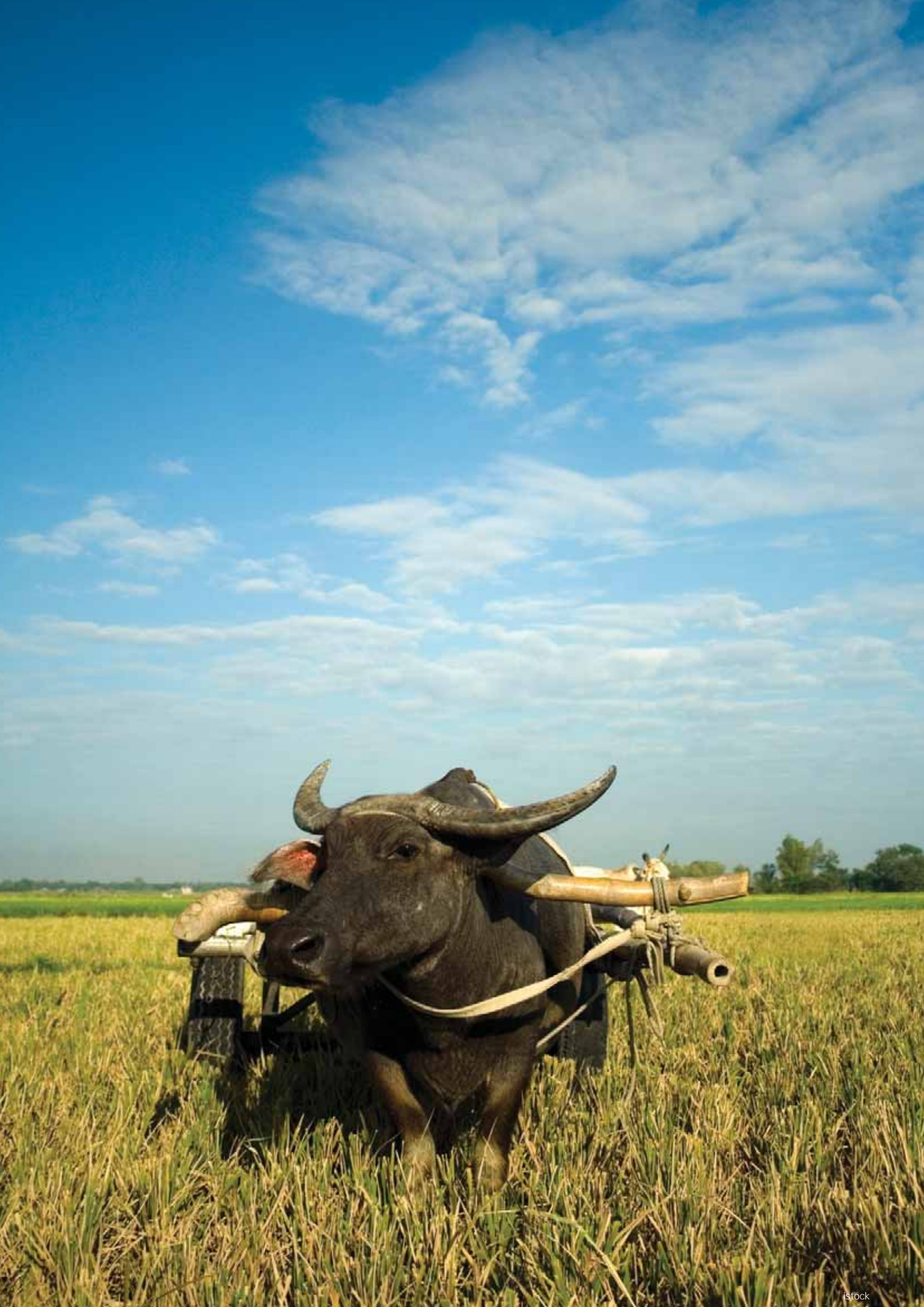
This manual provides practical guidelines for all those involved in this important role—the practitioners (extension workers, community organisers and farmer facilitators), local government officials and other agency managers who wish to understand how landcare works. What makes the manual especially valuable is that the guidelines come from 15 local landcare facilitators who between them have more than 100 years of landcare experience.

The manual builds on ACIAR's 2004 publication, *Landcare in the Philippines: stories of people and places* (Monograph 112), which tells the stories of more than 40 people who contributed to the growth of landcare in the country. The book inspired many people to become involved in landcare and we hope that this new manual will help them, and those of you who are new to landcare, to use the landcare approach for the benefit of your communities.



Peter Core

Chief Executive Officer
Australian Centre for International Agricultural Research



Contents

Foreword	3
Preface	9
Contributors	11
Acknowledgments	20
Abbreviations and acronyms	21
The story of landcare in the Philippines	23
Introducing this manual	35
The purpose of this manual	35
Who is this manual for?	35
How to use this manual	36
Section 1. What is landcare?	39
The seven principles of landcare	39
How does landcare work?	42
What issues does landcare address?	44
Landcare's entry point: conservation farming	52
The main technologies used in landcare	54
Everyone can play a part	55
Summary – What is landcare?	57
Section 2. Is landcare for you?	59
The benefits of landcare	59
The costs, risks and challenges of landcare	71
How landcare links with other programs and projects	75
The important role of the landcare facilitator	78
Summary – Is landcare for you?	83
Section 3. How to get landcare started	85
The seven steps to getting landcare started	85
Step 1. Identify the target site and farmers	86
Step 2. Get to know the local situation	89
Gathering as much information as you can find	89
Talking to stakeholders	91



Step 3. Gain broad agreement and support from stakeholders	93
Identifying the stakeholders	93
Arranging a presentation forum for stakeholder representatives	94
Preparing your presentation	95
Presenting your proposal	95
Step 4. Contact farmer leaders and arrange a process for engaging farmers	100
Step 5. Orientate farmers to the program and form landcare groups	102
Orientating the farmers to the program	102
Forming the landcare groups	103
Step 6. Identify and plan landcare group activities	104
Holding planning meetings with the farmer groups	104
Examples of landcare group activities	107
Step 7. Implement landcare group activities	110
Conducting a farmer cross-visit	110
Delivering on-farm training	113
Establishing a learning site	114
Implementing livelihood and income-generating activities	114
Implementing social activities	116
Communicating with farmers in the field	116
Summary – How to get landcare started	117
Section 4. How to keep landcare going	119
Keeping landcare groups going	119
Building on the landcare group structure	131
Staying strong as a landcare facilitator	136
Supporting the expansion of landcare to new sites	138
Summary – How to keep landcare going	139
Glossary	141
Further reading	143



List of stories

Marcelino's 'Garden of Eden' – a product of landcare	24
Natural vegetative strips and the 'cow's-back' method of ploughing contours	25
Changing attitudes and practices, not just technologies	26
A landcare dream come true	34
Landcare leaves a legacy for our grandchildren	41
Extending the life span of Pilar's water supply	45
Landcare transcends tensions in Mindanao	48
Landcare benefits the lowlands	51
Children teaching parents	56
Diverse crops transform barren land into a model landcare farm	61
Landcare brings healthy soil and more regular income	62
Farming in the foothills of Mt Apo Natural Park	64
Church ministry 'converts' South Cotabato family to landcare	65
Controlling erosion for neighbourly relations	65
A foundation for the Philippines' farming future	67
A hog for every woman	70
Healthier and wealthier vegetable production	72
Landcare adds value to Upland Development Programme in South Cotabato	77
Building friendships is the key to building partnerships	82
Bohol province integrates landcare approach with local government units	88
Finding out about what is already going on	90
Starting with the backyard vegetable garden at Malisbong	92
Partnering with Indigenous peoples to conserve native trees	97
Local government unit supports farmers to implement landcare	98
Cross-visits inspire farmers and government officials	108
Replanting forests to secure water and livelihoods in Agusan del Sur	112
Diversify, diversify, diversify!	115
Mayor passes ordinance for contour farming in Bohol	121
Landcare can benefit LGUs and non-government organisations	122
Bohol women's landcare group flourishes	125
Growing the right potato for the right market	127
Pooling resources to plant 15,000 trees in Claveria	129
Seeing is believing for Bohol farmers	132
Lantapan Landcare Association brings bargaining power and camaraderie	133





Preface

Never before have the twin challenges of addressing livelihood improvement and natural resource management in the Philippine rural uplands been as pressing as they are now. The passage of the Local Government Code of 1991 (Republic Act No. 7160), which devolved and decentralised national government services and programs, gave greater autonomy and power to the country's many provinces, municipalities and *barangays* and brought these twin issues to the forefront of the development agenda. Similarly, it gave greater responsibility to the local government units to be more creative in finding solutions to these problems. Among the services devolved to the local government units is the delivery of agriculture and natural resource management extension.

Landcare is an alternative model for extension that can be adopted or adapted by our local government units, national government agencies and other key development players. It is a people-centred approach for extension that brings all key stakeholders in the community together to learn and jointly address a broad range of livelihood issues that confront them. The issues may be degradation of resources on the farm, low farm productivity, poor marketing systems or even bigger issues that affect the wider community.

Facilitating the local people to act on these issues is of fundamental importance in landcare. Facilitators guide the people to come together, talk among themselves, analyse their problems, and identify and implement the solutions to their problems. Facilitators help make the community aware of the problems, and build and develop the community's capacity to innovate, test and implement new practices.

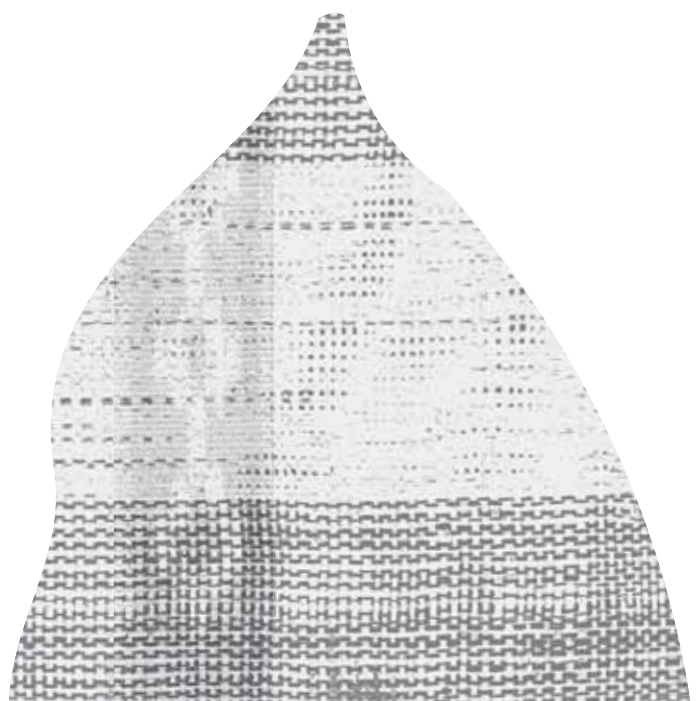
This manual is a product of the rich experiences of landcare facilitators from a series of landcare projects mainly supported by the Australian Government through the Australian Centre for International Agricultural Research (ACIAR) and the Australian Agency for International Development (AusAID). Their experiences were enriched by funding support from the Agencia Española de Cooperación Internacional (Spanish Agency for International Cooperation) and the many other partners of the Landcare Foundation of the Philippines, Inc. The facilitators began by introducing simple conservation farming practices in the sloping farmlands; later their work evolved to helping communities address broader livelihood issues such as managing soil fertility, diversifying farming systems and, more recently, gaining better access to markets for farmer landcare groups.

Opposite: Gretchen Sibonga is one of the students at Gerardo Astilla Sr. High School, Malamba, near Davao City, who is growing up with landcare.

This manual is intended as a guide for new landcare facilitators in the country's rural communities. These facilitators include the agricultural technicians of the provincial and municipal agriculture and natural resources management offices, the development facilitators of the national government agencies (such as the Department of Agriculture, the Department of Environment and Natural Resources, the Department of Agrarian Reform, and the National Commission on Indigenous Peoples), the community organisers and project officers of non-government organisations, and the farmer technicians and *barangay* extension workers of farmers' associations in the *barangays*. As well as a step-by-step guide, the manual provides practical and important tips on integrating and implementing landcare in ways that complement the programs and projects already operating locally. The manual is a response to a demand from our many partners—local policymakers, local chief executives, agriculture and natural resources officers, development workers, and community and farmer leaders—for practical information on how they can adopt and make landcare relevant to the needs and opportunities of their respective communities.

Ma Aurora C. Laotoco

Executive Director
Landcare Foundation of the Philippines, Inc.



Contributors

Authors

Samuel G. Abrogar

I am married to Merlyn Galinada and we have two children. We live at *Barangay* Madaguing, one of the 24 *barangays* of Claveria, Misamis Oriental.

As a field facilitator with the Landcare Foundation of the Philippines, Inc., I am facilitating tree-growing partnerships between the wood industry and smallholder farmers, as part of the ACIAR Community Agricultural Technology Program.

I first learned about landcare back in 1998 and was elected as a director of the board of the Claveria Landcare Association. Once I was trained in the landcare technologies, I became a farmer trainer for the association, using hands-on demonstrations to help spread the word about agroforestry to other farmers. I also implemented the technologies on my own farm.

Establishing a farm-based ecotourism venture is my desire and passion—a showcase area where farmers can learn about agroforestry and adopting diversified, integrated, and natural farming systems that help to bring about ecological balance.

Lyndon J. Arbes

I am the Regional Landcare Coordinator for northern Mindanao working for the Landcare Foundation of the Philippines, Inc. on the ACIAR–AusAID Philippines–Australia Landcare Project. From 1998 to 2008 I worked for the World Agroforestry Centre at its research site in Bukidnon on landcare projects funded by, among others, the Agencia Española de Cooperación Internacional and the International Fund for Agricultural Development.

I live in Don Carlos, Bukidnon with my wife Josephine Liu whom I met when she was a landcare volunteer. We are blessed with two children, Earl Laurence and Paul Hans.

I am passionate about improving the lives of the marginal farmers in the uplands of Mindanao and helping people to use the environment in a more sustainable way.



Email: samuel_lfpi@yahoo.com



Email: lyndon_lfpi@yahoo.com



Email: rojo_lfpi@yahoo.com

Rojo B. Balane

The priest baptised me Roy Joseph but my friends like to call me Rojo (raw-dew). For the past 10 years I have worked with communities and farmers helping them to improve their livelihoods and manage their natural resources. I first got involved with landcare in 2005 when the World Agroforestry Centre appointed me as Landcare Coordinator for Bohol under the ACIAR–AusAID Philippines–Australia Landcare Project.

I grew up in Bohol, in the middle of the province’s rice granary. At an early age I worked on my grandparents’ farm during summer vacation, harvesting corn or planting rice. It was not much fun, with back pains after each day spent in the paddy, and I always thought that there must be an easier way to plant rice. But I cherished the times I’d get to ride the carabao and I learned to manoeuvre the slopes toward the river where I was thankful to cool off.

In college I studied agriculture, thinking that I’d do better with the plough than the cloth or the bar. I’ve always dreamed of setting up my own small farm and, guided by the success stories that I’ve read, showing others the way to ‘farming without the back pain’.

Henry S. Binahon



Email: hbinahon@yahoo.com

My wife Perla and I manage our farm in Lantapan, Bukidnon. We have two children, Henry Mark and Pearlie Jane, both tertiary students. We are dependent on our farm income for basic needs and education.

I am a member of the Board of Trustees of the Landcare Foundation of the Philippines, Inc. I served as vice-president for two terms and president for two terms. I also participate actively in local organisations that have agriculture and natural resource management functions.

I am a practitioner of landcare. Having established and developed a model farm for conservation, I have made it a landcare education venue for farmers, technicians, researchers, students and other interest groups. We share our initiatives with our fellow farmers in the locality and educate our visitors in the concepts and principles of landcare and conservation farming, as a strategy for socioeconomic stability and sustainable ecosystem management. Since getting involved in landcare, I have made landcare a way of life.

Jessan S. Catre

I am 38 years old, married and living in Davao City, Mindanao. I work with Catholic Relief Services (CRS) as an agroenterprise project team leader. In this role, I provide specialist technical support services on marketing to the ACIAR–AusAID Philippines–Australia Landcare Project. I help landcare groups to market their produce profitably through collective efforts.

I became aware of landcare in 2004 when I visited Lantapan, Bukidnon. In 2007, I was part of a CRS team that evaluated our involvement in the landcare project in Agusan del Sur. Shortly after that I got formally involved with the project and have now seen landcare implemented in South Cotabato, Bukidnon, Misamis Oriental and Bohol. I am impressed by the dynamic partnerships built, the appropriate technologies introduced and the effective extension approach employed.

I'm enthusiastic about the potential of landcare to harmoniously combine natural resource conservation, production and livelihoods for the rural poor. I also believe landcare can become a national movement of farmers and fishers changing upland, lowland and coastal landscapes and mindscapes.



Email: jcatre@ph.seapro.crs.org

Geramil G. Cordero

I am a landcare facilitator with the World Agroforestry Centre, working on an ACIAR-funded watershed research project in Bohol. Originally from Bukidnon in northern Mindanao, I am married to Honey Mae Solano and we have two sons, Jeremy and Julian. We live in Tagbilaran, Bohol.

I started my landcare career as a volunteer for the World Agroforestry Centre and the Agencia Española de Cooperación Internacional where I helped to implement landcare in Lantapan in the municipality of Bukidnon.



Email: icraf_bohol@yahoo.com

Maria Noelyn S. Dano

Originally from Bohol, I am now in Australia doing postgraduate studies in environmental management and development.

I first got involved with landcare in 2005 when I worked with the World Agroforestry Centre as the Philippines Coordinator of the ACIAR–AusAID Philippines–Australia Landcare Project. I coordinated research and monitored progress in the field. I helped to integrate development initiatives of the Landcare Coordinators Network across priority provinces in the southern and central Philippines. I also researched the institutional support structure for landcare in the Philippines as part of the project.

What really excites me about landcare is being able to link voices from the field with policymakers.



Email: noelyn_dano@yahoo.com



Email: emily_lfpi@yahoo.com

Emily L. Garcia

My involvement in landcare started in 1999 under the first phase of the ACIAR–AusAID Philippines–Australia Landcare Project. I was the Project Management Assistant looking after the administrative and logistical needs of project staff. I was also involved in gathering and analysing data. I joined the facilitators on field trips to learn and understand fieldwork.

During Phase 2 of the project (2004–07), I was the Project Management Associate providing the whole project team with administrative and logistical support during meetings and workshops. I am currently the Administrative Officer for the Landcare Foundation of the Philippines, Inc. under Phase 3 of the project.

I am passionate about the dedication of our team and our partners to their work, and their commitment and willingness to learn from one another and to apply this learning in their everyday work.



Email: alaotoco@yahoo.com

Maria Aurora C. Laotoco

My full name is Maria Aurora C. Laotoco. I like it better if people just call me 'Au'. I am the Executive Director of the Landcare Foundation of the Philippines, Inc. (LFPI), based in Claveria, Misamis Oriental.

My first involvement with landcare was in 1998 as the Municipal Planning and Development Officer of the municipality of Claveria. I was so impressed by its potential to make a meaningful difference that, in 1999, through the World Agroforestry Centre, I joined the first ACIAR–AusAID Philippines–Australia Landcare Project as a landcare facilitator. In 2005 I joined LFPI.

I am passionate about the potential for landcare to guide local communities in conserving their natural resources while improving their livelihoods.

Lorena B. Loma

I consider landcare as my first career journey because it deals with people in the community, which is one of my interests. It was a great opportunity for me to be involved in the ACIAR–AusAID Philippines–Australia Landcare Project, implementing landcare in South Cotabato. Based in *Barangay Ned*, I was able to work closely with the Ned Landcare Association.

Personally, I realised that the project we implemented was effective and productive, not only for community development but also in building my character, confidence and professionalism. I am passionate about strengthening the Ned Landcare Association by linking it with service providers.

As the demand for landcare increases, I continue to believe with confidence that we can take landcare an extra mile and make a real difference.



Email: lorena_lfpi@yahoo.com

Agustin R. Mercado, Jr.

As Research Manager at the International Rice Research Institute – World Agroforestry Centre’s research site in Claveria, I coordinate and implement the World Agroforestry Centre’s research program.

My work focuses on improved conservation-oriented agroforestry systems for sloping lands. Current research is focused on the management of soil fertility on the natural terraces, and the development of smallholder farm forestry with short-cycle tree species and horticultural crops such as tropical fruits and vegetables. I have been involved in testing practical methods by which conservation farming technology can be diffused within and among farm communities.

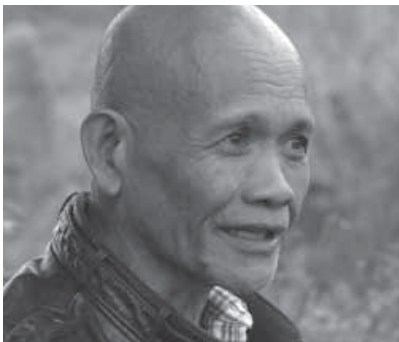
I facilitated the country’s first landcare initiative in Claveria in 1996, and still help landcare organisations to link up with non-government organisations, government line agencies, and academic and other institutions to promote exchange of information at the local, regional and national level.

I have a BSc in Agriculture specialising in agroforestry from Bohol Agricultural College, and an MSc in Environmental Management from Liceo de Cagayan University. I completed a PhD degree at the University of Hohenheim in Germany and was conferred *magna cum laude*. Prior to joining the World Agroforestry Centre, I worked for the International Rice Research Institute on an acid-soil upland rice-based farming systems project in Claveria. The project looked at soil fertility management, upland rice cultivar evaluation and conservation farming.

I have published a book and many journal articles about conservation farming, agroforestry research and development, and the landcare approach. I live with my wife and four children in Poblacion, Claveria, Misamis Oriental.



Email: agustin9146@yahoo.com



Email: mspatindol@yahoo.com

Marcelino M. Patindol

I am 60 years old, married, and graced with three children, Marel, Elmar and Arcelin, who are all grown up and have their own professions. I also have an adopted son, Charlie Mark Dacanay, a third-year accountancy student at Xavier University. I live in Claveria, Misamis Oriental.

I was one of the first farmers in the Philippines to be involved in landcare when it started in 1996 as a collaborative initiative between Claveria farmers, researchers from the International Centre for Research in Agroforestry (now the World Agroforestry Centre) and officers of the Claveria Local Government Unit. We came up with the name 'Land Care' and formed the Claveria Landcare Association, which has remained a dominant force in the development of landcare, not only in Claveria but throughout the Philippines. I was honoured to be the association's founding president.

Since those early beginnings, landcare has thrived and expanded and I have continued to support and encourage it wherever possible. In 1998, I was recognised by the Tekno-Gabay Program of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development as one of the 'farmer scientists' in my region (Region 10). I also make myself available to help with landcare training. I am proud to be one of landcare's founders and my farm is a demonstration of landcare's success.

Eldon A. Ruiz



Email: eldon_lfpi@yahoo.com

I am married to Concesa Berdin Ruiz and blessed with two sons, EC Krajeck and Keefer Keith. I live in Koronadal City, South Cotabato. Working with the Landcare Foundation of the Philippines Inc., as the Regional Landcare Coordinator for southern Mindanao, I am responsible for introducing landcare initiatives in the region.

I first learned about landcare in 1999 when I worked as a landcare facilitator covering the Ned area in Lake Sebu, South Cotabato, under the first phase of the ACIAR–AusAID Philippines–Australia Landcare Project. I became the provincial landcare coordinator in the second phase of the project from 2004–07, responsible for introducing landcare initiatives to other municipalities in South Cotabato.

My career with landcare started and grew with an ACIAR-funded project implemented by the Southeast Asian Regional Center for Graduate Study and Research in Agriculture based at the University of the Philippines Los Baños, Laguna.

I practise landcare on my own farm and am excited about developing it as a learning and earning site.

Alexander U. Tabbada

I am a believer in landcare and in the local capacities on which it is anchored. As Research Manager of the Landcare Foundation of the Philippines, Inc., I work with landcare teams from the ACIAR–AusAID Philippines–Australia Landcare Project to promote, further and practise landcare in northern Mindanao, southern Mindanao and the Visayas, across various development themes such as poverty alleviation, food security, sustainable agriculture and peace building.

My hands-on involvement with landcare started in the summer of 2002 when I became the Natural Resource Management Officer and Site Coordinator of the World Agroforestry Centre (ICRAF) in Lantapan, Bukidnon. My key contribution to landcare in the Philippines has been its scaling up in 144 *barangays* in 38 municipalities in six provinces in Regions XI and XII. This work was part of the collaborative project ‘Enhancing the Upland Extension System in Southern Mindanao’, which was implemented by ICRAF Philippines and the EU-funded Upland Development Programme in Southern Mindanao from 2004 to 2007.

Being involved in the development of this book has been professionally fulfilling for me. It has given me the opportunity to share the landcare knowledge, skills and experiences—in leading teams, capacity building, monitoring, research and extension—which I have gained directly and indirectly under various donor projects and in different capacities and functions.

Nelson F. Tomonglay

I work with the Landcare Foundation of the Philippines, Inc. on the ACIAR–AusAID Philippines–Australia Landcare Project as a landcare facilitator for northern Mindanao. I was involved in the beginning of landcare in the Philippines in 1996 as a member of the contour hedgerow extension team that represented the local government unit of Claveria.

I live in Claveria, Misamis Oriental, with my wife Bebelyn Besa and our four children, John Mark, Daniel, Paul Archie and Nelson Jr. I use landcare technologies on my 6,000 square metre farm. I love to mark each memorable family event (such as birthdays) and national events (such as Independence Day) by planting a tree.



Email: alex_lfpi@yahoo.com



Email: nelson_lfpi@yahoo.com

Coordinators/editors

Noel Vock



Email: noel.vock@dpi.qld.gov.au

I am an extension officer with the Queensland Government Department of Primary Industries and Fisheries, based at the Maroochy Research Station in Nambour, Queensland, Australia. For the past 10 years, as Project Leader of the ACIAR–AusAID Philippines–Australia Landcare Project, I have been fortunate to have been involved with a wonderful team of people in developing and testing a different approach to rural community development. I thank them and the farmers and partner agencies they serve for the experiences they have provided to me and my family—truly a life-changing experience.

I have been working in extension in subtropical horticulture for almost 40 years. I have a particular interest in the adoption of technologies by farmers and in how farmers can influence the development of new technologies through being involved in research design and implementation.



Jenni Metcalfe

I am Director of Econnect Communication, an Australian-based company specialising in communicating about science and the environment. We are passionate about helping to protect our natural environment.

My first contact with the Philippines–Australia Landcare Project came at Easter in 2003 when I was invited to meet with members of the project at the Australian Landcare conference in Darwin to discuss helping them to write a book. The result of this meeting was the book: *Landcare in the Philippines: stories of people and places*, published by ACIAR in 2004.

I worked with the landcare facilitators to collect stories, match them with photos and structure the book.

I have been privileged to visit landcare sites in the Philippines three times. On each occasion I have been both humbled and inspired by the efforts I have witnessed and the people I have met. During my last visit, I worked with Mary, Noel and the contributing authors to develop the concept for this manual.

I am very supportive of landcare in the Philippines and will continue to support the efforts of landcare facilitators to improve people's livelihoods and protect the environment.

Mary O'Callaghan

Landcare, *lechon* and laughter—this sums up my visit to the Philippines in December 2007. I had travelled from Australia, where I work with Econnect Communication as a writer and editor, to share with the authors of this manual some tips about writing. Their willingness to learn was wonderful and I learnt a lot myself about cultural differences in the use of language. My subsequent trip to South Cotabato, Agusan del Sur and Bohol to see firsthand some of the landcare sites was unforgettable. I am thrilled to have the chance to play a small part in the making of this book.



Email: jenni@econnect.com.au



Email: mary@econnect.com.au

Acknowledgments

The Australian Centre for International Agricultural Research (ACIAR) and the Landcare Foundation of the Philippines, Inc. (LFPI) have made this manual possible.

Special thanks go to Noel Vock from Queensland's Department of Primary Industries and Fisheries. As Project Leader of the ACIAR–AusAID Philippines–Australia Landcare Project, Noel motivated all the contributors and led the process of producing this manual, with the support of Maria Aurora Laotoco, Executive Director of LFPI.

Thanks also go to Jenni Metcalfe and Mary O'Callaghan from Econnect Communication who mentored the authors, which included running a writing workshop to help the authors identify the readers of this manual, and to structure and write the content to meet the needs of these readers. Jenni and Mary also visited landcare sites in South Cotabato, Agusan del Sur and Bohol to collect stories and take photographs to illustrate the manual. In reviewing, editing and managing the publication process for this manual, Econnect Communication continues to provide support and services to the Philippines–Australia Landcare Project team, much of this on a *pro bono* basis. This long-term generosity towards Philippines landcare started with the production of the first landcare book, *Landcare in the Philippines: stories of people and places*, published by ACIAR in 2004. Since then, they have, at no cost to the project, published an online newsletter for the project, advised the project team on a wide range of communication issues, and donated funds to schools and landcare staff in the Philippines. The authors are delighted to have had the opportunity through this manual to continue the association with Econnect Communication.

Jo Marie Libarnes, a VSO volunteer from the Philippines, has been working with farmers and local government units to develop a landcare program in Indonesia. She kindly provided a critique of the book from the perspective of a new landcare facilitator.

Delia Catacutan, Mindanao Research Officer for the World Agroforestry Centre and a highly experienced landcare practitioner, provided advice and support.

Betty Fueconcillo works with Catholic Relief Services on its Landcare in Schools Program. She was previously a landcare facilitator with the ACIAR–AusAID Philippines–Australia Landcare Project and kindly arranged for the authors to visit schools in Malamba, near Davao City, and landcare sites in Agusan del Sur to collect stories and photographs.

We thank the contributors for providing photographs to illustrate the manual.

Abbreviations and acronyms

ACIAR	Australian Centre for International Agricultural Research
AusAID	Australian Agency for International Development
BAW	<i>barangay</i> agricultural worker
BAFTECH	<i>barangay</i> farmer technician
CRS	Catholic Relief Services
DENR	Department of Environment and Natural Resources (Philippines Government)
FTG	farmer trainer group
LFPI	Landcare Foundation of the Philippines, Inc.
LGU	local government unit
MOSCAT	Misamis Oriental State College of Agriculture and Technology
NGO	non-government organisation
NVS	natural vegetative strips
PACAP	Philippines Australia Community Assistance Program
PCARRD	Philippine Council for Agriculture, Forestry and Natural Resources Research and Development
PILAR DAM	Productivity Improvement through Landcare and Agricultural Research Development And Management
SALT	sloping agricultural land technology
UDP	Upland Development Programme in Southern Mindanao



The story of landcare in the Philippines

Claveria – the birthplace

Soil erosion is a significant threat to Asia's productivity and prosperity. Caused by a combination of steep slopes, highly erodible soils, heavy rainfall, forest clearing and intensive cropping practices, it significantly reduces farm productivity and adversely affects water quality and storage, marine resources and biodiversity.

Sixty-five per cent of Asia's 1.6 billion rural people earn their livelihoods from farms located on steep slopes, where soil erosion rates are among the worst in the world. Most of Asia's population lives in rural areas, where there is high population growth, extreme poverty and insecure land tenure. So the impact of soil erosion is tremendous.

Nowhere is the problem more pronounced than in rural uplands of the southern Philippines, where it poses a grave threat to sustainable farming and poverty reduction. While lowland areas have much less soil erosion, they suffer the impacts of erosion from neighbouring upland areas, and have similar population growth and poverty problems.

Many projects have tried to tackle soil erosion but with little sustained success. Landcare is a relatively new initiative that takes a different approach. First used in 1996 in the northern Mindanao municipality of Claveria, Misamis Oriental, it brought together farmers, representatives of the Claveria Local Government Unit and technical facilitators from the World Agroforestry Centre. This special partnership helped farmers to tackle erosion by involving them in the development of conservation farming technologies for steep slopes, particularly the more farmer-friendly systems such as natural vegetative strips.

The farmers themselves coined the term 'landcare' to give the initiative an identity that emphasises the 'bottom-up' farmer-driven approach, which differs from the more traditional 'top-down' processes. The initiative was an instant success: landcare groups formed and farmers across Claveria adopted conservation farming technologies at a rate rarely before observed in the Philippines.



Farming households in the uplands are typically poor, isolated, vulnerable and threatened by land degradation. Through conservation farming and livelihood improvement, landcare offers a solution to this problem.



Marcelino's 'Garden of Eden' – a product of landcare

When Marcelino Patindol attended a farmers' forum on agroforestry in 1993, he had never heard of landcare.

'My farm was barren when I bought it in late 1990,' says the farmer from Claveria, Misamis Oriental in northern Mindanao. 'The vegetation was very poor; only cogon grass (*Imperata*) and wild fern grew on it. I started cultivating the land in 1992 when I retired from military duty, but after 2 years I had a very discouraging yield that couldn't even feed my family.'

The 25 farmers who attended the forum came from both upper and lower Claveria. 'I had no farming background so I grasped the information from that meeting,' says Marcelino.

After the forum, the farmers continued to work with researchers from the World Agroforestry Centre, meeting monthly at the centre's office to share their experiences of how the technologies were working on their farms.

'We learned about conservation farming—natural vegetative strips, minimum tillage and agroforestry. I found that agroforestry was a good fit for the undulating area of my farm. Rainfall in upper Claveria is 2,500–3,000 mm. But down below, it's dry.'

After 3 years, the group decided to form a farmer organisation.

'We looked for a name to call ourselves,' says Marcelino. 'I liked the word "landcare" because we all understood "land" and "care". I sold it to the group and after a lengthy deliberation the Claveria Landcare Association was born. I knew nothing about landcare in Australia. It was a complete accident that we had used the same word.'

That was 26 March 1996. Not only was it the birth of landcare in Mindanao, it was also the birth of landcare in the Philippines.

'Now on my farm, the *Imperata* grassland has been replaced by a forest of timber and fruit trees that I have grown. The soil is now fertile and, most significantly, spring water is flowing from my forest and serving my farm and my household. How great! I really treasure this forest in my life. I owe this to landcare!

'If our people will adopt the landcare approach, there is no reason why we can't restore the beautiful lost Garden of Eden from the book of Genesis (Chapter 2:10–16).'

Marcelino Patindol (above) surveys the crops growing on his contoured farm in Claveria. Contour farming is one of the conservation farming technologies he has helped to promote.

Natural vegetative strips and the 'cow's-back' method of ploughing contours

Natural vegetative strips are narrow strips of naturally growing grasses and herbs which are left unploughed along the contours of sloping farmland. The 50-centimetre wide strips are spaced 5–10 metres apart, depending on the slope. Left to grow, they act as buffers, controlling soil erosion and helping to filter pesticides and fertilisers in water run-off. Because the grasses used are naturally growing on the farm, the strips are cheap and easy to establish and maintain, and do not compete with crops.

Initially, farmers used a simple A-frame device that helped to indicate where they should plough the contours.

Farmers in Claveria adapted the A-frame method to their own needs and developed what is known as the 'cow's-back' method. With this method, to get true contours, the farmer makes sure that the back of the draught animal remains level as it ploughs along the contours. If the animal is headed up the slope, its head is higher than its back; if it is headed down the slope, its rear end is higher than its back.

While natural vegetative strips are good at controlling soil erosion, they reduce potential crop area by 10–20%. Although this means a reduction in total yields and farm income, it does lead to greater sustainability in the long run because farmers are able to remain on their land and produce regular crops. Planting timber trees and fruit crops such as bananas, durians, lanzones and pineapples on the strips can make them more productive.



A farmer demonstrates the 'cow's-back' method for locating contours.



Changing attitudes and practices, not just technologies

by Agustin ('Jun') Mercado, Jr

In the beginning we were not thinking about landcare. Our challenge as researchers was to help tackle the major soil erosion problem of farmers in Claveria, where we had soil losses of 50–300 tonnes per hectare every year. This erosion was reducing farmers' annual crop yields by 200–500 kilograms per hectare. After 3 years of continuous cropping on sloping land, the farmers had to abandon their fields. They moved to another location, where they had to cut down more forests to sow their crops. Our challenge was to sustain the areas already under cultivation and protect the forests.

Claveria is the upper watershed for 13 coastal municipalities in Misamis Oriental. So, what the farmers do here in Claveria affects all 13 municipalities. Besides soil erosion, there are issues related to soil acidity, soil fertility, land clearing, biodiversity loss, weeds and destruction of marine environments.

First we tried the sloping agricultural land technology (SALT), which uses a double hedgerow of legumes to stop soil erosion. Planting two rows of legumes, such as *Gliricidia sepium* or *Flemingia macrophylla*, along the contours eventually leads to a terracing effect.

We did a lot of work to develop the system for the acid soils typical of Claveria. However, the technology was not being adopted by our farmers. The work was labour intensive, taking

58 days to prepare 1 hectare. It took another 158 days a year to prune and maintain the hedgerows. On top of that, the legume seeds and seedlings were too expensive for our farmers. We also found that the hedgerows were directly competing with crops by taking up water and nutrients from the same layer of the soil profile. SALT was not a suitable technology for our area.

Then one of the local farmers accidentally left a strip of natural grass on their fields, where they had pegged out an area to put in a legume hedgerow system and then abandoned it. At first, we thought they were just being lazy, but when we looked at it carefully we found that leaving a strip of native grass allowed rainfall to filter through the grasses without washing the soil away. Eventually, terraces formed naturally in the areas where there were grass strips.

The best thing about this new technology, which became known as natural vegetative strips, or NVS, was that it was low cost and easy for farmers to adopt. The time needed to maintain NVS is much less than for a legume hedgerow and is related to how far apart the strips are placed. For example, strips spaced 6 metres apart take 30 days a year to maintain—less than one quarter of the time needed to maintain a legume hedgerow.

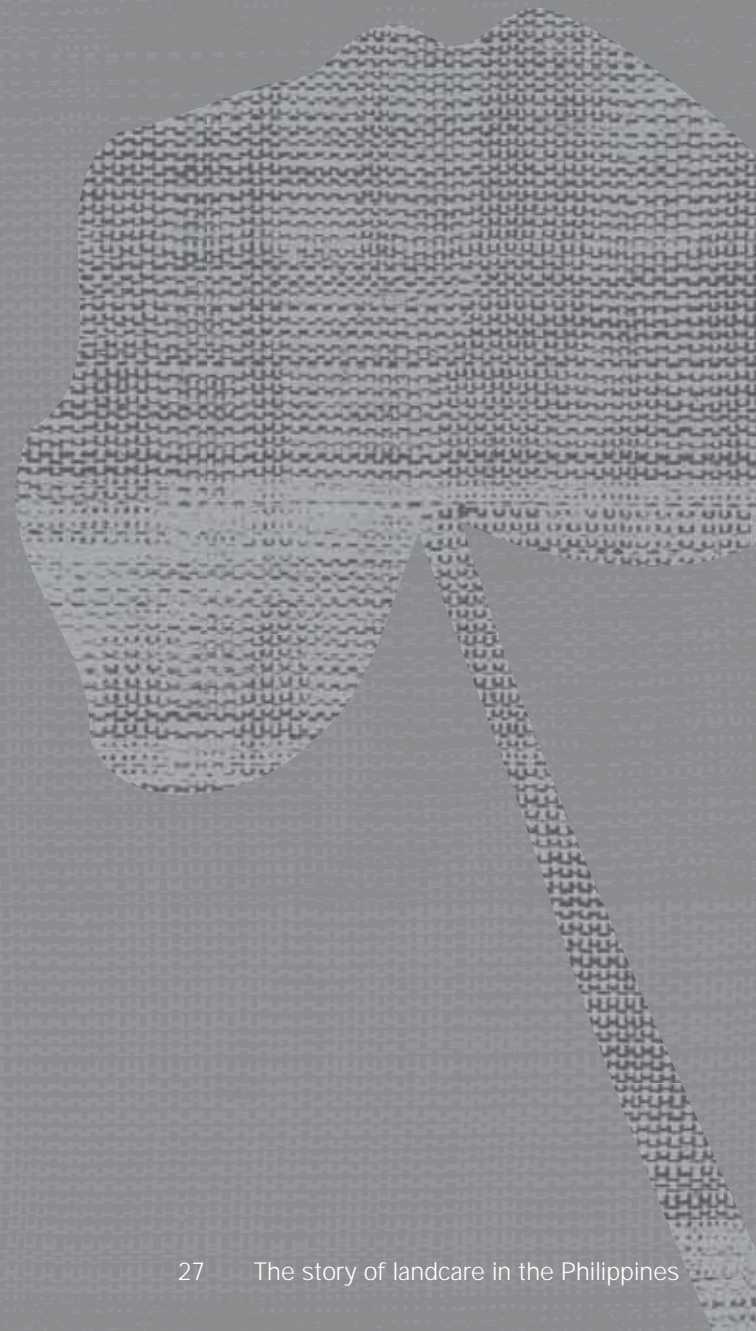


Jun Mercado grows fruit and timber trees in the natural vegetative strips on his farm in Claveria, Misamis Oriental.

Using NVS, annual soil losses can be reduced to as little as 2–4 tonnes per hectare. When farmers plant trees in the strips, they improve both the productivity and biodiversity of their farms. The more trees there are, the more carbon is stored, helping to reduce greenhouse gases. Less soil erosion means improved water quality downstream and less destruction of marine and coastal environments from sediment run-off.

Landcare is exciting because it touches everyone's life. It is about sharing knowledge—ideas, experiences and technologies. Here in Claveria it has spread so widely that if you are farming or ploughing up and down the slope, someone will tell you: 'What you are doing is wrong; when the rain comes all your soil will be washed away'. That person could be a neighbouring farmer, an extension worker, a parish priest, a *barangay* council member or even a school child.

Landcare's greatest success is that it is changing the attitudes of farmers, policymakers, local government units and landowners about how to use the land and protect the environment. It is not simply about the conservation measures that have been implemented or the number of landcare members. It's about changing land-use attitudes and practices to meet current needs, while conserving the land for future generations.





Landcare spreads beyond Claveria

In 1999, following landcare's early success in Claveria, two internationally funded projects strengthened landcare at the Claveria site and evaluated it at four other sites in the southern Philippines. In line with the partnership ethos of landcare, the two projects collaborated closely throughout the following years.

The Philippines–Australia Landcare Project

The Philippines–Australia Landcare Project—funded by the Australian Centre for International Agricultural Research (ACIAR)—brought together the following organisations:

- the World Agroforestry Centre (then known as the International Centre for Research in Agroforestry)
- the Southeast Asian Regional Center for Graduate Study and Research in Agriculture
- the Queensland Government Department of Primary Industries and Fisheries
- the Queensland Government Department of Natural Resources
- the University of Queensland
- Barung Landcare, a community-based landcare group in Queensland.

The project focused on implementing or expanding the landcare approach at three sites, and evaluating the impacts of landcare on adoption of conservation farming practices and rural extension systems.

The project established three new landcare sites in Mindanao at:

- *Barangay* Ned, Lake Sebu, in the province of South Cotabato
- the municipality of Lantapan in the province of Bukidnon
- the province of Misamis Oriental.

The project appointed specialised extension personnel called 'landcare facilitators' at each of the three sites. The landcare facilitators were backed by technical and extension personnel offering support in conservation farming technology, training and evaluation.

The Philippines–Spain Landcare Project

With funding from the Agencia Española de Cooperación Internacional (Spanish Agency for International Cooperation), the World Agroforestry Centre was able to further expand landcare in Claveria and the neighbouring municipality of Malitbog (Bukidnon), and establish pilot landcare sites on the islands of Bohol and Leyte in the Visayas. The focus of the Visayas program was to evaluate conservation farming systems, such as natural vegetative strips, in a farming environment very different to Claveria—one with highly degraded, shallow, calcareous soils on farms of predominantly rice and coconut farmers.

Farmers and institutions embrace landcare

At each site, the project team focused on getting farmers involved and getting them to adopt soil conservation and agroforestry technologies. Using a collaborative three-way partnership of farmer groups, local government units (LGUs) and technical providers (and other community groups), they gave the farmers the opportunity to drive the process.

By 2004, more than 600 landcare groups had formed, with 30–60% of the farmers at each site adopting soil conservation technologies, affecting 15–25% of their total farm area. This was an increase in farmers' knowledge and skills and a rate of change in farming practices rarely before seen in the Philippines.

There were also positive social and economic impacts from the farmers' improved capacity to pursue potential livelihood improvements such as growing fruit and timber trees and high-value vegetable crops (not just a rice or corn monoculture), and implement collective marketing and purchasing schemes through the landcare projects.

In addition, more than 40 local institutions adopted the landcare concept, with farmers identifying and planning activities and projects rather than the activities and projects being imposed on them. This demonstrated the potential for landcare to improve local governance.



Noel Vock (far left), Project Leader of the Philippines–Australia Landcare Project, discusses landcare with project staff and farmers at Pilar, Bohol.

Research confirms the effectiveness of landcare

In 2004, the Philippines–Australia Landcare Project was expanded, thanks to further funding from ACIAR and new funding from the Australian Agency for International Development (AusAID).

A fourth Mindanao site (in Agusan del Sur) was established, activities at the Bohol site were extended to two new municipalities, and activities at the other three sites were expanded to the provincial level. Catholic Relief Services and the National Crop Protection Center of the University of the Philippines Los Baños joined the project as partners.

In this second phase, the project focused on:

- researching the most suitable institutional or agency structure for taking landcare forward
- identifying the most appropriate ways of helping landcare entities such as landcare groups, municipal landcare associations and farmer trainer groups to be self-sufficient
- increasing the scale and level of uptake of the improved farming systems and diversified livelihoods
- evaluating the impacts of landcare activities.

The project confirmed the effectiveness of landcare in reducing the environmental impacts of upland farming systems, while improving the productivity and income potential of the land. It showed that discernible improvements to the sustainability of farms encouraged farmers to change from their primarily subsistence cropping practices, investing in cash crops and perennials. A survey of more than 100 farmers showed that the median cash income of farmers who had adopted landcare farming systems was 60–80% higher than that of non-adopters. In addition, the research showed that landcare made a major contribution to building linkages for poor and often isolated farming communities with external contacts and information sources. More agencies also joined the landcare movement, finding it a useful medium for more effectively delivering their programs.

During this time, landcare continued to evolve from its early focus on stopping soil erosion through the use of conservation farming technologies to focus more broadly on improving farmers' livelihoods. This evolution has occurred because farmers (and others) have seen with their own eyes the benefits that landcare brings in simultaneously tackling livelihood and welfare issues in their local communities.

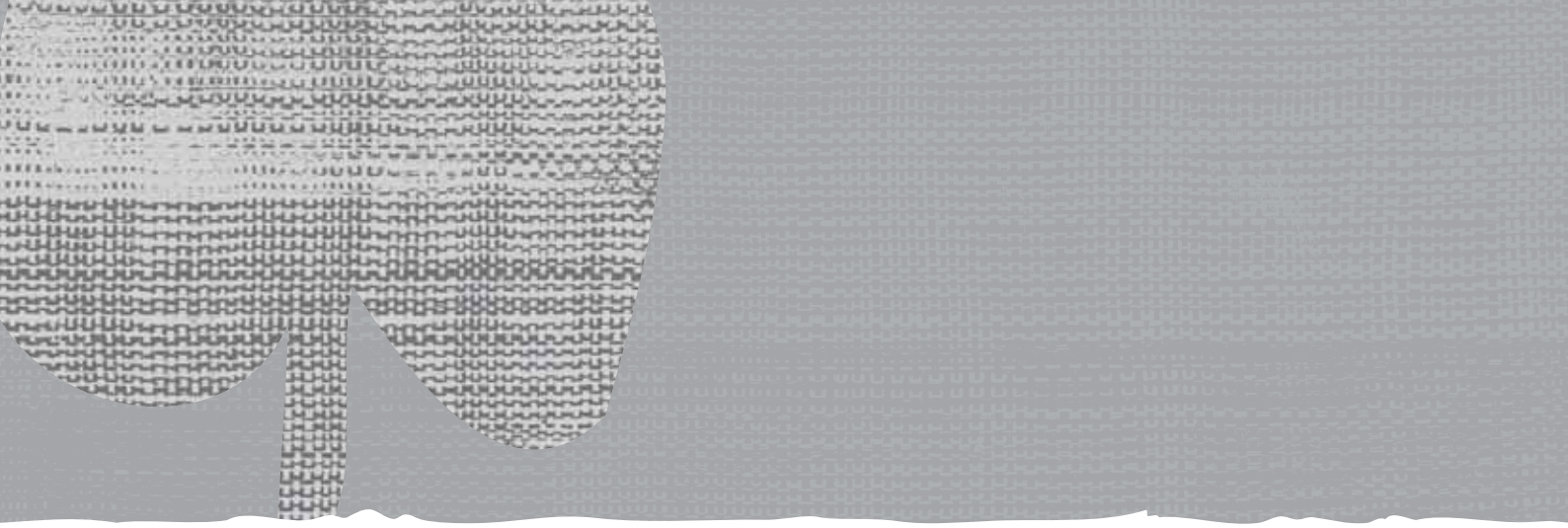


The Landcare Foundation of the Philippines, Inc.

In 2003, under the Philippines–Spain Landcare Project, the World Agroforestry Centre established the Landcare Foundation of the Philippines, Inc. (LFPI). LFPI's primary purpose was to administer a Small Grants Program to landcare groups in three of the primary landcare sites in northern Mindanao—Claveria, Lantapan and Malitbog—through a special Landcare Trust Fund provided by the Agencia Española de Cooperación Internacional. In 2005, LFPI started to participate in other small landcare projects across its three northern Mindanao sites, while maintaining links with the Philippines–Australia Landcare Project.



Landcare sites in the Philippines (2008)




By 2007, LFPI was running its own projects through robust partnerships with local government and international and national donor agencies. The Philippines–Australia Landcare Project, through its institutional research, had identified LFPI as the most appropriate agency to take on the long-term responsibility of being the lead agency for developing landcare in the Philippines. And so, in 2007, LFPI became an official partner of the Philippines–Australia Landcare Project.

In early 2008, in line with building its capacity to become the lead agency for landcare in the Philippines, LFPI took over management of the Philippines–Australia Landcare Project, including project operations in northern Mindanao, southern Mindanao and the Visayas. This move into ‘the driver’s seat’ represented a major shift in LFPI’s relationship with its partners. In particular, the World Agroforestry Centre, the Southeast Asian Regional Center for Graduate Study and Research in Agriculture, and Catholic Relief Services moved from managing the landcare program and staff to providing technical and institutional support to LFPI. With all landcare staff now under one umbrella, the three regional teams can more effectively share information and ideas, and contribute to shared goals.

LFPI appointed a research manager in 2008 to coordinate research across the three sites, undertake specialist case studies and better evaluate the impact of landcare on farmers’ livelihoods. Keeping a strong research focus ensures not only that LFPI and its projects can demonstrate progress against donor objectives, but also that landcare itself can be incrementally improved in the way it is delivered and in its impact on farmers.

LFPI continues to cultivate its relationships with donor agencies. In 2008 alone, it has partnered with:

- the United Nations Development Programme’s Small Grants Programme to Promote Tropical Forests in community-based forest protection
- the Asian Development Bank-funded InfRES Project on banana production and the dispersal of working animals
- Broederlijk Delen on agroforestry development
- the Philippine Tropical Forest Conservation Foundation on community-based conservation of indigenous trees in forest communities
- the ACIAR Community Agricultural Technology Program in a special agricultural technology extension project.



To improve farmers' livelihoods, LFPI's projects are designed to build on previous work in soil stabilisation, fruit and timber tree agroforestry, and high-value vegetable production. For example, at the Bohol site, farmers are being trained in the production of organic fertilisers and soil ameliorants, and in pest control methods that reduce household costs. In northern Mindanao, the World Agroforestry Centre continues to support the investigation of integrating rubber trees on farms as an alternative and extra source of income to an already diversified cropping system. The project in southern Mindanao is tackling the unique challenges associated with food security development in the politically unstable conflict zone of Muslim Mindanao.

Across all three sites, the technical support agencies are working alongside the landcare teams:

- Catholic Relief Services is helping deliver training in agroenterprise development that links farmers with markets for improved income.
- The World Agroforestry Centre is helping develop improved multistorey agroforestry systems for sloping land.
- The University of the Philippines Los Baños is helping integrate the most appropriate and cost-effective pest and disease management technologies into crop production systems.

As well as managing the three regional project sites for the Philippines–Australia Landcare Project and fulfilling its other project commitments, LFPI continues to liaise with other agencies and landcare pilot sites, including those in Agusan del Sur, Bukidnon and Misamis Oriental.

A landcare dream come true

As of January 2008, LFPI took over responsibility for the strategic planning and support processes of the ACIAR–AusAID Philippines–Australia Landcare Project. This is a dream come true for Maria Aurora Laotoco, or ‘Au’ as she prefers to be called, the Executive Director of the Foundation since 2005.

Au has long been passionate about the need for a single organisation to bring together landcare projects and other natural resource management activities. Her experience of landcare stretches back to 2000 when, as a landcare facilitator, she worked on the first ACIAR-funded landcare project in the Philippines.

‘The biggest challenge I face,’ says Au, ‘is leading the Foundation’s members and staff in developing and transforming the Foundation into an institution that is ready to push and market landcare to a broader level.’

Au faces challenges at a personal level too. ‘There are so many new things that I want to learn or read about, and so many good ideas that come to mind that I want to put to action. Juggling the responsibilities at home and work is not easy. My work often requires me to travel for two weeks straight or more. This kind of responsibility needs a very understanding family. But I’m happy that my three children can now mainly manage on their own. And landcare is not simply work, but a life commitment to contribute something in the little way I can to rural development.’

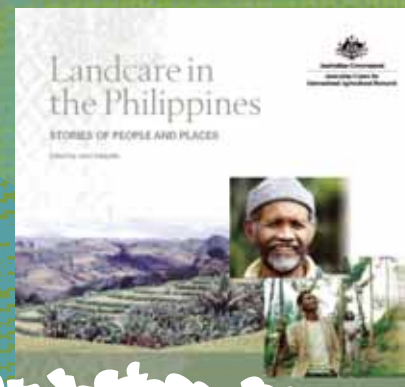
Au sees an increasing number of women involved in landcare in the rural communities and in the municipal agriculture offices of the local government units.

‘The increase is perhaps because the women are as involved as the men in the farm activities. They are as concerned as the men about the sustainability of household farm production. And they are interested in new ways of increasing household income. In some cases, it is the women who participate in the landcare meetings. They then share what they’ve learnt with their husbands so that it can be applied on their farms.’



Maria Aurora ‘Au’ Laotoco is the Executive Director of the Landcare Foundation of the Philippines, Inc.

Introducing this manual



The purpose of this manual

Many people have heard about landcare and are interested in trying it out in their local communities. Some people have been inspired by the stories of landcare in the book, *Landcare in the Philippines: stories of people and places*. However, there is a lack of published, practical, easy-to-understand information on how to implement a landcare program on the ground.

This manual is packed with practical strategies, step-by-step processes and handy tips for getting a landcare program started, keeping it going, and expanding it to new sites. These strategies, processes and tips come from our real-life experiences in the field and reflect our unique collective wisdom. Throughout the manual, we have tried to demonstrate the theory with stories about real people from the communities we work with.

We hope that this manual will help people to replicate and adapt our experiences, not just in the Philippines, but also in developing countries in South-East Asia, the Pacific region and Africa. The manual will also be of interest to agencies in Australia, which is becoming more involved in international landcare programs.

Who is this manual for?

We have designed this manual for people directly implementing landcare in rural communities in the Philippines. Specifically, it is written for:

- **government extension workers** including agricultural technicians in municipal agricultural offices; municipal staff of national government agencies such as the Department of Agriculture and the Department of Environment and Natural Resources; and their provincial government counterparts
- **non-government extension workers** from research and development organisations such as universities, private companies and technical service providers
- **community organisers and field facilitators** from non-government organisations, civil society organisations and religious groups
- **farmer facilitators** from farmer organisations, farmer trainer groups, *barangay* councils and municipal governments (for example, *barangay* agricultural workers, *barangay* extension workers, farmer technicians and para-technicians)
- **local government unit (LGU) officials** such as mayors, *barangay* captains, councillors, members of municipal and provincial development councils, provincial governors and provincial board members.

The 2004 book, *Landcare in the Philippines: stories of people and places*, continues to inspire people to try landcare.



With landcare, extension workers and community organisers work together with farmers and local government unit officials.

How to use this manual

The information is presented in four sections to match the development stages of a typical landcare program:

Section 1. What is landcare?

If you are new to landcare or you are not sure how it works, start reading here. We describe the principles of landcare, how it works, and how it differs from other approaches. This information is fundamental to developing empathy for landcare.

Section 2. Is landcare for you?

Here we identify the benefits and costs of landcare. This is important reading if you need to be convinced that it is worth trying, or if you need to convince someone else. We also explain the important role of the landcare facilitator in planning and implementing a landcare program.

Section 3. How to get landcare started

We describe the 7-step process for planning and implementing a landcare program in this section. The process is both an operational recipe for landcare facilitators and a framework for LGU officials.

Section 4. How to keep landcare going

So your landcare program is up and running. In this section we explain how to keep it active and growing, and how to expand it to include new sites. The information is particularly relevant to experienced landcare facilitators with established landcare programs, but new landcare facilitators will also find it useful for understanding what lies ahead of them.

Farmers in Ned, Lake Sebu, South Cotabato, prepare seedbeds for vegetable seedlings as part of a farmer training event. With landcare's grassroots approach, activities are focused on farmers.

Opposite: Justiniano Celeres practises landcare on his farm in Pilar, Bohol.







Farmers

Local
government
units

Technical
facilitators

Section 1. What is landcare?

Landcare is a farmer-centred and farmer-led, group-based approach to agricultural extension, aimed at improving rural livelihoods on a sustainable basis.

Landcare is based on a three-way partnership of farmers, local government units and technical facilitators. It is driven by farmers.

The seven principles of landcare

Landcare is based on seven principles:

1. A strong three-way partnership, with farmers driving the process
2. Trained extension workers
3. An emphasis on building the capacity of farmers to innovate and change their attitudes and practices
4. A focus on sustainably improving farmers' livelihoods
5. The establishment of farmer groups, called 'landcare groups'
6. High levels of farmer/community participation and leadership
7. Starting off by focusing on local solutions for local problems

1. A strong three-way partnership between farmers, local government units (LGUs) and technical providers, with the farmers driving the process wherever possible, is the fundamental principle of landcare.

In this partnership, the farmers share with each other their knowledge and experience, as well as their labour and low-cost materials; the LGUs provide leadership, financial support, technical support and policy support; and the technical facilitators provide technical support and facilitate the farmer groups to plan, implement and evaluate activities.

2. Trained extension workers (we call them 'landcare facilitators') work with the partners to bring about greater involvement in, and ownership of, livelihood issues, particularly by the farmers.

Working at an appropriate pace, they carefully facilitate the development, consensus, ownership and implementation of relevant solutions—economic, social, environmental and political—for sustainable improvement of livelihoods.

A landcare facilitator can be employed by any of the partner organisations, be it an LGU, a government agency, a non-government organisation, a farmer organisation or a private company.



On steep slopes, farmers can use natural vegetative strips, where native grasses are left to grow in strips between crops, to stop soil erosion.



In the landcare approach, farmer trainers pass on their knowledge, skills and experiences to other farmers, helping them to improve their farms and network with each other.

3. An emphasis on building the capacity of farmers to innovate and change their attitudes and practices is important, rather than providing them with particular inputs, such as technologies.

However, it is recognised that new or different technologies are an important component in the process of innovation and change, so landcare facilitators do work to identify and make available to farmers a selection, or 'basket', of appropriate and relevant technical innovations promoted by different projects and having a strong scientific and research basis. Examples include natural vegetative strips, sloping agricultural land technology and natural farming systems.

4. A focus on sustainably improving farmers' livelihoods is part of the landcare approach. Although landcare began with a land management focus, primarily addressing soil erosion, it quickly evolved to encompass people's livelihoods when farmers (and others) saw its benefits in simultaneously tackling other issues relevant to their communities. For example, using the landcare approach, lowland rice farmers in Agusan del Sur are promoting organic farming with reduced use of pesticides and increased use of natural fertilisers.

5. The establishment of farmer groups (we call them 'landcare groups') can encourage sharing and learning among members. Once landcare groups have ownership of the process, they are encouraged to form a landcare association (a confederation of landcare groups within a municipality or *barangay*) allowing them to share knowledge and resources between groups. They are also encouraged to support 'farmer trainer groups' where farmers pass on their knowledge, skills and experiences to other farmers. As landcare associations and farmer trainer groups become better equipped, they may form a 'farmer research committee' to help initiate, design and implement research programs of benefit to their members.

6. High levels of farmer/community participation and leadership make landcare activities more relevant and result in greater ownership of the issues and outcomes. Participation is voluntary and the process is kept relatively informal, in keeping with the way that farmers generally prefer to operate.

7. Starting off by focusing on local solutions for local problems makes it easier for farmers and support personnel to take part and interact, and allows them to gradually build their confidence and capacity before engaging in broader, more complex issues.



Landcare leaves a legacy for our grandchildren

by Basilio Decano

Basilio is a farmer from Lantapan, Bukidnon, in Central Mindanao. His 6-hectare farm is planted with trees, forage grasses, corn, root crops and coffee.

With landcare I have seen an improvement in my corn harvest. Before landcare, I harvested 16 cans of corn from my unprotected sloping farm. After several cropping cycles, the harvest went up to about 100 cans of corn. I also gained an added benefit from planting *gabi* (taro) along the contours. One contour line gave me a harvest of three sacks of *gabi*, and even if it is only priced at P2 per kilo, this benefits my family. I earned P300 for one contour line of *gabi*, which is a lot higher than the money I earned from corn.

Before landcare, my farm used to be a big pathway for rushing floodwaters from above. The flood path was almost as big as our road and it washed away a lot of my newly planted crops as well as some of the established crops. But now I can't see even a bit of that happening. The soil has remained on my land and I see my soil going back to its conditioned state even without the application of inputs. I use goat and cow manure to augment the fertiliser requirements for my crops.

Other benefits I have gained from landcare have been through the sales of seeds and seedlings. The promise of producing income from trees

in as short as 3–4 years is also becoming a reality—it's really true! And I have received other benefits, or small 'presents' as I like to call them, such as a hybrid bull, a pig and some ducks. I also received facilitation fees and small tokens of appreciation from being involved in training events and having allowed my farm to be a learning site for visiting agencies and groups.

Before landcare, I was a very shy type of farmer. I could hardly speak with others at all, but I have transformed into a new person over the past 5 years. I can proudly tell my children, who have attained a higher education than me, that I have gained more practical skills and knowledge than them through my experience in landcare.

Even if I'm gone from this world tomorrow, my children and my grandchildren will no longer suffer the difficulties that I did. This is because I have left a livelihood and legacy more precious than gold that can last a lifetime. If I'm gone, they will always remember me through the trees and the other improvements on the farm.

Basilio and Willie Decano in an agroforestry plot on their farm. 'Before landcare, my farm used to be a big pathway for rushing floodwaters from above... [With landcare] the soil has remained on my land.'

How does landcare work?

We are often asked: What makes landcare different? What makes it work? People point out that many good extension approaches are based on similar principles, which makes sense. So what makes landcare unique?

We believe that there are six features that make landcare unique and contribute to it working so well:

1. It has a strong ethic of farmer/community participation and ownership.
2. It places a high value on real partnerships.
3. It has a flexible agenda.
4. It treats facilitation as a specialised extension role.
5. It has a clear identity.
6. It is low cost for individual agencies.

1. Landcare has a strong ethic of farmer/community participation and ownership

Farmers lead and manage the process and readily take part in activities. This approach is an adaptation of the participatory farmer or community-based extension approach. To motivate farmers to take part, landcare places a strong emphasis on farmer-to-farmer knowledge sharing in a group setting (for example, through farm visits and farmer trainer groups).

2. Landcare places a high value on real partnerships

In the partnerships with local and national government agencies, non-government organisations, technical service providers, academic institutions and business groups, everyone contributes (or chooses not to) and their contributions are valued and respected. The partnerships are based on not 'reinventing the wheel'; rather, they build on and collaborate with existing programs and projects.

3. Landcare has a flexible agenda

Within its broad objective of improving farmers' livelihoods, landcare operates with a flexible agenda. It does not demand that farmers follow an externally driven agenda. Instead, it supports farmers in identifying and dealing with their immediate needs, in the expectation that they will address the larger and long-term problems in due course.

4. Landcare treats facilitation as a specialised extension role

Landcare places a great deal of importance on facilitation as a specialised extension role for achieving change. Landcare facilitators foster collaborative networks across sites and across projects, resulting in a collegial and supportive working environment.

5. Landcare has a clear identity

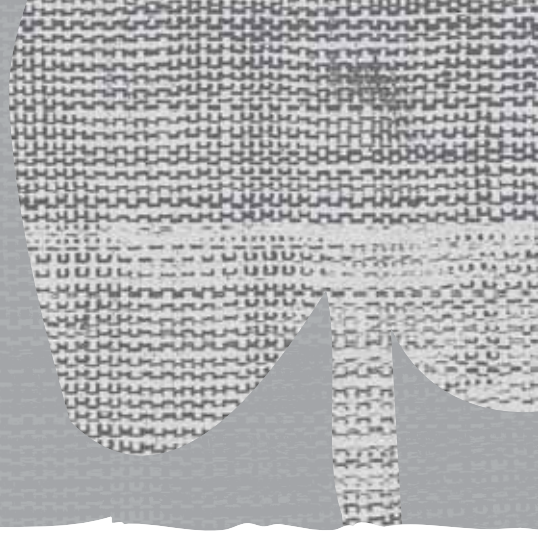
The name 'landcare' means what it says—caring for the land. The landcare identity also carries an ethic of no political, religious or gender bias.

6. Landcare is low cost for individual agencies

Because it can work without significant material inputs, landcare is relatively low cost to any one agency. What supports this is (a) the emphasis on the partnership appropriately sharing the human, financial and technical resources for landcare activities, and (b) the strong ethic of volunteerism, where participation is focused around community benefits as well as individual benefits.



LFPI Regional Landcare Coordinator Rojo Balane (centre) and Bohol farmers inspect a vermicomposting system for producing natural fertiliser. It is the farmers and their local communities who lead and own landcare, working with landcare facilitators who have a specialised extension role.



Land degradation destroys the soil on farms, reducing crop productivity. It also leads to loss of habitat for animals. It is made worse by practices such as ploughing and cultivating crops down the slope, and burning crop residues, which instead could be returned to the soil to improve it.

What issues does landcare address?

Like many developing countries in the Asian region, the Philippines has a number of rural development issues that can benefit from a landcare approach. These include:

1. land degradation from inappropriate farming practices
2. rural poverty from a combination of population pressure, lack of land and capital resources, lack of access to new and more efficient production technologies, and lack of access to market opportunities
3. rural conflict from lack of security of land tenure, lack of peace and order, and competing land uses
4. isolation and lack of services as a result of remoteness and poor rural infrastructure
5. farmers' lack of recognition and ownership of problems, and their lack of leadership in resolving these problems.

1. Land degradation from inappropriate farming practices

The Philippines is a country that depends mainly on agriculture. More than half of the country's agricultural land is considered uplands, most of which are sloping and very prone to soil erosion. Much of the uplands are farmed for subsistence, mainly with rice, corn, root crops and vegetables. Farming practices generally do not include measures to prevent soil erosion. So, erosion rates can be high, reducing soil fertility and crop productivity over time. Research by the World Agroforestry Centre shows that soil losses from erosion in unprotected upland farms can be as high as 300 tonnes per hectare per year. Eroded soil also causes downstream problems. It can deposit sediment on roads and in streams, reduce water quality, silt up water storage dams, and reduce marine resources and biodiversity.

Other forms of land degradation include reduced soil fertility, soil acidification, degraded soil structure, and increased soil salinity. Land degradation is made worse by inappropriate clearing of forests, which also destroys habitat for animals and reduces biodiversity.

Landcare tackles land degradation by helping farmers adapt and adopt conservation farming technologies such as contour farming systems, improved soil management and protection, forest protection, use of agroforestry and replanting of trees.

Extending the life span of Pilar's water supply

The municipality of Pilar on the island of Bohol has an irrigation dam—the Malinao Dam—that stores about 5 million cubic metres of water. The dam was originally intended to provide water to local farmers for at least 80 years but, due to silt being washed down from the surrounding upland areas, its life span is likely to be halved to 40 years.

A study by the Bureau of Soil and Water Management found that, on average, about 80 tonnes of soil per hectare is being washed into the dam every year. Most of the erosion was coming from cassava and corn growing areas, where the crops were being planted up and down the steep slopes. The local government was also concerned about water quality, especially since many neighbouring municipalities also depend on the dam as a water source.

'We thought it was very important to introduce a system of landcare for our farmers in upstream areas so we can control or stop soil erosion', says engineer Joseph Anania, the Municipal Planning and Development Officer.

'With landcare, we observed that gradually the water discharged from our springs was increasing and they are now regenerating our dam and lakes. Farmers are not losing so much of their fertile soil, and they are increasing their incomes and improving the environment where they live.

'Our vision for Pilar is that it becomes an agro-industrial and ecotourism region where the environment is protected and farmers' incomes are increased.'

Melecio Ocsin is one of the farmers in Pilar, Bohol, who is using landcare to reduce the soil erosion that has been silting up the Malinao Dam.




2. Rural poverty from a combination of population pressure, lack of land and capital resources, lack of access to new and more efficient production technologies, and lack of access to market opportunities

Poverty in the Philippines, particularly in the south, is serious, widespread and increasing. Mindanao remains one of the country's poorest regions, with 14 of its provinces among the 20 poorest provinces in the nation and 50–60% of its people below the recognised poverty line. The situation is similar in the Visayas. Poverty is concentrated in the rural areas, where people involved in agriculture make up 75% of the population below the poverty line. Worse still, its incidence in rural areas has not improved much in the past 10 years.

Poverty is worst in upland areas. These areas are generally 5th or 6th class municipalities (lowest average annual income), distant from major administrative centres, and with poor infrastructure and access to services. The World Bank estimates that average income in the uplands is at least 20% lower than in the lowlands, with surveys showing it to be more in the order of 30–40% lower. Rural income in the upland areas is largely related to staple crops such as corn and rice. Productivity, however, is low and, in many cases, becoming lower. In some areas, a significant proportion of income comes from family members working off-farm or overseas.



When farmers plant a diversity of crops, such as bananas and timber trees together with corn, they have a more reliable income and more food for their family.



Population growth in upland areas remains high at 2.6–2.7% per year, and is higher in some regions as a result of inter-regional migration. An important issue in many upland areas is the large proportion of Indigenous peoples, who are often extremely disadvantaged and remotely located.

Landcare addresses rural poverty by helping farmers to improve their livelihoods through:

- diversifying their cropping systems
- planting high-value crops
- improving production systems (for example, selecting better varieties and fertilisers, and managing pests and diseases better)
- improving marketing systems (for example, from rural enterprises based on natural resource management).

Landcare can also facilitate the design and implementation of culturally sensitive livelihood improvement programs for Indigenous peoples.

3. Rural tensions from lack of security of land tenure, lack of peace and order, and competing land uses

In rural areas of the Philippines, lack of secure land tenure is a major problem for many farmers. The problem is made worse by the continuing marginalisation of farmers to the status of tenants and landless labourers through foreclosures caused by farmers' lack of collateral and poor credit history. Lack of secure tenure is a particular problem in the buffer zones of protected areas, where tensions between farmers and authorities over protected area incursions and inappropriate land management practices is common.

In the competition for land and resources, rural tensions can arise through cultural, political and religious differences. This is a particular problem in some regions of Mindanao. For Indigenous peoples, these tensions make their already significant economic disadvantage even worse.

Landcare eases rural tensions by:

- helping landless farmers work collectively with authorities towards limited tenure options
- brokering collaborative projects in tension areas to address livelihood issues, as a means of facilitating linkages and dialogue.



Landcare transcends tensions in Mindanao

South-western Mindanao is home to around two million Muslims. Due to recurring violence, development interventions are sometimes difficult to implement. Janima C. Bayang is the treasurer of the Malisbong Community Development Organisation (MACDO) landcare group in the *barangay* of Malisbong in Palimbang in the province of Sultan Kudarat. She describes Malisbong as a long narrow coastal strip of land that rises steeply to the mountains, beautiful and lush, with plenty of water, but where families eke out a hand-to-mouth existence. There has been little in the way of government support.

The persistence of a pair of energetic landcare facilitators from South Cotabato—Eldon Ruiz and Lorena Loma, both supported by the Southeast Asian Regional Center for Graduate Study and Research in Agriculture and now the Landcare Foundation of the Philippines, Inc. (LFPI)—finally paid off when they succeeded in convincing the regional office of the Department of Agriculture to provide seeds for the Muslim community. Women are often the first to take on landcare and the women in Malisbong are no different. They have now planted vegetables and fruit trees around their homes as a more diverse and nutritious food source for their families, and they hope to eventually increase their incomes.

For Janima, hunger is at the root of the problems in Malisbong. She is passionate about the benefits of landcare and hopes that the MACDO landcare group can one day inspire neighbouring communities, both Muslim and Christian. ‘When there is food, and people are earning, there is peace’, she says. ‘Landcare can sustain peace because productivity brings peace.’



Janima Bayang from Malisbong, Sultan Kudarat, in south-western Mindanao, believes that hunger is at the root of the tensions there and that landcare, by bringing productivity, will also bring peace.

Top: Members of the Malisbong Community Development Organisation Muslim landcare group in Malisbong, Sultan Kudarat have planted vegetables and fruit trees around their homes to provide a more diverse and nutritious food source for their families.

4. Isolation and lack of services as a result of remoteness and poor rural infrastructure

In the upland regions of the southern Philippines, rural communities can be serviced by a number of agencies, including the national government, local government, private industry and civil society organisations. However, the level of support varies considerably, depending on distance from administrative centres, the state of roads and communication infrastructure, and the local interest and activity of agency staff.

With the devolution of some government roles under the Local Government Code of 1991, the management and delivery of services in agriculture, health, social services and environmental management became the responsibility of LGUs. In agriculture, LGUs now manage agricultural extension staff through a municipal agricultural officer who is in charge of a small number of agricultural technicians. Because the LGUs vary significantly in their approach to extension and in the quality of their staff, the quality of services they provide to communities also varies significantly. Services in isolated upland communities are often fragmented, piecemeal and unsustainable. A shortage of LGU funds further limits their presence in the field and their responsiveness.

National government agencies such as the Department of Agriculture, the Department of Agrarian Reform, the Department of Environment and Natural Resources and the Department of Trade and Industry also provide services related to national government programs and projects. The Department of Agriculture is responsible for technical support to LGU agricultural extension staff; however, if the LGU service is limited, the impact of national programs at the community or farmer level will also be limited.


The private sector provides a wide range of services including marketing, and supplying credit, inputs and extension; but companies limit their services to areas where they can make a profit.

Non-government organisations and related People's Organisations often run highly effective programs at the *barangay* or *sitio* level, particularly in some of the more remote upland areas. They provide a range of services in sustainable area development, microcredit and institutional capacity building. However, they are often limited by their agency's mandate and/or geographic scope.

Landcare addresses isolation and lack of services by helping to build an effective interface between local farming communities and service providers. While initially this approach can add to the extension services of LGUs and other agencies, it may subsequently be recognised as a better delivery model for extension services.



LFPI's Northern Mindanao Landcare Facilitator Nelson Tomonglay (left) discusses landcare developments with *Barangay* Captain Samuel Abrogar (centre) and farmer Alejandro Lobiano from Claveria, Misamis Oriental. Landcare facilitates the provision of technical advice and services to remote farming communities by linking farmers with relevant government and non-government organisations.



5. Farmers' lack of recognition and ownership of problems, and their lack of leadership in resolving these problems

Farmers often see some of their problems as belonging to someone else, or they feel powerless to solve them. The more isolated and independent they become, the more these perceptions are reinforced.

Landcare facilitates people to work together to own and solve the problems affecting their farms, their livelihoods and their welfare. Working together like this is deeply rooted in the history and tradition of the Filipino people, particularly in the *bayanihan* tradition of 'working together'. Landcare taps into the *bayanihan* spirit.

Assisted by landcare facilitators, the local people in the community get together with their *sitio* leaders and their *barangay* council representatives who, in turn, work with their municipal agricultural technicians and other development facilitators to develop and implement simple solutions to the problems on their farms. In this way, they start to solve the easy problems. Later, they move on to some of the bigger tasks such as increasing soil fertility, creating organic fertilisers, establishing communal nurseries to produce tree seedlings, and marketing their farm produce. This is what landcare is all about.

With national and local government agencies and non-government organisations working together with the community, local communities can improve their food and nutritional security, sustain and strengthen their livelihoods, and improve the condition of their natural resources by having healthier farms and cleaner and more secure sources of local water. When these changes occur in many local communities, they eventually change the bigger picture of the provinces, the regions and the Philippines as a whole.



Landcare benefits the lowlands

Landcare had its origins in the uplands of Mindanao but has been embraced in the lowlands of eastern Mindanao.

In Agusan del Sur, rice farming systems are well established but farming families still struggle to make a living. And while landcare brings to the uplands solutions to upland-specific problems such as soil erosion, it brings a different set of solutions to address the problems that beset the lowlands.

Betty Fueconillo, a landcare facilitator with Catholic Relief Services, has been working with farmers and schools in Agusan del Sur.

‘Landcare is getting your land, people and environment working together’, says Betty. ‘Before landcare, local government agricultural technicians only did what was mandated by the government. They were very product-based, focusing on a single commodity such as rice or vegetables. Landcare provides a more integrated approach that gives the farmers benefits that they can sustain.’

‘The challenge with landcare is that it is not a typical development project in the Philippines. It does not have a lot of funds. As facilitators, we need to present it to the local government units as something they will own and work with farmers to sustain.’

‘Our contribution as facilitators is more in facilitation rather than being the main drivers. This is effective in drawing in more involvement in landcare and, because there is a sharing of resources, there is also a shared accountability.’

Betty stresses that landcare is an approach, not a technology. She believes it is important that landcare is not seen to be linked with any one technology such as natural vegetative strips or organic farming. Rather than going to farmers with a single technology in mind, the farmers decide what technology best suits their needs. In the lowlands of Agusan del Sur, where the main problems are over-dependence on commercial pesticides and fertilisers, and deteriorating soil condition, the farmers chose organic farming as the key technology.

‘We need a common understanding of what landcare really is’, says Betty. ‘Otherwise it will be automatically associated with the specific technologies being introduced. It is the approach that is important, and then the technologies and other components will follow.’

‘Government leaders are very impressed with the results from landcare in Agusan del Sur, because they have been delivered with limited resources and finances compared with other projects with huge resources.’

Through landcare, lowland farmers in Agusan del Sur are improving their rice production systems and diversifying their income with new enterprises.



Landcare's entry point: conservation farming

While landcare has the potential to use any entry point that is relevant to farmers, traditionally it starts with helping farmers understand and implement conservation farming technologies such as contour farming systems, improved soil management and protection, forest protection and agroforestry.

These technologies generally show some immediate benefits by increasing productivity and helping to maintain livelihood security. There is also the added bonus for farmers of being seen to be doing something to reduce off-farm impacts of soil erosion. They are helping to sustain downstream agriculture, particularly rice growing, as well as maintaining the integrity of downstream infrastructure such as roads, water storages and hydro-electric installations.

When farmers adopt conservation farming technologies, their livelihoods generally improve incrementally, as follows:

1. With staple crops such as corn, as soil and nutrient losses are reduced, farmers are able to grow enough food for subsistence and cash income.
2. The improved farming system brings opportunities for farmers to diversify and increase their cash income by growing high-value crops such as vegetables, plantation crops (pineapples, bananas) and tree crops (fruit trees, timber trees, rubber). In forest plots separate from their cropping lands, they can plant trees for fruit, timber, fuel and other products. Some farmers also establish nurseries to produce their own seedlings. As well as being a source of cash income, fruit and vegetables can improve the family's nutrition. In this way—by increasing food security, reducing risk and improving cash income—landcare greatly improves livelihood security.
3. Once farmers are involved in improving their farming systems, they often see the benefits of tackling other livelihood issues such as improving sanitation, managing biodegradable wastes for compost, establishing a backyard garden and planting herbal medicines to improve the health of their family. They usually also become more community minded and contribute more readily to community causes.

4. Through the landcare process, farmers embark on a journey of self-development that opens up new opportunities for improving their livelihoods. They acquire new skills, knowledge and self-confidence from interacting more with other farmers, taking the practical 'learning by doing' training provided and visiting other landcare sites. They also connect more effectively with sources of support. They build horizontal links with progressive farmers in other localities, and vertical links with research agencies, private agribusinesses, and industry and marketing organisations. Through these linkages, they gain access to new plant varieties, new production technologies such as integrated pest management, new marketing chains, and new opportunities for generating additional non-farm income, such as training other farmers, and collecting and selling seeds and seedlings.
5. The landcare approach generally gets farmers more involved with their LGU. They have more contact with LGU officials and staff; better access to technologies, training and resources; and more opportunities to get involved in planning and addressing development issues through their *barangay* development council.

Whatever the entry point, the principles of landcare remain the same, and the farmers' livelihoods improve incrementally.



Landcare starts with conservation farming technologies that lead to improved and more diverse farming systems.



Children take the family vegetables to market in Lantapan, Bukidnon. Diversified cropping on contoured farms can improve the livelihoods of farming families.

The main technologies used in landcare

Technologies are technical tools that farmers adapt or adopt to service their needs. Because farmers' needs vary from farmer to farmer and from region to region depending on the characteristics of their farm, the farmer's aspirations and external drivers, the technologies used in landcare vary widely.

Some of the commonly used technologies are:

- soil surface protection technologies (groundcovers, cover crops, crop residues, manures, mulching, crop rotation)
- contour-based soil erosion control barriers or systems (natural vegetation strips (NVS), terraces, bunds, hedgerows, diversion drains, waterways)
- soil management systems (contour ploughing, minimum tillage, ridge tillage)
- alley cropping—growing annual crops such as corn or rice between alleys of fruit, timber or fodder trees, or trees grown for industrial use, such as rubber trees
- agroforestry—growing an integrated mixture of crops; for example, corn or rice with fruit, timber, fodder or rubber trees, and perennial cash crops such as banana and pineapple
- production of plots of trees on non-cropping land, for timber, fuel and other products
- production of high-value vegetable crops such as onion, tomato, bell pepper, carrot, brassicas, potato, sweet potato, ginger and eggplant
- nursery production of fruit and timber tree seedlings
- on-farm production and use of organic fertilisers using composting and vermicomposting techniques
- integrated pest management systems to reduce dependence on chemical pesticides; for example, using parasites and predators to control insect pests, and biofumigation to control soil diseases
- development of niche 'cottage' industries to build on specialist community skills for competitive advantage; for example, making paper from *abaca* and collecting seeds of indigenous trees for nurseries
- marketing technologies to improve market access; for example, cluster marketing and quality management.

If technologies are to help improve sustainable livelihoods, you need a balance of those technologies targeted at ensuring sustainable production and those targeted at improving income.

Remember that it is not the technologies that make landcare—it is the way in which *technologies appropriate to farmers' needs* are identified and applied.



Everyone can play a part

We have talked about how farmers, government agencies and technical service providers are fundamental to the success of landcare. But everyone in the community can play a part, depending on the needs of the community.

Here are some examples of how other groups can contribute:

Households

Parents and children can manage waste around the home, turning it into compost that they can then use to nourish their plants. They can also reuse and recycle other household wastes. Backyard fruit and vegetable gardens and herbal medicine gardens can also be established around the home.

Community groups

Youth groups, women's groups, groups of elderly community members are just some examples of groups that can take part in community tree planting, *sitio* beautification, clean-up days, and work to help farming families in need.

Businesses

Corporations that are involved with farming communities have corporate social responsibilities and are often interested in supporting concepts such as landcare. There is also potential for landcare to be a component of their environmental compliance processes (for example, Environmental Compliance Certificates and Environmental Impact Assessments).

Religious groups

Religious groups can run their own small landcare projects to improve livelihoods and the environment or they can incorporate landcare into existing projects such as those of the Indigenous Peoples Apostolate. Church leaders can promote landcare concepts of stewardship and effective communication during their sermons.

Schools

Teachers can incorporate landcare principles into the curriculum of appropriate subjects and run small landcare projects on growing vegetables, planting trees and managing waste. In rural areas, where most school children are from farming families, when landcare is taught in schools, the children can have a powerful influence on their parents' farming behaviour.



Children teaching parents

The children attending Malamba Elementary School, an hour's drive from Davao City, are growing up with landcare. Ninety-five per cent of them are Bagobo Indigenous people. Many of the children swim or raft across the Davao River every day to get to school.

Since November 2007, the elementary school and the adjacent high school have been working with Catholic Relief Services (CRS) to bring landcare into the schools. CRS has been testing the benefits of landcare in the Agusan del Sur province of eastern Mindanao and has been promoting landcare to schools in five other Mindanao provinces.

The children at Malamba have planted fruit trees such as lanzones and rambutan, and a vegetable garden, in the school grounds. They have been taught how to make fertiliser from leaves and decaying matter.

School principal Melba Robrigardo sees that the benefits of students doing landcare include spin-offs to better farming practices throughout the community. 'The children understand the importance of landcare because it affects their lives and their future. And they are starting to influence their parents. They are teaching them not to have the "slash and burn" way of farming', explains Melba.

The produce grown by the children is also generating income, some of which goes to the children's families and some which Melba uses to improve school facilities. In spite of its proximity to Davao City, the school has no electricity. Three recently donated desktop computers sit on display, still wrapped in plastic. 'I let the children touch the keyboards now and again so that they can get the feel of them', says Melba. Electrification is now on its way and, thanks to landcare's connections with Australia, the students now have four microscopes to help with their studies.

Malamba Elementary School students are learning that there are better ways of farming than 'slash and burn' and are starting to influence their parents.

Summary – What is landcare?

The key points to take away from this section are as follows:

1. Landcare is farmer-driven, farmer-focused and works to sustainably improve farmers' livelihoods.
2. It relies on a strong partnership between farmers, local government units and technical providers, who work with trained landcare facilitators and organised landcare groups.
3. It looks for local solutions to local issues and problems such as land degradation, poverty, conflict, isolation, lack of services, and lack of skills.
4. It relies on partnerships with both government and non-government agencies.
5. It works without significant material inputs and is relatively low cost.
6. It usually starts by introducing conservation farming technologies such as soil surface protection, contour-based soil erosion control, soil management systems, alley cropping, agroforestry, forestry plots, high-value vegetable crops, nursery production of seedlings and integrated pest management.
7. It improves livelihood security, sanitation and family health, and boosts the knowledge, skills and confidence of farmers.
8. All sectors of the community can contribute—households, community groups, businesses, religious groups and schools.





Section 2. Is landcare for you?

In this section we help you work out if landcare is the right option for you and for the farmers and communities you are working with. If you know the problems you and/or your farmers are experiencing and you understand the benefits, costs, risks and challenges of applying landcare, you should be able to decide if landcare is the right choice for you.

The benefits of landcare

How landcare benefits farmers

Because farmers are the main target of landcare, most of the benefits of landcare are farmer-related. Benefits include the following:

- By adopting conservation farming technologies such as contour farming systems, farmers can reduce soil and nutrient loss and increase productivity. Research shows that contour farming technologies reduce annual soil loss in unprotected corn fields from 40–60 tonnes per hectare to less than 5 tonnes per hectare. By reducing soil loss and maintaining fertility, farmers are able to maintain adequate levels of production of their staple crops for subsistence and cash income.
- By reducing soil erosion, farmers have the assurance that they are not contributing to the serious downstream effects of sedimentation, such as reduced water quality, silting of dams and deterioration of river and marine ecosystems.
- The contour farming systems used in landcare bring opportunities for farmers to diversify and increase their cash income by growing high-value crops such as vegetables, plantation crops (pineapples, bananas) and tree crops (fruit trees, timber trees, rubber). By increasing food security, reducing risk and improving cash income, landcare greatly improves livelihood security. A case study of a landcare farmer in South Cotabato showed the net profit from his diversified vegetable farming system, using similar labour and marketing inputs, to be 70% higher than the traditional corn-based farming system.
- As well as being a source of cash income, diversifying crops with fruit and vegetables can improve the family's diet and nutrition.



Landcare can deliver many livelihood benefits to farming families.

- In some cases, such as in Bohol, abandoned degraded cropping land can be rehabilitated to supplement income from traditional crops such as rice and coconuts. This also means that rice and coconut labour can be more consistently used throughout the year, benefiting both the farmer and the labourer.
- Landcare makes it easier for farmers to tackle other livelihood issues by, for example, establishing a backyard garden, planting herbal medicines to improve family health, improving sanitation around their homes, composting biodegradable waste, sharing labour for farm and conservation activities, and helping each other and the community in times of need such as sickness and death.
- Farmers get opportunities to continuously build their knowledge, skills, self-confidence and leadership by taking practical 'learning by doing' training and by interacting with other landcare farmers during cross-visits to other farms. They can expand their social and knowledge networks with progressive farmers in other localities, and with research agencies, private agribusinesses, and industry and marketing organisations. These linkages help farmers to gain access to new plant varieties, production technologies, marketing chains, and opportunities for generating additional off-farm income (for example, training other farmers, and collecting and selling tree seeds and seedlings).
- The presence of a landcare program is likely to increase farmers' contact with LGU officials and staff, potentially improving government service delivery and access to financial and material resources. There is also more opportunity for farmers to be involved in planning and addressing development issues through their *barangay* development council.
- By boosting the self-confidence of landcare families and increasing their hope for the future, landcare can strengthen family ties, improve joint decision making and increase the family's ownership of their issues. It also brings about a closer bonding of people in the community, with a greater interest and spirit in helping community members in need—the true spirit of *bayanihan*.

Diverse crops transform barren land into a model landcare farm

by Samuel Abrogar

In 1992, Henry Binahon left the Department of Environment and Natural Resources to develop his farm in Sungco, Lantapan, in Bukidnon in northern Mindanao, with his wife Perla and their two children.

Using the agroforestry technology he had learned at university and his personal experiences in farming, Henry transformed the barren and undulating 6 hectares of land into a productive farm in just 8 years.

'I wanted my farm to someday become a showcase for other farmers to visit and possibly copy the technology I used', says Henry. 'This would be my own personal contribution to the restoration of the environment.'

Henry tackled pest and disease problems by applying the indigenous knowledge of pest management, natural farming technologies and vermicomposting (worm farms) for soil improvement. He planted different vegetable crops and fruit and timber trees to minimise the infestations of pests and diseases.

He solved soil erosion problems by ploughing contour lines along the sloping areas and by planting the vegetable crops and fruit and timber trees both as a food source and a source of income.

'This meant I had varied market options, resulting in better economic viability for sustaining production and income,' he says.

'There really is money in farming when you combine crops within an agroforestry system.'

Henry receives many people and farmers from different social groups visiting his farm and observing what he has achieved.

'Our farm is now a landcare education venue for farmers, technicians, researchers, students and other interest groups. We share our initiatives with our fellow farmers in the locality, and educate our visitors in the concepts and principles of landcare and conservation farming, as a strategy for socioeconomic stability and sustainable ecosystem management.

'The challenges were exciting. But I have shown that all things can be possible and that many positive outcomes can be achieved through hard work and good planning.'



Henry Binahon (right) demonstrates nursery production techniques to other farmers at his training centre in Lantapan, Bukidnon.

Landcare brings healthy soil and more regular income

On the mountainous slopes of Pilar, a municipality in the centre of the island of Bohol, Justiniano Celeres farms his half-hectare plot of land. Cassava was once the sole crop grown but, since taking on landcare in 2006, Justiniano now also grows pineapples, ginger, corn and sweet potatoes.

Starting by ploughing contours and creating natural vegetative strips along the steep slopes, in less than a year he noticed changes in his soil. 'You could hardly see any topsoil at all here before I started landcare', he says. 'Now the topsoil has built up again. The soil is healthy now and I don't have to use as many fertilisers or chemicals, so my costs are less.'

Justiniano has also seen an increase in yields and is pleased that the range of crops gives him an income all year round. 'While one crop is at a young stage, I am planting another crop and harvesting yet another.'

With this range of produce, Justiniano can feed his wife and six children and earn a more regular income.

Humble in his achievements, Justiniano is justifiably proud that other farmers in the locality have noticed his success and are copying his landcare practices on their own farms.



Justiniano Celeres grows a diversity of crops on his farm in Pilar, Bohol, including pineapple, banana, cassava, sweet potato and forage crops.



Farming in the foothills of Mt Apo Natural Park

The vegetable growers of Kapatagan supply Mindanao's largest city, Davao City, with fresh produce. Farming in the foothills of the Mt Apo Natural Park, the last refuge of the endangered Philippine Eagle, means there are inevitable tensions between farmers and park management staff.



Farmer Leo 'Dodong' Castillo is leading the way with landcare at Kapatagan, Digos City, Davao del Sur, in the foothills of Mt Apo Natural Park.

The landcare approach can provide a means of easing these tensions by building bridges between farmers and local and national government agencies. With the farmers making better use of the land they have, they are less likely to encroach on protected areas. This is good news for both biodiversity and the farmers' long-term livelihoods.

Leo 'Dodong' Castillo is the farmer leading the way with landcare in the area. He likes the practical nature of the landcare training programs and is now making his own organic fertilisers. 'After learning, we go to the field and try it by doing', he says.

With some slopes steeper than 70 degrees, contour ploughing is also important for stopping soil erosion—something Dodong was aware of before landcare even came to his district. He planted trees to protect his soil and he is now a keen supporter of landcare's natural vegetative strip technology, which is cheaper and easier to use than other schemes.

'The technology is very beneficial to us farmers because it protects the fertility of our farms', Dodong says. 'You can plant coffee in the strips and then plant corn in the ploughed area. This means you have extra income from the coffee. I am 100% landcare!'



Church ministry 'converts' South Cotabato family to landcare

Daisy and Flor Barret used to grow corn on a 3-hectare farm in Ned in Lake Sebu, South Cotabato. When they first heard about landcare, they didn't pay much attention to it. However, when the program was integrated into their church ministry, they started to better appreciate its values and were 'converted' by its goals and objectives.

After a cross-visit to Lantapan, Bukidnon, where they saw diversified farming systems, they shifted from cropping only corn to also planting vegetables and perennial crops, and keeping

livestock. Daisy regrets that they had not learned about this technology much earlier.

From their vegetables they now earn additional income of P100 daily which they put towards their children's schooling, their monthly power bills and their savings.

After a cross-visit to Lantapan, Bukidnon, Daisy Barret and husband Flor changed from growing only corn to a diversified system on their farm at Ned, Lake Sebu, South Cotabato.

Controlling erosion for neighbourly relations

Landcare helped Sergia Subaa ease tensions on the San Isidro farm where she works in the north-west of Bohol.

High rainfall on steep slopes was causing a big headache for the landowner. 'Big portions of our soil used to flow down onto the neighbour's rice fields below and cover the plants, killing them,' Sergia explains. That all stopped after she convinced the landowner to plough the slopes along contours, rather than vertically, and to replace the corn crop with seven different crops, including a variety of fruit trees.

Sergia is an active member of the local landcare women's group, which has started a nursery and is producing flowers for market. The income from the flowers is used to support other group activities, such as tree planting and extension training.



Sergia Subaa convinced the landowner to plough contours on his steeply sloping farm in north-west Bohol. This stopped the soil from being regularly washed onto the neighbour's rice crops below.



How landcare benefits extension workers

More and more, government and non-government extension workers are rethinking their approach and shifting from the traditional top-down technology transfer to the more facilitated 'learning by seeing and doing' methodology promoted by landcare. Benefits for extension workers include the following:

- The farmers have more ownership of the process and more input into selecting activities that are relevant to their local needs. This means that the extension program will be more self-sustaining and potentially more successful. It also has the potential to eventually service the broader economic, environmental and social needs of communities.
- Because landcare is group based, there is likely to be a higher level of participation by farmers. This means that there will be more farmer-to-farmer sharing from cross-visits and other group activities, and more farmers trying out and adapting the technologies they have learned. The result is that adoption is likely to be both greater and faster.
- The learning environment for extension officers is richer as a result of the dynamic farmer-learning process and because collaboration with other extension professionals is more likely.
- Because landcare can secure funding and resources from LGUs and other sources, there is potential for a more rewarding work environment for extension officers, with more opportunities for professional development and an expanded role in carrying out activities.
- Extension officers work closely with farmers on topics of more relevance and interest to them, so there is potential for developing friendlier, more satisfying and more productive relationships.

A foundation for the Philippines' farming future

Even though landcare is still young, it is the necessary foundation for the Philippines' farming future. That's what Eldon Ruiz believes. Eldon is the Southern Mindanao Landcare Coordinator with the Landcare Foundation of the Philippines, Inc. (LFPI).

Growing a diversity of crops instead of a single crop is just one way that landcare helps poor farmers survive. 'When farmers grow a number of crops', explains Eldon, 'they have a daily income from selling vegetables locally rather than waiting 5–6 months to get income from a single crop and incurring lots of debt on the way.'

Eldon believes farmers can take better control of their own situations through landcare. 'As a group, for example, they can ask different service providers for assistance with things like providing shovels, scythes, seedling bags, fruit tree seedlings, and seeds of fruit and forest trees. Many landcare members testify that landcare, with its technologies and group interaction, is now part of their daily lives. They have shifted their concern from the individual to the community level. They now believe that, through group efforts, much can be done.'

Before joining the landcare movement in 1999, Eldon knew little about it. Coming from an agricultural research background, he had to learn about participatory research and facilitation. But the experience of working with farmers, along with the training, helped build his skills in facilitating groups and building capacity.

'This training was very important to me because it helped me to feel much more confident about working with farmers', he says.

'Through landcare, I also feel more sensitive to the needs of the farmers. It gives me a chance to work with many people and increase my capability to deal with them or respond appropriately.

'As I got more involved in landcare, it became clear to me that landcare was not only about production or soil conservation. It is also about the process, about group formation, about linkages and about networking.

'I think it's very important to listen to the farmers, as I believe we can solve most of their problems this way. Often when we listen to farmers, we find they already have a solution in mind, and they just need someone who will direct them or link them to other service providers that can help them solve their problems.'

Eldon helped establish landcare in Ned, one of the most remote areas of south-western Mindanao, where he practises landcare on his own farm. 'My farm is my passion', Eldon says.



LFPI Landcare Coordinator Eldon Ruiz has planted crops in the contours of his own farm in Ned, Lake Sebu, South Cotabato.



How landcare benefits local government units

Responsibility for agricultural development and natural resource management was devolved from the central government to local government units (LGUs) under the Local Government Code of 1991. Now, *sanggunians* (policymakers) exist at the *barangay*, municipal and provincial levels of local government. As a result, there is a need for more local understanding and interpretation of agricultural and natural resource management issues, particularly the link between the environment and farmers' livelihoods. Landcare services this need effectively and can provide the following benefits to LGUs:

- Landcare provides a forum for LGU leaders and officials to engage with farmer groups in constructive dialogue. In this way, the LGUs learn more about the issues and what is happening on the ground, and the farmers can put forward ideas on how the LGUs can best support activities and programs for sustainable livelihoods. The LGU is seen to be proactive, not reactive; decisions are made faster and with more assurance; and the strategies implemented are appropriate to people's needs.
- At a technical level, landcare provides an extension model for LGU research and extension services to be more effectively integrated at the grassroots level with those of other service providers (academic institutions, private enterprise, research and development agencies) and delivered to farmers.
- Landcare offers LGUs a framework within which they can be more effective in planning and implementing an integrated development approach for their communities. The framework can guide implementation of plans such as an LGU's comprehensive development plan, the watershed development plan, and/or the natural resource management and development plan.
- By partnering effectively with other agencies in landcare, there is potential for a program to access a wider range of resources, which may reduce program costs and farmers' dependence on LGU resources. For example, landcare can facilitate farmers' access to microfinance that was not previously available. LGU resources may also be targeted with greater confidence to areas of greatest need.

- Where landcare is successful in creating more diverse and more profitable farming systems, there is the potential for increased LGU income generation through a broader tax base and increased total taxes.
- Through achieving more rewarding outcomes, LGU extension workers may be more motivated and self-sufficient and, as a result, less reliant on government funds for operating expenses.
- Landcare can be used as a basis for policy incentives/disincentives for farmers. For example, some LGUs have implemented ordinances to levy higher taxes on land that is not protected by conservation systems or is not being used appropriately.
- Landcare groups can be an effective mechanism for distributing trees, animals and other resources as part of municipal programs, and for leveraging outcomes from other programs related to landcare such as backyard gardening, hygiene and healthcare.



Landcare provides a forum for local government units to engage with farmer groups in an integrated approach to development. For example, landcare has helped beautify the home gardens in *Sitio Tungol*, Claveria, Misamis Oriental, proudly displayed here by owner Rosita Lobiano.

A hog for every woman

Irenea Hitgano, Mayor of Trento in Agusan del Sur in Mindanao, aims to provide the woman in each family in the municipality with a hog to generate additional income for the family. The municipal swine project, which uses biodynamic farming principles, is one of the landcare projects she is most proud of.

Mayor Hitgano believes that landcare can help farmers in her community tackle poverty by reducing farm input costs and diversifying their income source. She visits each *barangay* with her agricultural officers and representatives of Catholic Relief Services (CRS) to give farmers information about landcare, answer their questions, and provide technical support, such as how to make organic fertiliser. She has appointed a landcare coordinator to help drive the spread of landcare in her municipality.

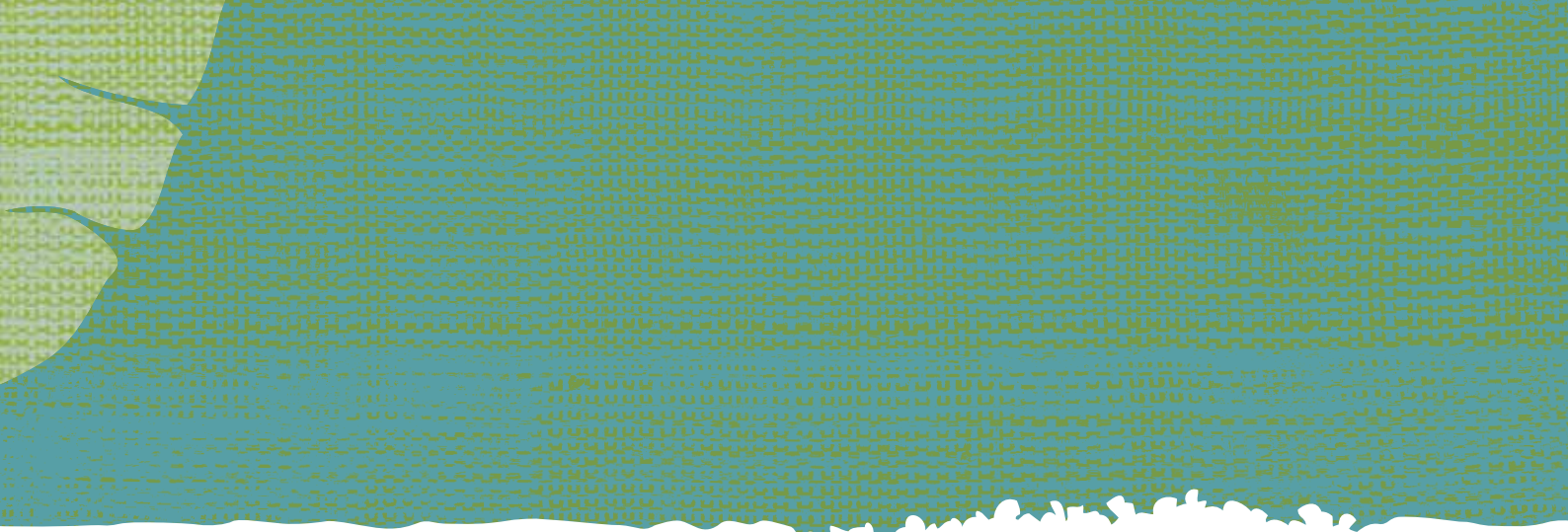
'I do this because I want to help farmers raise their incomes. The fertilisers they buy from the stores are so expensive. One hectare of rice can cost P8,000 to fertilise, but with organic fertiliser it will cost only P2,000', she explains.

Mayor Hitgano targets women for landcare activities such as hog raising and planting vegetables and fruit trees. 'The women can help their husbands instead of going from house to house gossiping', she says. 'If they care for the land, they and their families will have healthy food and healthy bodies'.

Her plans for the municipal swine project are to supply one of the biggest supermarkets in Davao City with organic pork within 2 years. The market linkage was arranged by CRS. Hogs from the households will be consolidated by the municipal government and delivered to market.



To help farming families raise their incomes, Irenea Hitgano, the Mayor of Trento, Agusan del Sur, is supplying each family with a hog.



The costs, risks and challenges of landcare

While it is clear that landcare has many benefits, there are also some costs, risks and challenges. We believe that these are significantly outweighed by the benefits. However, knowing about these costs, risks and challenges helps you to keep a balanced perspective on the program.

The costs, risks and challenges for farmers

- To implement contour farming systems such as natural vegetative strips, there is an initial cost to the farmer from the loss of crop production from the strips. Farmers may be able to compensate for this by planting high-value crops on the strips (for example, bananas, pineapples or trees) or in the alleys. The reduction in soil loss from using contour farming systems will improve soil fertility, so ongoing fertiliser costs should also be less.
- There are some start-up costs in applying new technologies. Examples are the cost of seeds for high-value vegetable crops and the cost of seedlings for agroforestry systems. In some cases, the ongoing production costs for high-value fruit and vegetable crops may be higher than for standard staple crops such as corn and rice. This needs to be weighed up against the potentially higher returns.
- In some cases, there may be more risk associated with the new farming systems; for example, more danger from pests and diseases, or more market volatility. These risks can be largely offset by training the farmers so that they are armed with the necessary knowledge to give them confidence in managing the new crops and farming systems effectively.
- Farmers who are involved in a landcare group and landcare-related events are likely to spend some time away from the family and the farm.

Healthier and wealthier vegetable production

Switching to organic farming methods is bringing health benefits for lowland farmers in Agusan del Sur.

Maralito 'Boy' Rosauro is President of the Awao Vegetable Growers' Association, which is the focus of landcare activities in the area. Boy and his wife Melanie have embraced landcare and have implemented natural farming systems, using organic fertilisers without the use of pesticides, and cultivating worms for composting.

'We used to apply toxic chemicals, which are not good for human health', says Boy. 'Now we use organic farming technology. We are getting the same income as we used to previously, but we have fewer expenses.'

'With organic farming, our soil is free from toxins, and this prevents our soils from becoming acidic and keeps them fertile', says Melanie.

Boy and Melanie say landcare has helped them implement organic farming through training, financial assistance and demonstrations of the technology.

Now their vegetable farm is a demonstration farm and they are keeping landcare going through the growers' association.

'It's not easy for farmers to shift to organic farming when they're used to inorganic farming', says Melanie. 'But they have already seen the results here, so this will convince them.'

Boy agrees that the benefits are obvious: 'First and foremost, for the health of the people, and secondly for the sustainability of the environment.'



Melanie and Boy Rosauro and their family have reduced their expenses by switching to organic practices on their farm in Awao, Sta Josefa, Agusan del Sur.



The costs, risks and challenges for extension workers

- As with any new extension process, landcare requires extension workers to be personally and professionally motivated to change their outlook and practices. They also need to commit time and effort to training and self-development.
- The expanded responsibility and the different way of doing things can at times be testing and challenging, requiring flexibility, patience and endurance. Some extension workers may find it hard to convince their managers, particularly older municipal agricultural officers, to embrace a new approach like landcare.
- The partnership building that is required as a central component of landcare requires more skills and effort in negotiation and in maintaining the partnerships.
- Because some of the more challenging areas for landcare are in remote upland areas where there is political instability, extension workers may need to work in areas where the risk to their personal safety is higher than normal.



Landcare may require local government unit officials to take a longer term view to achieving their goals.

The costs, risks and challenges for local government units

- If there are no existing landcare facilitators within the program partnership, the main cost for an LGU is the human resource—the landcare facilitator. If the LGU has an extension officer with the interest, motivation and time to try the landcare approach, the only additional cost is the training/reorientation and some extra local travel. Landcare is a process that requires skills and patience in negotiating arrangements with farmers and partners; for example, additional time may have to be spent consulting with farmers to help them take ownership of the process. The training addresses these needs. Beyond this, experience has shown that it is possible to run a successful landcare program with minimal material costs. This is because the greater involvement of farmers and other partners generally results in a greater range of funding options being made available. In addition, the landcare partnership is generally able to source a greater collective sum of human, financial and material resources than any one organisation, and then share these appropriately.
- Once landcare gets going, LGUs may receive additional demands for services. Farmers may discover new opportunities and feel empowered to engage more with service delivery agencies, including LGUs. In time, this may bring additional costs. Examples are the costs of administering larger dispersal schemes, logistical costs for community activities like training and field visits, rewards for landcare leaders for particular services, and costs of deploying farmer facilitators to better link LGU services with farmers. In some cases, resources such as seeds or nursery plants may need to be redirected to areas of greater need.
- The landcare process can take some time to deliver the full range of benefits—possibly longer than the standard 3-year political cycle. This requires elected LGU officials to take a long-term view and be comfortable with incremental changes towards their broader goals.

How landcare links with other programs and projects

Landcare can easily be adapted to fit with any other program or project that is pursuing change in rural communities, and where group action is required. Up to now it has been applied predominantly in programs pursuing outcomes in agriculture, natural resource management, peace building and land tenure. However, it should work equally well in programs on health, housing, solid waste management, water supply, education, population management, social welfare and microfinance.

There are some particular advantages where there is obvious overlap between programs; for example, where landcare is helping upland farmers diversify their corn- or rice-based farming systems with fruit and vegetables, there is obvious potential for fit with preventive healthcare programs related to improving diet. Similarly, where landcare is helping farming communities in conflict areas of Mindanao to expand their economic potential and connect with new markets, there is obvious potential for fit with peace and order programs.



Landcare can work with other programs to help farming communities connect with new markets.



Through landcare, farmers visit wholesale and retail markets to study market requirements.



Links with government programs

There are many processes where landcare can link with government programs in areas of common interest. Various programs are being implemented by LGUs, the Department of Agriculture, the Department of Environment and Natural Resources, the Department of Agrarian Reform and the National Commission on Indigenous Peoples. In particular, important policy frameworks have been put in place by the government to recognise the role of local people and local communities in managing natural resources. Examples of these policy frameworks are as follows:

- The Community-based Forest Management Program of the Department of Environment and Natural Resources recognises people and local communities as the key players in managing forests.
- The Local Government Code recognises the importance of having local communities, represented by their *barangay* and municipal governments, play an active part in managing natural resources. The Code mandates that each LGU will establish its own local development council. This council is the mechanism by which the LGU works together with its constituents, represented by the leaders of peoples' organisations (farmer groups, landcare groups, women's groups, Indigenous peoples and tribal councils).
- The Philippines Strategy for Improved Watershed Resources Management (Department of Environment and Natural Resources, 1998) aims for the sustainable multiple use of the natural resources within all watershed areas of the country in a manner that is environmentally sound, economically viable and socially acceptable. It also promotes the prevention of further watershed degradation and the restoration of the productive and protective functions of currently degraded watershed areas.

Links with non-government programs

Although programs of non-government and civil society organisations often focus on objectives that are different from those of landcare, there is generally always a relevant development component with opportunities for landcare to offer complementary resources and skills. For example, we have recently forged partnerships with the Government of the Philippines – United Nations Multi-Donor Programme's ACT for Peace Programme, Habitat for Humanity, World Vision and Catholic Relief Services.

Cooperatives that are focused on livelihood and agricultural production issues have good potential for linkages, as does the Ancestral Domain Sustainable Development and Protection Plan.



Landcare adds value to Upland Development Programme in South Cotabato

When landcare was introduced to *Barangay* Lake Seloton in Lake Sebu, South Cotabato, a farmer group already existed and was being supported by local government extension workers.

The Upland Development Programme in Southern Mindanao (UDP) had already established a local program and gained community and local government support. Landcare added value by providing further technical assistance to the farmer group.

José Somido is a farmer extension worker for the *barangay* council. He has a nursery that produces vegetable seeds for the farmers in his group. Before the UDP he was growing corn on his 1.5-hectare farm with no contouring.

'Now I plant bananas and vegetables in the contoured alleys as well as corn to feed my chickens', says José. 'And I observed that I don't need as much water for my farm because the soil is better.

'With just corn, I had to wait 3–4 months before I could harvest. And sometimes my corn was attacked by insects and I had nothing. Now, if one crop fails, I have another to go to market with and earn money.'

As the *Barangay* Extension Worker, José manages a number of farmer trainers and is responsible for looking at how things are going across the whole *barangay*.

If he can't solve a problem, on his own farm or someone else's, he looks to Municipal Agricultural Technician Jethro Arceo for advice.

'Landcare adds value to our existing partnership with farmers', says Jethro. 'UDP introduced tree planting and contouring. With landcare we're testing different crops in the contours. We've had some success with onions, cabbages and garlic. And landcare has helped us to find ways to market these new products.'

Vermicomposting is another technology introduced by landcare. Farm wastes are composted under plastic for 14 days, then the plastic is removed to allow the soil to breathe for a day before the worms are brought in. It takes about a month for the worms to then produce natural fertiliser.

Jethro believes the success of landcare in Lake Seloton comes from working with an existing group and avoiding unnecessary competition that would result from setting up a new group. 'Our principles are almost the same principles as those of landcare—principles of participation and inclusion', he says.

For farmers like José and his group, landcare brings new ideas and inspiration: 'Landcare has the technologies and also the sincerity to work with people.'

Farmer and *Barangay* Extension Worker José Somido believes landcare has added value to an existing farmer group at Lake Seloton, Lake Sebu, South Cotabato.



Landcare facilitators create an environment where it is easy for people to learn and share ideas.

The important role of the landcare facilitator

Facilitation is at the heart of landcare. It is about making it easy for farmers to get involved in and take ownership of the issues affecting their livelihoods.

At an appropriate pace, landcare facilitators carefully take farmers (and others where appropriate) through the development, consensus, ownership and implementation of appropriate solutions for sustainable improvement of livelihoods. The problems they are solving can be economic, social, environmental or political.

This facilitated process of change is different to some other extension approaches, which often manipulate or control the change process, or even ignore it totally. Some technology transfer projects are like this—they are almost totally focused on the technology, and ignore the process of change; or they are almost totally focused on the transfer, and try to manipulate people to adopt the technology.

For these reasons, it is important to clearly understand the specialised role of the landcare facilitator.

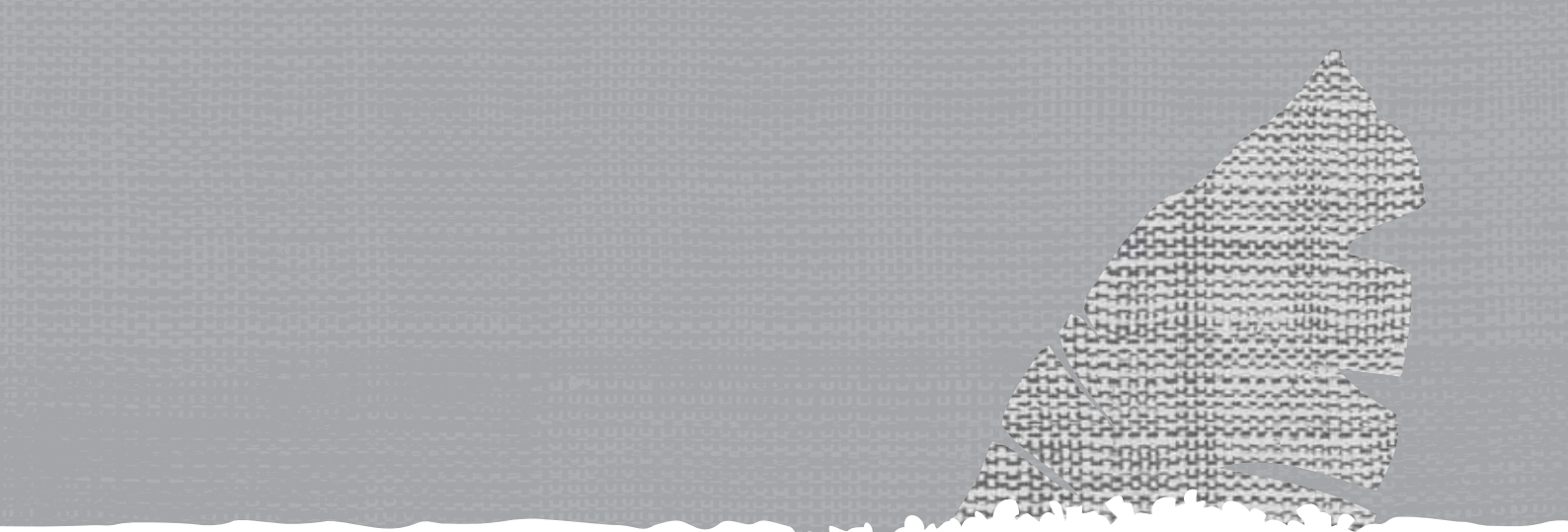
The responsibilities of a landcare facilitator

The landcare facilitator is responsible for:

- forming landcare groups
- building the knowledge, skills and self-sufficiency of the landcare group
- networking and communicating with the landcare group
- communicating with LGUs and other partners
- establishing links with service providers and funding agencies
- monitoring and evaluating the landcare program.

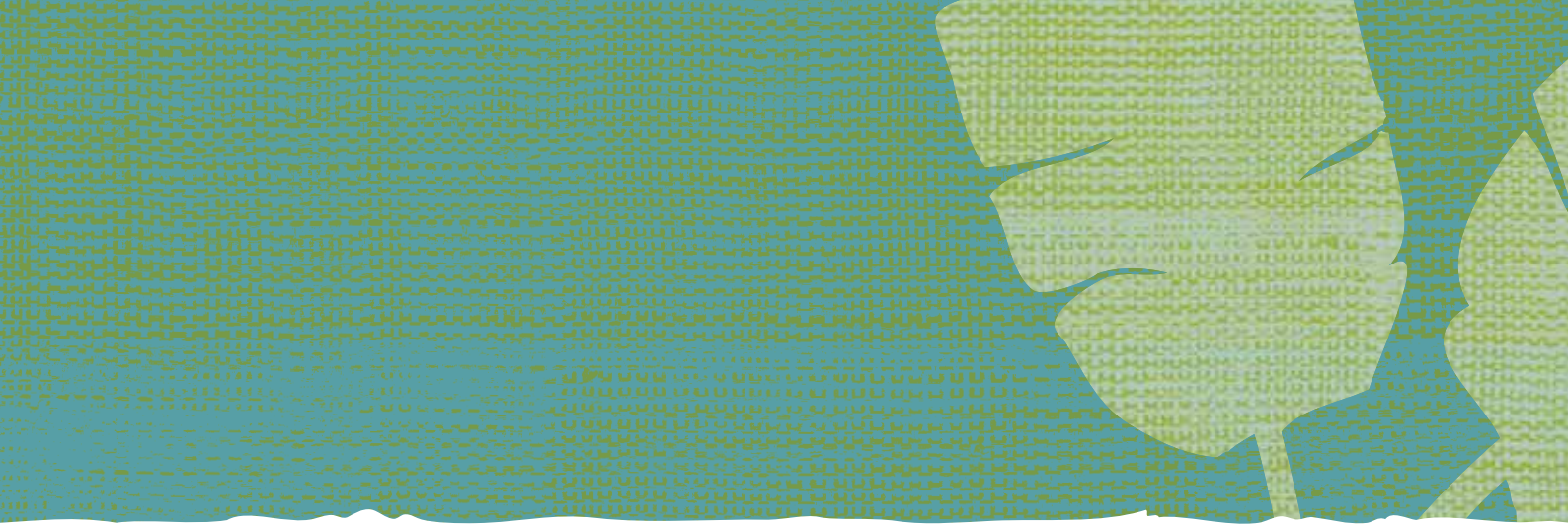
The landcare facilitator, in carrying out their responsibilities, should aim to:

- empower people, groups and institutions to create change and to respond to change
- create an environment for sharing and learning, using the principles of adult learning
- play the supporting role, not the leading role; this means looking for activities that encourage independence and self-reliance, and not intervening too much in group activities; it is easier to facilitate a group that is open to new ideas and technologies

- 
- build up activities slowly and ‘drip feed’ information in line with the farmers’ learning pace so as not to overwhelm people with too much technology or too much information at any one time
 - share different technologies from which the farmers themselves can choose those appropriate to their needs, rather than providing a technology package for farmers to rigidly follow step by step; the facilitator needs to source and gain access to a range of appropriate technologies, often in areas where they have little expertise
 - balance the process and the technical content, while paying attention to both; the process side requires a mix of social and interpersonal skills, while the content side requires a mix of technical knowledge and the ability to effectively source outside technical support.

Tips for landcare facilitators

- Identify and participate in any extension training available, especially in group development and facilitation skills.
- Be prepared to share your facilitation experiences with others; you learn more through sharing.
- Make it very clear to farmers and others that landcare is a process and not a technology.
- If you are employed by a development or research organisation with a particular objective, check before you start that your organisation has some flexibility in how you achieve the objective. This is important because farmers often have a different approach and use different methods to achieve an objective. Always be open with the farmers about your organisation’s objectives and how you are trying to meet them. Let the farmers decide whether or not they believe this to be the best approach.



The qualities that make a good landcare facilitator

The qualities that make a good landcare facilitator are:

- openness—this is important for building trust and confidence
- a welcoming friendly attitude
- sensitivity—having that extra level of awareness to be able to pick up important signals
- empathy with people, i.e. being able to place yourself in their shoes, particularly people in poor rural communities
- a genuine interest in agriculture and natural resources, and in farmer group activities
- a passion for seeing rural communities improve their livelihoods in a sustainable way.

The skills that a good landcare facilitator needs

A good landcare facilitator needs the following skills:

- personal communication skills: observing, speaking, listening, questioning and probing, summarising, conversing, presenting
- group development skills: group dynamics, teamwork, participation, conflict resolution (particularly when confronted with diverse people in different situations with different agendas)
- networking skills: dealing with partner agencies to facilitate support and funding; linking with national government agencies and other external agencies to gain support
- learning skills: reflecting, sharing, thinking laterally
- technical skills: some basic technical skills in agriculture and natural resource management, preferably with a good knowledge of rural sociology, are important for understanding farmers' technology needs and for supporting farmers in using the technologies; any technical field experience is invaluable.

The farmer facilitator

A farmer facilitator is a landcare facilitator who is also a farmer. While the responsibilities, qualities and skills of the landcare facilitator apply equally to the farmer facilitator, their role is more about implementing technologies on their own farm, sharing their experiences with their fellow farmers, and facilitating farmer meetings and training sessions with visiting technical experts.

The right mindset and a willingness to learn

Anyone can become a landcare facilitator. It does not require a college degree or a lot of experience in community organising, although these things are of course beneficial.

What it does require is a mindset for helping people (especially farmers) to discover their own solutions to their own problems and the ability to connect them with people who can help them.

Don't get too hung up on the responsibilities, qualities and skills that we have listed here—with the right mindset and a willingness to learn, we feel sure that anyone can do it.



Farmer facilitators play an important role by demonstrating conservation technologies on their farms and sharing their experiences with their fellow farmers.



Building friendships is the key to building partnerships

Lorena ('Aying') Loma is a 27-year-old landcare facilitator with LFPI. Her first landcare project was at *Barangay Ned*, a remote village in the municipality of Lake Sebu, South Cotabato, in south-western Mindanao.

Aying regularly travelled the 70 or so kilometres from her base in Koronadal City to Ned on a hired motorbike, but often had to walk many kilometres when heavy rain made the roads impassable.

'My first visit to Ned was an extra challenge because the road was so bad. It really takes perseverance, trust and confidence in the Lord to get there', says Aying. Her first 2-month stay in Ned challenged her to live a simple life in a remote village, with no relatives and friends nearby.

'Sometimes I asked myself why I was in Ned; after all it's quite a lonely place to live', she reflects. 'But little by little I found my comfort zone with the farmers. Soon, I realised I wasn't alone and I was there for a cause—to help the farmers in Ned'.

Inspired by the warmth of the Ned farmers, Aying worked hard to help them improve their living and protect their environment, teaching them conservation farming techniques and planting trees with them. Seeing the potential influence of future generations, she also taught good land management practices to students in two Ned secondary schools. And while she was overwhelmed by the active participation of both students and farmers, she was concerned with their lack of resources.

'Although their enthusiasm was there to help protect their environment beyond just their own farm, they simply can't because they are constrained by the lack of resources', she explains. Sometimes Aying's help was as simple as making available quality planting materials and cellophane bags. And again, she quickly realised that she was not alone and that she could help them create partnerships.

'Building partnerships with existing government and non-government agencies and linking farmers to these programs is the key to complementing resources', Aying says.

'Constant follow-up and interaction to build rapport, and a common vision with these partners is crucial.

'Being part of Ned as one big family is very important to me', says Aying. 'And hearing how happy the farmers and students are to be part of landcare warms my heart. It's nice to know that when they see the trees that are now growing in Ned, they remember me as well.'

LFPI Landcare Facilitator Lorena 'Aying' Loma (left) found that perseverance, trust and building friendships with both farmers and agency staff helped her to spread landcare.



Summary – Is landcare for you?

The key points to take away from this section are as follows:

1. Landcare benefits farmers by protecting their soil; improving their cash income and livelihoods; improving their families' nutrition and health; and developing the farmers' skills, confidence and knowledge. These benefits outweigh the costs and risks of applying new technologies, market volatility and the time invested in landcare groups and activities.
2. Landcare benefits extension workers by creating the means for a more self-sustaining and successful program with greater participation by farmers, faster adoption of conservation technologies, and more funding and resources. Extension workers need to be committed and motivated, which requires time, new skills and expanded responsibilities.
3. Landcare benefits LGUs by providing them with a forum to engage farmer groups, listen to their concerns, extend technologies and integrate development approaches. The resulting increase in profit in the community will deliver a better tax basis for the LGU, but landcare requires some investment in landcare facilitators, services and materials.
4. Landcare can link with existing government and non-government programs and add value by providing access to farmer groups, providing technical expertise and leveraging other resources.
5. Landcare facilitators have a specialised role in forming and supporting landcare groups, networking and communicating, linking with outside resources and coordinating monitoring and evaluation activities.
6. Effective landcare facilitators empower people to change, support rather than lead, respond to the needs of farmers, recommend appropriate technologies and are good communicators. They are empathetic, open and have a passion for working with farmers for sustainable outcomes.
7. Anyone can become an effective landcare facilitator provided they are prepared to develop the right mindset and are willing to learn.



Section 3. How to get landcare started

Landcare starts with you!

Whether you are an extension officer, a community organiser, a farmer facilitator or a local government unit (LGU) official, landcare starts with you understanding what it is about (see Section 1) and determining that it can work for you (see Section 2).

In this section we take you through a series of steps to get landcare started. The steps follow an approximate time line, although in some cases some steps may happen concurrently. You can follow the time line and read through each step serially or jump to the step that currently interests you.

The steps are in the sequence that we have found to be most successful. But there may be times when you need to vary the sequence or indeed the process. So don't see it as a rigid recipe, but as a starting point.

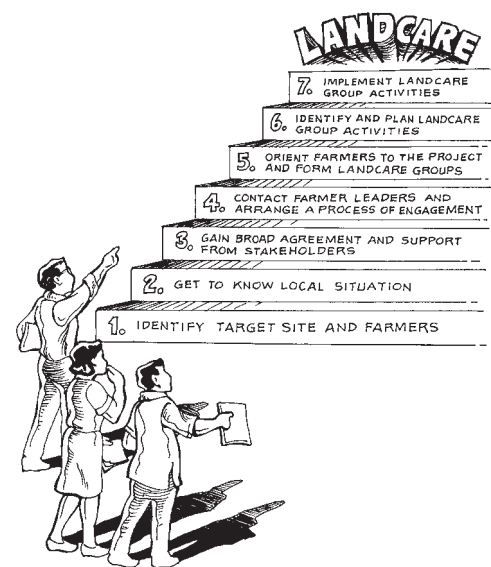
If you are an extension officer, a community organiser or a farmer facilitator, you are probably thinking about or are already using a landcare approach in your project. We wish you good luck as you follow these steps!

If you are an official from an LGU or a non-government organisation, and you are keen to try the landcare approach, before embarking on the 7-step process, you will first want to find a landcare facilitator. You could appoint a new staff member (if resources permit) or assign one of your existing staff. Or it may be that one of your partner organisations has the resources and capacity to assign someone to the role.

While landcare starts with you, it involves everyone. As you proceed, remember the importance of the three-way partnership of farmers, LGUs and technical facilitators—all three need to be involved for landcare to succeed in the long term.

The seven steps to getting landcare started

1. Identify the target site and farmers.
2. Get to know the local situation.
3. Gain broad agreement and support from stakeholders.
4. Contact farmer leaders and arrange a process for engaging farmers.
5. Orientate farmers to the program and form landcare groups.
6. Identify and plan landcare group activities.
7. Implement landcare group activities.



Getting landcare started is a 7-step process.

Step 1

Identify the target site and farmers

This step may not be necessary if your target farmers have already been identified. This will be the case where, for example, you are an LGU agricultural technician or a farmer facilitator with an assigned farmer base, or a community organiser from a non-government agency with a set development target.

If you have a number of different sites or farmer groups to choose between, it is important to first identify which site or group offers the best potential for success.

Research shows that landcare is likely to be more successful when the following conditions are present:

- A common issue or problem related to natural resource management or rural livelihoods is affecting the majority of the farmers in the area.
- The farmers are focused on farming and are relatively free of other rural development pressures.
- The political environment is stable and local government is able to provide consistent support.
- A committed and competent agency is able to provide technical assistance and facilitation services.
- There is a level of interest among farmers and cohesive farmer groups already exist or are easy to form.
- The landcare facilitator is providing the farmers with well constructed training and communication services.

To identify your target site and farmer group, list the appropriate criteria, using the above conditions as a guide and adding any others that are relevant to your agency's objectives. Then compare each potential site or farmer group with the criteria.

Table 1 lists some criteria that we have used in the past.



Identify the target site and farmers

Step 1

Table 1. Sample checklist for selecting sites and farmer groups

Criteria	Yes	No
The LGU is likely to be supportive.		
Other potentially valuable technical partners are available.		
The site/group is in a high priority area (e.g. because of land degradation, poverty, lack of services).		
There is an important farmer-based natural resource management or rural livelihoods issue(s) that landcare can potentially address.		
The issue(s) is recognised and accepted by most of the community.		
The farmers are likely to be open to change.		
Appropriate technologies are available to meet the needs.		
Farmer social groupings exist or are easy to organise.		
[Any other issues that may need to be considered, e.g. stability, peace and order]		



Select the site or the farmer group that best meets the criteria.

It's important to get the LGU involved!

In one or two cases, landcare has been successful without active LGU support because of the existence of a strong non-government implementing agency. But without active LGU participation, landcare's chances of long-term success are significantly reduced.

Remember that the LGU has a mandate to lift the living standards of the people and protect the environment, so their ownership of the landcare approach is obviously important, particularly for long-term success.

Step 1 Identify the target site and farmers

Bohol province integrates landcare approach with local government units

One of the objectives of the Philippines–Australia Landcare Project is to grow and sustain landcare in the province of Bohol. The province's first site was in San Isidro and the project is successfully scaling up with sites in the municipalities of Pilar and Alicia. Integrating the landcare approach into the programs of the local government units (LGUs) has been a key strategy.

'It is important that you know who to contact and learn about the existing programs where landcare could fit', says Rojo Balane, Visayas Regional Landcare Coordinator with the Landcare Foundation of the Philippines, Inc. (LFPI).

'This will serve as a guide on how one could start landcare.'

Rojo learned that the Alicia LGU had appointed *barangay* farmer technicians (called *barangay* agricultural workers, or BAWs) who could help him start landcare activities in the *barangays*. Their role is critical because they provide technical assistance to their fellow farmers—something not available from the municipal agricultural technicians.

Rojo collaborates with the LGU and trains the BAWs in the technologies, the landcare approach and the concepts that they need in their new role of promoting landcare in their respective *barangays*.

'Before landcare, farmers were dependent on what the LGU gave them. They were not used to being involved in planning and developing the programs', explains Rojo.

'The LGUs now understand what landcare is and they integrate it into their programs where relevant. They see landcare as a potential tool to address other issues and concerns and they see the benefit of partnering with the landcare project. LGUs also have resources that can be tapped by landcare to assist the LGUs in their programs of providing farmers with appropriate technologies.'



Rojo Balane (far left), Visayas Regional Landcare Coordinator with LFPI, with *barangay* agricultural workers in Alicia

Get to know the local situation

Step 2

Once you have identified the site or farmer group, the next step is to develop a good knowledge of the situation in which the farmers are operating. To do this, you should read whatever information you can find and talk with people who have an interest (a stake) in the site or farmer group.

It is sometimes easy for a landcare facilitator to downplay the importance of this step and either skip it completely or give it only token attention. Perhaps you believe you know the situation well enough already, or time is short. We consider this step as one of the most important, and we strongly recommend that you complete it. It doesn't have to take much time—one week should be all that it takes if the stakeholders are available. And no matter how well you think you know the local issues, there are always useful things that you can learn from re-listening, re-scoping and rethinking. The time and effort you invest will be worth it.

Gathering as much information as you can find

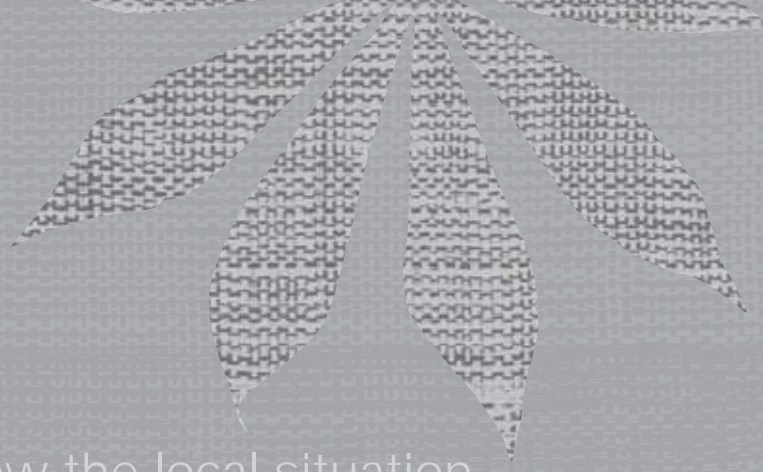
Gather and read as much information about the site or group as possible. Look at both primary sources (information about the site or group itself), and secondary sources (information of general relevance to the site or group, such as demographic and socioeconomic data, and existing programs and policies).

Look for information from libraries, LGU offices and the internet. Good places to find relevant information are local development plans, natural resource management plans, watershed management plans and land use plans.

Start a file of relevant information, and start a special fact file of important issues that you think may be useful when the landcare program gets underway.



It's important to talk with local people about what they need from landcare.



Step 2

Get to know the local situation

Finding out about what is already going on

by Rojo Balane

When starting landcare in your local community, be aware of past and current projects in the area. Past projects tell you about the experiences of the people and the effectiveness of different strategies that have been employed for different cultures and traditions. Current programs, on the other hand, are opportunities for you to tap into and help establish landcare more easily and at less cost. These programs may have been started by LGUs, non-government organisations, schools or the local church.

Where there are existing programs related to landcare in the area, it is more appropriate and practical to partner with them. Integrating landcare into ongoing programs is far more effective than starting landcare as a stand-alone program, where it may only duplicate and compete with other programs.

Look carefully into existing programs in your region, province or municipality. Get to know their goals and expected results. Learn about their strategies and identify where partnerships with landcare may be appropriate. There may also be opportunities for landcare to improve these programs. Remember that landcare is flexible enough to address most issues, even those of related programs targeting, for example, health and nutrition.

Get to know the agencies that are implementing these programs. Information about the nature of these agencies will help you see how landcare can fit in and be accepted by your potential partners. Knowing the key people involved should help you to build good relationships. Identify a champion—an insider who can advocate for landcare within the organisation.

Consider networks and alliances as opportunities to promote landcare. The important thing is that landcare should address a significant issue, or issues, that are recognised, understood and relevant to the stakeholders..



Pilar farmer Justiniano Celeres (right) talks to Rojo Balane, Visayas Regional Landcare Coordinator with LFPI.

Talking to stakeholders

Talk to relevant people who have an interest (a stake) in the site or the farmer group, so that you can:

- expand your knowledge about the target site or group
- indicate your interest in a potential landcare program
- seek information about the possibility of collaboration and partnership in a potential landcare program
- identify any relevant complementary projects or policies already in place.

Talk to people from the LGU and people from any national government agencies, non-government organisations and service providers involved in the site or with the farmer group.

If possible, talk to one or two representative farmers, such as farmer leaders or prominent farmers, to learn about their perspectives and interest. Again, remember that listening is the key—some potentially good programs have failed to get off the ground because the landcare facilitator was more interested in talking than listening.

Farmers' early perceptions are important and often colour their attitudes from there on. Be careful not to raise their expectations; use the discussions to gain their perspectives, not to make brash promises that you may not be able to keep.

In all your discussions, listening should be your focus—you are there primarily to acquire information that will be helpful in developing a landcare program. In the process, find out the names of any other people, agencies and projects that have a stake in the site or group, or that are already working, or planning to work, with the site or group. You can follow these up later as part of initial scoping discussions.

Be clear that the discussions are merely conceptual, and that the program is still only a *potential* program—it is easy to raise expectations. You can not commit to the program until the scoping is complete and the need and partnership issues assessed.

Add the outcomes of all your discussions to your information and fact files.





Step 2

Get to know the local situation

Starting with the backyard vegetable garden at Malisbong

More than 100 farmers attended the first landcare training session in Malisbong, where they learned about planting a backyard vegetable garden.

Eldon Ruiz, a regional landcare coordinator with LFPI, presented slides showing what landcare had achieved in Ned, arousing the interest of the largely Muslim group of farmers.

Malisbong is a poor coastal community in Sultan Kudarat in south-western Mindanao. It is remote and has both upland and lowland areas. It is largely dependent on fishing, but is plagued by peace and order issues and its people are desperate to move out of poverty.

'After just 4 months of landcare, people are harvesting the vegetables they planted in their backyards and are bartering vegetables for fish', says Eldon.

Junaid Angkanan, president of the local People's Organisation, believes that landcare provides a mechanism for his organisation to link with government agencies and the wider community and sustain development in the region.

'We are very happy that our site was selected for landcare as this addresses our number one issue of livelihoods', he says. 'Landcare has highlighted to us the importance of networking and alliance building. And we have learned a lot about new technologies.

'Landcare has taught us how to plant vegetables, and how to make compost, fertiliser and home-made pesticides.'

While the backyard vegetable production is important for local consumption, farmers are keen to get into commercial production and take their organically grown produce to the Davao City markets.

'We need landcare assistance for this commercial expansion', says Junaid. 'We need more seeds and we need fruit trees.'

Some of the Malisbong farmers have visited upland landcare sites in Lantapan, and others are hoping to visit the lowland sites growing rice in Agusan del Sur.

'We would all like to visit the landcare sites in Agusan', says Manting Salong, a member of the local farmers organisation. 'We have 78 rice farmers with 350 hectares. We are now starting to grow organic rice with no insecticide and using organic fertilisers, but we need more training in how to create organic fertiliser and compost.'

Eldon believes Malisbong has a very good chance of becoming a hub for organic farming: 'The fertility of the soil is very high and largely underused.' He and his colleagues from LFPI try to visit Malisbong twice a month to provide support and training.

'It's learning by doing,' says Manting. 'After learning, I go to the field and do it. Landcare is very practical.'

The Malisbong farmers are keen to share their knowledge with other farmers from nearby communities once they have established landcare in their own community.

'We can become a model *barangay* where we can transfer our knowledge to other *barangays*', says Manting.

Malisbong farmers are proud of their quick success in diversifying their farms with vegetables and fruit.

Gain broad agreement and support from stakeholders

Step 3

You now have an understanding of the farmers' situation and you have gained positive indications of support and collaboration from people you have talked with.

In this step, you formally present the landcare program proposal to all stakeholders for their consideration, with a view to gaining their agreement and support. This is also where you educate the stakeholders about the landcare process.

Identifying the stakeholders

First you identify the important stakeholders—those who you believe need to know about the program, those who can commit to a program partnership, and those who can provide support. You can include stakeholders with whom you have previously spoken as part of Step 2 if you found them to be genuinely relevant.

Then, for each stakeholder, identify the key representative(s) who you believe need to be informed about the program.

Table 2 lists potential stakeholders and their representatives.

Institutional mapping can be useful in helping to identify potential landcare partners. Venn diagrams are a commonly used institutional mapping tool.



Step 3 Gain broad agreement and support from stakeholders

Stakeholder agency	Possible representatives
Farmer groups or cooperatives	Farmer leaders
<i>Barangay</i> LGU	<i>Barangay</i> captain Councillors
Municipal LGU	Mayor Municipal agricultural officer Municipal environment and natural resources officer Agricultural technicians
Provincial LGU (for large projects covering more than one municipality)	Governor Provincial agricultural officer Provincial environment and natural resources officer
National government agencies (e.g. Department of Agriculture, Department of Environment and Natural Resources, Department of Agrarian Reform)	Chiefs of offices Local project officers
Civil Society Organisations, religious groups, non-government organisations, and People's Organisations	Organisation heads Local project officers
Research organisations (e.g. World Agroforestry Centre, universities)	Organisation heads Local research officers
Private sector	Field or regional representatives

Table 2. Potential stakeholder agencies and representatives

Arranging a presentation forum for stakeholder representatives

There are two ways in which you can present the program proposal to the stakeholder representatives:

- Arrange one program presentation forum for all representatives. This has the advantage of obtaining useful cross-agency perspectives which, ideally, will emerge during the discussion. It also makes it easier for you to assess consensus on importance issues. On the other hand, it is logistically more difficult to arrange, particularly where there are many agencies involved and they come from a wide geographic spread.
- Arrange a series of small individual presentations to each of the stakeholders at their respective offices. This is obviously easier to arrange but takes more time and you cannot get the consensus that is possible with a single forum.

Gain broad agreement and support from stakeholders

Step 3

Preparing your presentation

Your presentation should consist of a well prepared PowerPoint™ slideshow, backed by a one- or two-page program outline for representatives to take away with them.

Use your fact file of issues from the initial scoping (Step 1) to develop a situation summary at the beginning of the presentation—stakeholders always appreciate someone who has done their homework and is well prepared.

Use the rest of the presentation to outline what you are proposing to do.

Presenting your proposal

- During the presentation, look for feedback, particularly suggestions on how the program might be improved. Assess people's general agreement with the proposal and look for indications of support (including personnel, funding, policy and logistics).
- When representatives indicate their support, find out who you should liaise with to follow up and what you need to do to secure the support. They may, for example, need a written submission, and they may prefer to have a memorandum of agreement drawn up.
- Clearly articulate that you are not presenting a program, but an approach to facilitating a solution to an important issue. This should focus the attention of the audience on the landcare approach, rather than on the technologies that might be implemented.
- Make it clear that landcare is not a process for dole-outs—it is a process for building farmers' ownership of issues and solutions, which may then provide a more efficient and effective process for any community funding allocations.
- Watch for false hopes and over-optimistic expectations. It is important to be relatively conservative in predicting what might happen, but quite clear as to what you are proposing to achieve. Remember the old adage: 'It is better to under-promise and over-deliver, than over-promise and under-deliver'. Use landcare case studies from other similar situations to present a pragmatic view of what might happen. And be careful to temper people's expectations that landcare can solve all problems.
- Clearly indicate the intended time frame of the proposed program and the exit plan. Long-term commitment from LGUs for landcare activities may require them to look beyond the normal tenures of existing staff and the term of office of local officials.



Gather your stakeholders together to present your landcare proposal.

Step 3 Gain broad agreement and support from stakeholders



Lyndon Arbes (second from right), Northern Mindanao Landcare Coordinator with LFPI, presents a landcare proposal to LGU staff in Lantapan, Bukidnon. Present your landcare program to partners as a solution to important and shared issues rather than a program in its own right.

- Make the boundaries of the program clear. For example, are you intending to work at just one site or with one farmer group, or are you intending the site or group to be a pilot site for a larger and more extensive landcare program?
- Make it very clear that any benefits from the program are to be shared by the partners; they will not belong to any one agency. Emphasise that all partners will be acknowledged during program events and in any program publicity.

The basic funds required for a landcare program

Salary for landcare facilitator (if this is a new position)

Monthly salary not lower than the salary standard, with normal incentives such as paid vacation and sick leave, maternity and paternity leave, holiday allowances, 13th month pay and normal bonuses.

Operating overheads for landcare facilitator

Office equipment and supplies to support documentation, correspondence and communication (access to computer, LCD projector etc); transport allowance or access to vehicle or motorbike; funds for personal development and training; funds for hosting meetings with farmers, partners, community groups and support institutions as part of scoping and program start-up; funds for internal reporting.

Operating budget for landcare facilitator

Funds for farmer activities (meetings, workshops, cross-visits); communication materials for farmers (brochures, leaflets, flip charts, training manuals); material inputs (e.g. seeds, seedlings); funds for communicating with and reporting to partners and support institutions.

Gain broad agreement and support from stakeholders

Step 3

Partnering with Indigenous peoples to conserve native trees

by Nelson Tomonglay

Native trees such as *sagimsiman* provide food, shade and building materials for Indigenous peoples, so we need to conserve them.

This is exactly what is happening, thanks to a program facilitated by LFPI which is working with Indigenous landcare groups in Claveria in northern Mindanao.

The project, which started in 2005, is funded by the United Nations Development Programme and the Philippine Tropical Forest Conservation Foundation. It supports technical training, meetings and planning with groups to establish nurseries and plant thousands of hectares of native trees. The project is also promoting and supporting the planting of *abaca* under the trees.

'This participatory activity is very important for the local people', says Maria Aurora ('Au') Laotoco, Executive Director of LFPI. '*Abaca* provides an alternative source of income to corn, sweet potato, *gabi* and other cash crops.

'This extra livelihood opportunity is important to Indigenous people when farmers find it hard to provide food to meet their daily needs.'

LFPI links with the Department of Trade and Industry to provide skills training. It also links with product users and the business sector to market *abaca* fibre.

'We facilitate linkages with markets, product users and processors', says Au.

'Over the past 3 years working with Indigenous communities, we've learned the importance of partnerships. We've also learned to be careful in understanding upland communities and their need to manage the natural resources they depend on. They have a lot of existing knowledge about things like *abaca* fibre production.

'I am happy and hopeful that our sincere partnership and involvement with Indigenous people, linking them with funding agencies and the business sector at both national and local levels, provides great assistance to our Indigenous brethren while conserving and protecting indigenous trees.'



Datu Manayo, Leader of the Mat-i Higaonon Tribal Council in Claveria, Misamis Oriental, proudly shows the integration of *abaca* with native trees. Participatory activities with Indigenous groups are helping to conserve native trees as well as build sustainable sources of income from crops such as *abaca*.



Step 3 Gain broad agreement and support from stakeholders

Local government unit supports farmers to implement landcare

The Pilar municipal government in eastern Bohol is training around 200 farmers to become landcare technicians in a bid to implement landcare across the municipality and halt the erosion that is filling up the large Malinao Dam.

The program, called PILAR DAM (Productivity Improvement through Landcare and Agricultural Resources Development And Management), recognises the important role farmers play in landcare.

'If farmers do not know about it or do not understand it, they will not cooperate', says Engineer Joseph Anania, Municipal Planning and Development Coordinator. Joseph was convinced of the importance of the role of farmers after a visit to landcare sites in Claveria.

For every 25 households in the municipality, the PILAR DAM program is training a farmer technician to meet their landcare needs. With more than 4,800 households, they need about 200 farmer technicians. Joseph calls them *barangay* farmer technicians, or BAFTECHs.

The farmer technicians are being trained and they receive a small honorarium of P50 a month from the municipal government and another P50 a month from their local *barangay* council.

'We provide BAFTECHs with some garden tools and initial vegetable seeds', says Joseph. 'Farmer technicians are expected to put in their own backyard nursery and distribute the seeds they grow to the other farmers and householders in their group. We do not limit this program just to farmers. All households need to establish a vegetable garden or an agroforestry system on their land.'

'The farmer technicians are supported by six agricultural technologists and one agricultural officer. They are required to meet monthly with the 24 householders in their group to share experiences and discuss new technologies.

'We have not had a single negative reaction from farmers', says Joseph. 'Nobody has said it can't be done.'

Joseph convinced the Mayor of Pilar of the benefits of the scheme by explaining the importance of farming to the community.

'Ninety per cent of our households are farmers. We have *barangay* health workers but had no extension workers for the farmers. We brought the concept to the municipal council and no one was against the idea. This year (2007-08) we have appropriated about half a million pesos for landcare-related activities. And the current administration is planning to sustain our activities, especially as we have already provided concrete results in our pilot areas.'

Top: The Pilar Local Government Unit in Bohol is training 200 farmer technicians to support other farmers in their villages in adopting landcare. Here, Joseph Anania, Municipal Planning and Development Coordinator, speaks to farmer technicians at an orientation program.

Opposite: Claveria farmer trainer Expedito Vistar shows farmers from Gingoog City, Misamis Oriental, how to use the A-frame to lay out contours.



Step 4

Contact farmer leaders and arrange a process for engaging farmers

Once the program has been given broad support from stakeholders and the partnership has been established, it is time to get down to working with the farmers.

The first step is to go back to the farmer leaders you talked with in Steps 2 and 3, to negotiate and plan how you are going to work with them and their fellow farmers.

Remember to keep accurate notes on all of the discussions you have, so that you can build up the following steps with confidence. Always carry your fact file of issues with you, and record all new key issues. A good practice is to spend 10 minutes or so after each discussion, on your own, reflecting on what was said and noting any issues for future reference.

Here is a list of questions that you need to discuss with the farmer leaders.

Are you going to work with just one pilot group of farmers or a number of groups?

The number of landcare groups needs to be manageable within the facilitation resources available. One option is to select the number of groups that you can manage to facilitate yourself. Another option is to identify, with the help of the farmer leaders, a number of farmers who could act as facilitators ('farmer facilitators'), each looking after a landcare group. Your role would then be to train the farmer facilitators as a group and guide them in facilitating their individual groups.

Are you going to work with the farmers directly or use farmer facilitators?

The farmers chosen to be farmer facilitators need to be compatible with and acceptable to their fellow farmers. They need to have both the ability to learn new facilitation and technical skills, and effectively interact with their farmer groups to pass on these skills.

Are there existing farmer groups that you can work with or do you need to form new landcare groups?

If existing farmer groups are functioning well, use these for the landcare project. This saves extra work and has the advantage of building on existing functional social networks. The landcare process is flexible and adaptable, so it can easily work with existing groups. You should form new groups only where there are no existing groups or where the farmer leaders believe existing groups are too dysfunctional. Let them make the final decision.



How many farmer groups will there be?

If you need to form new groups, the ideal size is 8–20 farmers per group. A big group can be hard to organise, geographically and logistically, and farmers will find it harder to learn. There is also the potential for more conflict. If groups are already in place and have more than 30 farmers, we recommend that you split them into smaller subgroups of up to 20 farmers.

How will you structure the landcare groups?

For groups to be functional, they should:

- share a common interest and purpose so that they are likely to be constructive in moving ahead
- be located close to each other geographically so that they can interact regularly without spending too much time travelling to attend meetings
- share a similar culture and outlook so that they are relatively cohesive as a group
- be comfortable with each other so that they work well together as a team.

Do you need guidelines for group operations?

Guidelines can be beneficial in setting the boundaries and goalposts for the group, but it is also important to keep landcare groups relatively informal. If you feel from the discussions that guidelines are needed, you will need to develop them and have them accepted by the group.

How will you get started with the farmers?

The farmers will need some program orientation and if you, the landcare facilitator, are relatively unknown to the farmers, you will need to be introduced to them. Orientation and introduction can be done at a meeting and presentation to all farmers at a central location, a series of small *sitio*-based meetings and presentations, or an individual walk around the farms with the farmer leaders. If there are farmer facilitators, the orientation and introduction could be channelled through them to the farmers. As well as discussing the process of this initial orientation, you should also look for feedback from the farmer leaders on other key partner representatives that they believe should be present during the orientation (for example, LGU officials, LGU staff, non-government organisation staff).



Spend time with farmer leaders in their communities to discuss how they want landcare to run.

Step 5

Orientate farmers to the program and form landcare groups



Invite farmers and other partners to a community meeting to learn about and discuss the proposed landcare program.

By now you will have reached agreement with the farmer leaders on the number and structure of landcare groups, the use of farmer facilitators, and the process for first meeting the farmers. The next step is to meet the farmers, brief them on the program and the concept of landcare groups, and then form the landcare groups if suitable groups do not already exist.

Orientating the farmers to the program

- Work closely with the farmer leaders on the orientation. Farmers tend to look up to their leaders, so it is important that the farmer leaders are seen to be actively involved and supporting the program. In fact, the farmer leaders should be the key players and should do most of the talking. Get them to introduce you as the landcare facilitator and to speak about the relevance of the program from their own perspective.
- If the farmer leaders have suggested that partner organisations be present during the orientation (for example, LGU officials, LGU staff, non-government organisation staff), make sure they are invited to attend and introduce them to the farmers. Invite them to comment on the program and endorse the farmers' involvement.
- Keep your presentation to the farmers short and simple. Focus on explaining the landcare approach and what it means for the farmers. Remember to acknowledge the farmers, the farmer leaders and the program partners.
- Look for feedback on the program from the farmers and arrange in advance to have someone record it for you. This will free you up to maintain eye contact with the farmers while listening intently. At this early stage, where early impressions count, farmers will look more favourably on a facilitator who appears to be actively listening to their issues rather than taking notes. Check beforehand that the farmers will be comfortable with an assistant attending the meeting.
- Talk to the farmers about the structure of the landcare groups, as recommended by the farmer leaders (existing groups and/or new landcare groups to be formed under the program). Emphasise the importance of landcare groups in getting the farmers together to exchange information and to learn. Ask for their input on the groups and how they think they might be improved. Later, record the feedback in your fact file.

Orientate farmers to the program and form landcare groups

Step 5

Why the landcare group concept is important

- It is a forum where farmers can exchange ideas and information.
- It provides a forum for farmers to collectively filter and test new technologies.
- It provides a mechanism for farmers to reach group consensus on important community issues, which brings greater cohesiveness.
- It provides a strong support and learning network; farmer-to-farmer sharing and learning is a powerful driver for change.
- It is a visible and bipartisan link with the LGU (and other groups) and an efficient and transparent mechanism for distributing resources to farmers (e.g. material inputs, funds).



A landcare group meets at Kinoguitan, Misamis Oriental.

Forming the landcare groups

After the orientation meeting(s), summarise the farmers' feedback on the landcare groups, and meet again with the farmer leaders to revise the groups (if there are existing groups) or to give them the go ahead to form the new groups.

Work with the farmer leaders to schedule a planning meeting for each group.

You may be able to generate farmers' interest in attending the planning meeting by making them aware of the potential for training and for cross-visits to landcare farms in other areas.

The farmer leaders may like to arrange for groups to elect office-bearers prior to the planning meeting.

Step 6

Identify and plan landcare group activities

Now that the farmer groups have been formed, it's time to hold the first planning meeting with each group to identify landcare activities that meet their needs.

Holding planning meetings with the farmer groups

The purpose of the meeting

The purpose of the planning meeting is to get the farmers to identify and agree on their key needs, prioritise these needs, discuss and identify some appropriate solutions, and then plan the first activities in pursuit of these solutions. The meeting should also involve some discussion from the farmers about how they want their group to operate.

Organising the meeting

Get the farmers to organise the meeting so that they start to take ownership of the process. Facilitate the organisation of the meeting only as much as is required, and try not to intervene unless the farmers appear to be having trouble organising the event and are happy for you to help out.

Possible venues for the meetings include the *barangay* hall, a *sitio* meeting hut or a farmer's house—the only requirements are that it is large enough to accommodate the group and it is protected from the sun and rain.

Remember too that when we talk about 'farmers', we are referring to 'farming families', so the landcare groups include any men and women who wish to take part. To make it easier for women with young children to attend, think about operating a children's crèche for the duration of the meeting.

As for the orientation meeting, arrange if possible for someone else (an assistant) to record the proceedings of the meeting. And again, check beforehand that the farmers will be comfortable with the assistant being at the meeting.

Running the meeting

First up, you should establish some ground rules for the meeting; for example, attendees should show respect for others' opinions, allow people to have their say, and be constructive.

Next, for the benefit of those who may have missed the orientation meeting, give a brief overview of the program and the value of landcare groups.

Then give a quick outline of what will happen at the meeting, which will include:

1. identifying the farmers' needs
2. prioritising the farmers' needs
3. identifying solutions to the high-priority needs
4. planning what action they will take
5. deciding how the group will operate.

Now, work through each agenda item in the above sequence.

1. Identifying the farmers' needs

There are a number of techniques you can use to help the farmers identify their needs—brainstorming, cause-and-effect analysis, problem tree analysis, farmer testimonies and resource mapping are some examples. You can usually find out about these techniques in extension manuals. The main thing is to select a process that is fairly simple and that the farmers are comfortable with.

2. Prioritising the farmers' needs

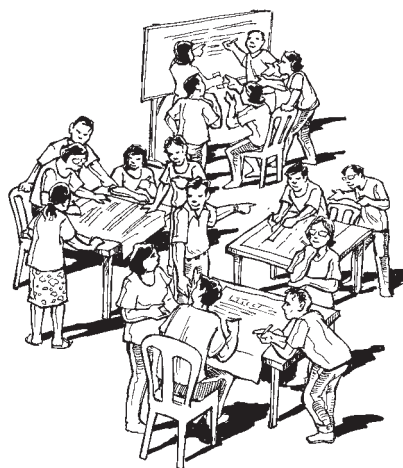
To prioritise the farmers' needs, simply allocate each farmer a limited number of votes that they then place against the needs of their choice. Some discussion may be necessary to achieve general consensus on the group's priorities.

3. Identifying solutions to the high-priority needs

Both you and the farmers should share your ideas on how best to resolve their priority needs. This is where some basic knowledge of suitable and appropriate technologies is valuable. You may want to do some preliminary research for this purpose. But be careful not to strongly advocate any particular solution or reflect your personal biases; share information as just another contribution to the discussion. In some cases, the high-priority needs may require research and investigation of potential solutions, and agreement with the farmers to do so becomes the outcome of the meeting.



Step 6 Identify and plan landcare group activities



The farmer group planning meeting is an opportunity to work together to identify the farmers' needs, solutions and priorities.

4. Planning activities

Develop an action plan before the meeting ends. You might want to use a Gantt chart for this purpose. Planning activities at the meeting is important because it:

- increases the farmers' ownership of the activities
- identifies who is responsible for the next step
- clarifies how resources will be allocated.

The action plan does not need to be large or long term. Start with small goals and tasks. The main thing is to get the group to identify (and own) two or three tasks in the immediate future. Scheduling when the group will meet next (for a discussion meeting, farm walk, field day, demonstration etc.) should be one of these tasks. Because some tasks will involve you as the landcare facilitator, it is important for you to negotiate at the meeting what you can and cannot do, so that the group is clear about what they can expect from you. From the farmers' perspective, there is nothing worse than the landcare facilitator not delivering on their actions.

5. Deciding how the group will operate

During the meeting, during refreshments or after the meeting over lunch, you need to start the discussion on how the farmers would like to see their group operate from here on. Here are some questions you will want answered:

- How often do they want to meet and conduct activities?
- How will they communicate with each other as a group?
- How will you communicate with them?
- What days/times/venues are most appropriate for getting together?
- Are new members welcome and, if so, how do they become members?
- Do they want to nominate a leader or chairperson to be the main contact?
- How would they like to measure the progress and overall success of the group?

Identify and plan landcare group activities

Step 6

Examples of landcare group activities

Landcare group activities have two components: *content* and *process*.

The content component is the technology or subject of the activity. The technology used in group activities will vary widely depending on the needs of the group. The main technologies used in landcare are listed in Section 1.

The process is the way in which the activity is run. It will vary depending on the learning needs of the group. Remember that different farmers will have different learning methods and learning curves, and it is important that you use a range of processes to cater for this.

The processes that we have found to be particularly successful for landcare are:

- cross-visits
- on-farm training days
- learning sites.

Cross-visits

A cross-visit is where a group of farmers visits successful landcare farmers and landcare sites. It is based on the principle 'to see is to believe'. Rather than farmers hearing about what has been achieved on another farm, they get to see it for themselves. And because farmers learn best from seeing the successes of other farmers, cross-visits increase farmer-to-farmer interaction and learning which, in turn, increases adoption. Ongoing direct farmer-to-farmer relationships are often established, and can result in farmers becoming more self-sufficient over time.

Your role as the landcare facilitator is to facilitate the cross-visits and support the farmer-to-farmer learning process. This is described in more detail in Step 7.



Farmers from Malisbong, Sultan Kudarat, join farmers from other sites at the Northern Mindanao Integrated Agriculture Research Centre in Bukidnon during a cross-visit to landcare sites in Northern Mindanao. Farmers who are new to landcare benefit from visiting established landcare sites. Seeing is believing!

Step 6 Identify and plan landcare group activities

Cross-visits inspire farmers and government officials

Any doubts that Kapatagan farmers in southern Mindanao might have had about the benefits of landcare were quickly erased after they visited the Lantapan landcare sites in the north of the island.

Kapatagan farmer Leo Castillo says they learnt a lot that they could put into practice. He is keen to follow up with further visits to other areas.

'I think everyone in my *sitio* would like to go on such a visit', Leo says. 'The verbal communication with other farmers is so useful.'

Leo's comments reflect what thousands of farmers have experienced with cross-visits over the years. Hearing firsthand from practising farmers about what they have achieved through landcare, and seeing the results with their own eyes, has proven to inspire farmers time and again.

Engineer Joseph Anania, the Municipal Planning and Development Coordinator from Pilar in eastern Bohol, used a visit to landcare sites in Claveria in northern Mindanao to convince municipal government officials and *barangay* captains of the benefits of landcare.

'From our visit to Claveria, we learned that landcare not only addresses environmental concerns, but also the economic concerns of farmers', Joseph says. 'We also learned how important it was for farmers, not just municipal officials, to understand how to implement landcare, which is why we then set up a program to support farmers to do just this.'

Bohol Landcare Coordinator Rojo Balane believes that this visit to Claveria was instrumental in the Pilar municipal government investing in landcare.

'We brought the mayor, the vice-mayor and all the members of the municipal council to Claveria to let them experience and interact with the Claveria mayor, government officials and local farmers', says Rojo.



Farmers from Pilar in Bohol visit a landcare site in Claveria, Misamis Oriental, in northern Mindanao.

On-farm training days

On-farm training days run by successful farmers use the 'learning by doing' principle. Rather than a landcare facilitator or some other 'expert' showing or telling farmers about techniques, the farmers themselves get to show and tell.

The farmer demonstrates the technique or technology first and then all the other farmers have a go at doing it themselves. The training can be arranged as a series of sessions over one day or over a number of days.

Your role as the landcare facilitator is to facilitate the training days, support the farmer-to-farmer learning process and provide technical input as required. This is described in more detail in Step 7.

Learning sites

A model or demonstration farm run by an innovative farmer with good landcare practices can be used as a learning site—a venue for sharing knowledge with other members of the farmer group. The farm needs to be conveniently located so that other farmers can get there without too much difficulty. Much of the on-farm training can be run on the farm and the farmers get to see a working system to which they themselves can aspire. The owner may be given some incentive for providing the venue.

Your role as the landcare facilitator is to support the model farmer with technical inputs and specialised training, and facilitate the farmer-to-farmer training that is conducted on the model farm. This is described in more detail in Step 7.

What makes a successful landcare group?

- The group should have a strong sense of ownership, with the farmers making the main decisions.
- Group activities must be relevant to the issues that the farmers see as important.
- At least some activities must relate to improving farmer incomes, not just to conservation farming.
- Group leaders need to be respected by the farmers; preferably, the farmer leader should be a leader in adopting innovative farm practices on their own farm.
- The landcare facilitator has realistic expectations and recognises that every farmer has a different learning style and learning curve.
- The group identifies their measures of success and members are involved in the process of monitoring their performance.

Step 7

Implement landcare group activities

Using the action plans from the initial planning meeting, you can now go ahead and facilitate the implementation of the landcare group activities that the farmers selected.

Here are some tips and guidelines for:

- conducting a farmer cross-visit
- delivering on-farm training
- establishing a learning site
- implementing livelihood and income-generating activities
- running social activities
- communicating with farmers in the field.

Conducting a farmer cross-visit

Your farmers can visit other farmers in their own *barangay*, municipality or province, or farmers in other provinces. The important thing is to make sure that the site and the farmers at the destination share common ground with your farmer group.

- Identify some farms that your group could potentially visit, and then let the group decide which one (or ones) they would prefer to visit.
- A cross-visit can be expensive, particularly if travel to another province is required. So, it needs to be well planned and organised with clear dates, times and logistics.
- Don't be tempted to visit too many farmers. It is better to visit one or two good farmers and have plenty of time for interaction, than have fleeting visits to half-a-dozen farmers. Farmers like to spend time with other farmers, both informally and formally. So, in between the formal talks and demonstrations, it's important to allow time for informal questions and farmer-to-farmer interaction.
- Have a clear program and brief the visitors well before the trip. Make sure they know who they are visiting and what they are likely to see so that they can prepare accordingly. And make sure they are aware of what is expected of them in terms of behaviour, cultural sensitivity and courtesy.
- Keep the size of the visiting group manageable—20 to 25 farmers is an ideal number.

Implement landcare group activities

Step 7

- Carefully plan the logistics for managing the group. It is more efficient if they travel together as a unit, so hire a jeepney or some other form of mass transport. Carry a megaphone or portable public address unit to make it easier for them to hear the host farmer. Create a small cross-visit guide book for each farmer in the group so that they have the basic logistical information at their fingertips and can add their own notes.
- At the farm site, introduce the host farmer, give a brief overview of the farm and its innovations, and then hand over to the host farmer. Do not over-facilitate the interaction between the visiting farmers and the host. Intervene if the discussion is getting bogged down on one subject, but only if the attention of the farmers is starting to wander.
- Keep background chatter to a minimum while the host farmer is talking. They deserve common courtesy, and the visiting farmers need to be given the fullest opportunity to hear what their host has to say.
- Always evaluate a cross-visit so that improvements can be made to future cross-visits. This can be as simple as asking some of the farmers for their feedback at the end of the cross-visit, or you might want to do a more thorough pre- and post-visit analysis of what farmers were seeking, what they found and what they then put into practice. You can only improve future cross-visits by carefully analysing the content, the process and the impacts.



Farmer cross-visits are useful for inspiring new groups but need to be carefully planned. Increase the potential for farmer-to-farmer dialogue by getting members of an existing farmer trainer group at the host site to take part.



Nelson Tomonglay, LFPI Northern Mindanao Landcare Facilitator (far right), helps Claveria farmer trainers host a cross-visit of farmers and LGU officials from Gingoog City, Misamis Oriental.

Step 7

Implement landcare group activities

Replanting forests to secure water and livelihoods in Agusan del Sur

With deforestation increasing erosion and run-off, the Bayugan Water District in Agusan del Sur was concerned about the quantity and quality of its future water supply.

‘We began to consider the options of bringing water in or rebuilding our forests’, says Arnulfo Torres, the president of the water district at the time. ‘We decided to plant trees and we got seedlings from Catholic Relief Services (CRS) and the government.’

CRS introduced Arnulfo to landcare and before long they invited the Bayugan farmers to visit Lantapan and Claveria to see landcare as practised.

‘When the farmers came home, they were very interested. They were able to see the benefits of using landcare technologies and that’s when landcare started in this area’, says Arnulfo.

The farmers’ landcare activities earned them an extra P3 million from the Philippines–Australia Community Assistance Program (PACAP) to help their efforts to improve their livelihoods.

‘While we were rebuilding the forest, the farmers needed to look to alternatives for their livelihoods’, says Arnulfo. ‘Our reforestation includes fruit trees, and the PACAP money is helping farmers earn income from vegetables and flowers.’

The farmers now use contour ploughing to minimise soil erosion and they make and sell their own chemicals and fertilisers—practices

brought to the region through landcare training. They have formed a landcare group with more than 30 members who meet monthly.

Arnulfo believes landcare brings a new ethic to Philippine farming practices. ‘With present practices of farming, you slash, burn, plant, harvest, then transfer to another area and do it again. With landcare, we see something new. Landcare is the care of the land and the care of the lives of the people.’

He is also hopeful that one day farmers and landcare groups will be self-sufficient. But he says that in the early days of landcare they still need support.

‘My main concern is we need to keep educating people to spread landcare. The farmers not yet involved need to be able to see what is happening with landcare. They don’t know the alternatives to cutting down trees and, unless they stop, everything will die.’



Arnulfo Torres, former president of the Bayugan Water District in Agusan del Sur, believes cross-visits are important for showing farmers the benefits of landcare technologies.

Delivering on-farm training

- Training should be based on the results of an analysis of farmers' training needs. Do this analysis as part of the first planning meeting with the farmers.
- Choose the farm that is most appropriate for the technology that is to be demonstrated and practised. Get the farmers involved in making the decision.
- A good training day will include:
 - a brief overview of the technology to be demonstrated and practised, and the reason why the technology is important and relevant to the farmers
 - a practical demonstration of the technology by the host farmer, and their testimonial as to why the technology is important
 - hands-on practice by each farmer attending
 - a final demonstration by the host farmer to clarify any issues and to field questions by the farmers on things they noticed during their hands-on practice
 - a group analysis of how the farmers intend to apply what they have learned, which can be used as part of the evaluation of the training day.
- Try to get one of the partner agencies to provide refreshments and lunch. Farmers appreciate the hospitality as well as the social interaction that occurs over a meal.
- Try to choose one topic for each training day rather than a 'basket' of topics.
- Always evaluate a training day so that improvements can be made to future training days. This can be as simple as asking some of the farmers for their feedback at the end of the day, or you might want to do a more thorough pre- and post-training day analysis of what farmers were seeking, what they found and what they then put into practice. You can only improve future training days by carefully analysing the content, the process and the impacts.



Farmer trainer Leo Zambrano from Lantapan, Bukidnon, demonstrates nursery production techniques to landcare group members.

Step 7

Implement landcare group activities



Zacarias Polinaria provides his farm in the San Isidro municipality of Bohol as a learning site for other farmers.

Establishing a learning site

- Choose a farm that is representative of farms in the area, and that farmers can relate to on a practical and economic basis. Heavily subsidised farms or those of well-off farmers are not generally appropriate. Choose a farm where the farmer has done the changes largely on their own.
- Provide special support to the owners of learning sites to recognise their important role and to maintain a healthy relationship. Give them first preference on any higher-level training opportunities, make sure they are first to receive a share of any material inputs, and ask them for ongoing specialist feedback on the development of the landcare program. Always acknowledge their role during demonstrations and farmer training sessions and publicise their role to LGU officials and partner agencies.

Implementing livelihood and income-generating activities

- Keep a balance between activities targeted at conservation farming and those targeted at improving economic livelihoods. When farmers can see that all activities are part of a larger long-term strategy to improve their future, they will participate more readily in all activities.
- Where appropriate, look at starting some income-generating activities for the group. Be aware that formal policies may be needed for managing income and distributing benefits.



Implement landcare group activities **Step 7**

Diversify, diversify, diversify!

'I spent many sleepless nights worrying about the seeds I had sown and the fertilisers I had applied being washed away. I used to grow corn; and when there was an oversupply, I either sold my product at a very low price or I didn't sell it at all. Diversifying my crops to include vegetables, and using soil and water conservation practices like contour farming, has been the best decision of my life. I get a daily income at competitive prices, plus I preserve the soil for the next generation.'

Orlando T. Berdin, member of Ned Landcare Association, South Cotabato

'Being a member of landcare has really helped me and my husband to improve our main source of living, which is farming. Adopting a diversified system of farming has increased our income and strengthened our relationship as husband and wife, because we work together in planting diverse vegetable crops on our farm. It has also developed our sales skills since we now know how to sell our produce. Landcare will remain in our hearts and we will continue to practise and share it with others.'

Daisy Barret, Secretary of Ned Landcare Association, South Cotabato

'Incorporating vegetables in the alleys of my contour farm supports the education for my 10 children. Also, they rarely get sick and are very healthy, thanks to the vegetables we grow and which have become part of our daily diet.'

John Villanueva, President of Ned Landcare Association, South Cotabato



John Villanueva (right) visits the farm of a Ned landcare group member.

Step 7

Implement landcare group activities



School children ham it up with landcare facilitators during the Ned Landcare Association Christmas Party.

Implementing social activities

As well as planning activities to improve livelihoods, the farmers should plan activities to improve social relationships within the group and the local community.

Be inventive! Examples of social activities are:

- an annual landcare festival to honour and celebrate successes
- a competition to find the best landcare adopter
- an annual competition to elect a Mr and Mrs Landcare
- a contest for a landcare song or slogan.

Social activities help to increase the community's acceptance of landcare and build the profile of landcare within the broader community.

Communicating with farmers in the field

- Good quality information, extension and communication materials can assist farmer learning. Use them to complement cross-visits and on-farm training sessions rather than as stand-alone items.
- Laminated information flipcharts are useful for on-farm training as they can visually summarise and reinforce key points, are easy to erect in the field and are weather-proof.
- Make sure flipcharts, slides and any other presentation materials used are highly visual with mostly pictures, diagrams and cartoons, and relatively few words.
- Use local dialects and keep the format simple.



Pre-prepared flipcharts can be useful for reinforcing key points during field activities.

Summary – How to get landcare started

The key points to take away from this section are as follows:

1. Identify a suitable target site and farmer group. It's best if the farmers share a common problem; are focused on farming; are in a politically stable area, supported by a committed and competent agency; are already connected; and have access to training and facilitation resources.
2. Get to know the history and socioeconomic nature of the local area by talking to as many farmers and others as possible.
3. Gain agreement and support from government and non-government stakeholders for your landcare proposals and plans.
4. Contact farmer leaders to arrange a process for engaging farmers in landcare activities and groups.
5. Orientate farmers to the landcare program and form landcare groups; be guided by the advice of the farmer leaders.
6. Identify and plan landcare group activities based on the farmers' needs; consider cross-visits, on-farm training days and learning sites.
7. Implement agreed landcare group activities—and don't forget to keep a balance between activities targeted at conservation and those at improving livelihoods.





Section 4. How to keep landcare going

Having put so much effort into getting a program started, it is really important that you build on it and keep the momentum going.

In this section, we describe the processes that we believe are necessary to sustain landcare. These processes relate to:

- keeping landcare groups going
- building on the landcare group structure
- staying strong as a landcare facilitator
- supporting the expansion of landcare to new sites.

Keeping landcare groups going


When a landcare group is functioning well, its activities are relevant to the farmers' needs, the farmers are learning and adopting new technologies, and the farmers' livelihoods are improving. At this stage, the group is likely to continue operating without much assistance. And, after all, this is the aim of the process—to build a strong, self-sufficient group that needs little, if any, assistance from the landcare facilitator.

Some things that are helpful in building self-sufficiency are:

- strengthening the partnership with the local government unit (LGU)
- regularly reviewing the group's action plan
- continually building capacity
- improving income-generating activities
- keeping partnerships healthy
- developing external linkages
- keeping up the supply of resources.



Once you have established landcare, you need to think about how to sustain it; this should be a partnership effort.



Strengthening the partnership with the local government unit (LGU)

The LGU is the key to establishing and sustaining landcare. So you need to make sure that each partner in the landcare program maintains a strong relationship with the LGU.

As the key partner, the LGU's relationship with landcare groups deserves special attention, particularly the integration of landcare into the LGU's existing programs.

We recommend the following steps for strengthening the relationship with the LGU. You may have already carried out some or all of the steps as part of the initial development of the partnership (see Section 3: Steps 2 and 3). Here, we have targeted the steps at the *barangay* level but you can also apply them at the municipal and provincial levels of government.

1. Establish rapport with *barangay* officials. Make a courtesy call to the *barangay* captain and seek permission to join the next *barangay* council meeting.
2. Present the landcare program to the *barangay* council. Ask the councillors to consider integrating the program as part of the *barangay* development plan and whether you can take part in the *barangay* development planning process.
3. Present the landcare program to the *barangay* development council. Ask them to integrate the landcare program with the *barangay* development plan and to commit some of their budget to make this happen.
4. Present the landcare program to the *barangay* assembly to raise their awareness of the program and its goals. This will also help bolster support and help develop ownership of the program by *barangay* officials.
5. Seek input from *barangay* officials on possibly aligning monitoring and evaluation processes for the project with those of the *barangay* development plan.
6. At least once a year, update the *barangay* development council on progress and outcomes. During this update, revisit how the landcare program is fitting with changing government priorities and plans, particularly the *barangay* development plan.

Mayor passes ordinance for contour farming in Bohol

Bienvenido ('Ben') Molina believes so strongly in landcare that, during his term as municipal mayor of Alicia, Bohol, he passed a municipal ordinance requiring all farmers tilling lands with a slope of 30 degrees or more to adopt contour farming.

'I was convinced by landcare when I saw that farmers with small landholdings could go on using their lands for farming without any danger of erosion and that their crop yields were still alright', says Ben, now a member of the provincial board of Bohol.

Alicia is a mountainous area not far from the famous Chocolate Hills of Bohol. As mayor, Ben set aside funds for the introduction of a landcare program and also trialled natural vegetative strips on his own farm: 'The result is really clear that this controls erosion excellently'.

Ben sees landcare as important for water conservation as well as protecting the soil: 'Alicia is one of the towns first hit by drought because it no longer has any forests and the area is practically grassland. This means we have a problem for irrigation and water for household consumption. Landcare conserves our water.'

'The number one support that people really need is from government', he says. 'The government has the resources, the technical know-how and the people to implement, supervise and guide the farmers. They also have the resources for training, research and other activities to help farmers to adopt landcare.'



The previous mayor of Alicia in Bohol, Ben Molina, believes so strongly in landcare that he passed an ordinance requiring all farmers tilling steep land to adopt contour farming.



Landcare can benefit LGUs and non-government organisations

by Delia Catacutan

Local governments are a frontline organisation in the future of landcare. As the only permanent local institutions, they are in a good position to deliver services and support to landcare. The challenge is to get their support and involvement.

We need the larger system of government to cooperate with local farmers. While I support farmers being self-reliant, I still see a great need for governments to participate and provide the foundation for farmers' activities. I think it is great that farmers value independence and knowledge rather than external finance and resources. This creates the culture of pride, independence and esteem for themselves and what they do. But they should not be left alone.

This doesn't mean it's the sole responsibility of government or a certain agency. It's more about complete participation that includes government and non-government organisations (NGOs) like the Landcare Foundation of the Philippines, Inc. (LFPI). It's about developing farmers' ability to be independent while working with government and non-government partners for large-scale change.

Delia Catacutan (far right), a research officer with the World Agroforestry Centre and long-time landcare advocate, introduces farmers and LGU officials to landcare principles during their visit to Lantapan, Bukidnon.

Local governments can help landcare and improve their own extension programs by:

- employing more qualified technicians and extension personnel who are supported by relevant training programs and travel opportunities
- producing quality extension materials
- applying the landcare concept to both agricultural and environmental extension programs
- supporting livelihood activities in landcare as a form of incentive, rather than an aid
- gaining private support and investment for landcare from, for example, the agribusiness industry.

NGOs can support landcare by:

- building community skills for achieving development rather than focusing on projects that lead to dependence and the need for a 'dole-out system' to support development
- being flexible in their project targets to allow for experimentation, which means achieving a balance between content, process and output
- supporting landcare projects rather than creating new institutions.

Regularly reviewing the group's action plan

The action plans developed at the initial planning meeting with the farmers (see Section 3: Step 6) need to be continually reviewed to make sure that they still meet the evolving needs of the farmers in the group. The farmers should conduct an action planning workshop each year to review what the group has done and learned. At the workshop, get the farmers to identify how their needs changed as their farms and their livelihoods started to improve. Use the evaluation records from each event (such as cross-visits and on-farm training days) to help with the analysis.

A short-term review of the action plan can also be done at the end of each meeting or field event by getting the farmers to review their immediate plans for the next and subsequent activities.



LFPI Northern Mindanao Landcare Coordinator Lyndon Arbes works with farmers from Claveria, Misamis Oriental, in developing a new banana marketing group. It's important to work closely with farmers to identify their changing needs.



Continually building capacity

Training needs identified at the initial farmer planning meetings (see Section 3: Step 6) will have made their way into the group's action plan. Get the farmers to reassess their training needs each time they review the group's action plan, as described above.

Here are some other things you can do to help build the group's capacity:

- If the group has identified new training needs, organise a 'training match-up' workshop between the farmers and invited landcare partners such as LGUs, national government agencies and non-government organisations. During the workshop, the farmers present their training needs and the partners identify which of these needs they can meet, based on their capacity and mandate.
- If there are training needs that cannot be met by the partners, contact other institutions that may have the expertise to help. Research and academic institutions often have the capacity to help with training but lack the local knowledge of farmers' needs and networks and the appropriate contacts.
- Work with the farmers to prioritise their training needs. Sometimes they need help in getting a balance between technical training and group development.
- As capacity building and training programs evolve, evaluating the effectiveness of the training becomes more important. Continually emphasise the importance of ongoing monitoring and evaluation of all training events. The partner agencies that provide the training will also appreciate getting feedback on the effectiveness of their training programs.
- When the group has matured, encourage them to think about forming a farmer trainer group to provide specialised farmer-to-farmer training services to other landcare groups. For some landcare groups, this has become an income-generating activity.
- Mentor and groom one or two farmers who appear to have good leadership potential. They are important for the future sustainability of the group. Try to link them up with leadership development programs of the LGU or other providers.
- Make sure individuals in the group are not over-burdened with work, particularly those with talent and interest. It is important to avoid burnout. Appointing a committee is one way to spread the load.
- Continue to strongly support the involvement of women from farming families in capacity-building programs. Women are often better skilled and better placed to play key roles in running and developing the landcare group. Landcare promotes a strong gender equity ethic along with its bipartisan political ethic.

Bohol women's landcare group flourishes

The Masonoy Women's Association in San Isidro, Bohol has more than 30 active members. President Eleuteria Godin is proud of her garden full of flowers. Planted by the women's group, the flowers are sold to nearby markets to supplement each of the women's family income.

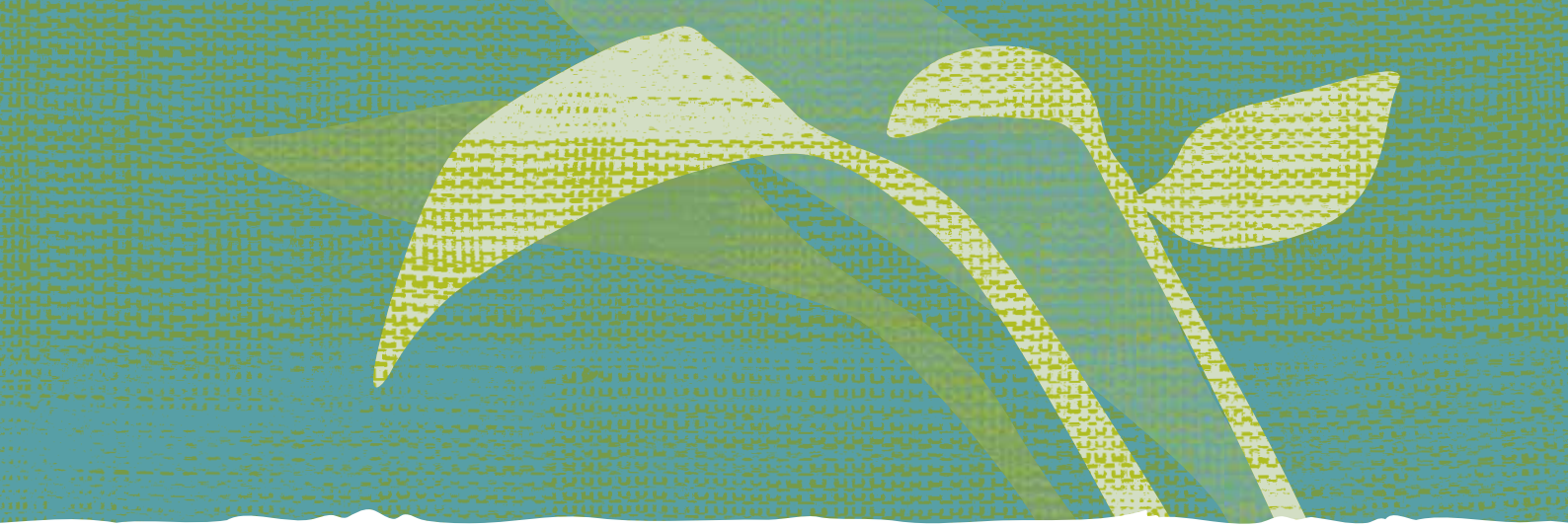
The women prefer to make their own organic fertiliser that does not degrade the soil or cause soil acidity. Eleuteria hopes they will soon be able to afford to buy worms to help speed up the process of producing the fertiliser.

She also dreams of having a machine to help them turn the ginger they grow into powder, so that they can sell it beyond the local stores into other cities and towns in Bohol.

'We do this to help our husbands and families', Eleuteria explains. 'We also help them on our farms to build contours. We're getting a much better production and return from our farms than we did before landcare. Instead of just having sweet potato and cassava, we now have vegetables, coconuts, bananas, and other fruit.'



Eleuteria Godin is President of the Masonoy Women's Association in San Isidro, Bohol. The members grow flowers to sell at nearby markets to supplement their incomes.



Improving income-generating activities

The livelihood improvement and income-generating activities identified at the initial planning meeting with the farmers (see Section 3: Step 6) need to be reviewed. Encourage the group to continue to look for new and innovative ways of improving their livelihoods. Here are some ideas:

- Start a group livestock dispersal program. For example, the group buys a piglet that is looked after by a landcare group member until it is large enough to produce its own piglets. Some of the offspring are dispersed to other members of the group and some are sold for the group's income, and then the cycle continues.
- Make organic fertilisers and vermicompost, and sell the products to farmers or non-government organisations that are promoting organic farming.
- Start a microfinancing scheme where all group members contribute a small amount of money, and lend the funds to members at minimal interest.
- Investigate improved marketing systems for the group's farm products.



Vale Justo trains farmers in how to grow new vegetables and apply new pest and disease management systems.



Growing the right potato for the right market

With landcare, farmers are growing more produce and are expanding the range of their produce. In many cases, this is more than is required to meet the needs of their families and local outlets, and they need to find other markets.

In remote communities such as Ned in South Cotabato, where rough roads hamper transportation, this can be a problem. For produce like cabbages and tomatoes, it can mean high losses before they even reach the marketplace.

'Farmers in remote areas are being encouraged to move to more durable crops, like potatoes and onions, that aren't damaged as easily', says Valeriana ('Vale') Justo, a researcher working with landcare at the University of the Philippines Los Baños.

'Every time we hold a landcare meeting in Ned we have these farmers who come every time,' says Vale. 'There are three or four ladies who have to walk 2 hours by foot, but they still come even if it's raining. We teach them things like biofumigation and how to produce different vegetables. They are very organised in their landcare groups. They work with each other; they share their resources and their labour. They help each other in planting onions and they are happy doing this.'

Jessan Catre, a technical support officer with Catholic Relief Services, is helping farmers find new markets to support the new supply of produce. And his market intelligence is also helping farmers to select the right produce to grow.

'There are two types of potato in the Philippines: a yellow variety and a white variety. The white potato is used for fast food such as potato chips, but we currently need to import this from places like Australia and Europe', says Jessan.

The white potato is ideal for growing in Mindanao's upland areas of Ned, Kapatagan and Lantapan.

'The biggest buyer of this potato told us there was potential for landcare groups to produce these potatoes. He said that if we could produce quality white potatoes in Mindanao that he'd buy from us rather than import the potatoes. And so with Vale's technical production expertise we're trying to introduce this quality potato into the region.'

Jessan is hoping to see farmers become confident enough to call themselves entrepreneurs. His agroenterprise program with landcare is supporting this dream.

'Farmers always think of themselves as purely farmers and powerless to be involved in the dynamic market system', he says. 'In this program we try to educate landcare farmers to look at themselves as entrepreneurs who have the capacity to participate and influence the market.'

Jessan Catre (front right) helps landcare groups find new markets and improve their marketing systems through a market clustering process introduced by Catholic Relief Services.

Keeping partnerships healthy

By now the landcare group will have cemented important linkages with the agencies in their landcare partnership. These linkages need to be kept healthy. Here are some ways to do this:

- Communicate regularly with partner agencies to make them feel valued. Emphasise the progress being made by the program and the benefits to partners.
- Make sure partners are invited to landcare events, even though they may not appear to be interested or the event may not seem relevant to their mandate.
- Always acknowledge your partners at events, even if they are not present.
- Make sure partners are included in any written publicity about the program.
- Evaluate the performance of the partnership to identify and document what worked well and what could be improved. And get the partners' agreement on any new action plans. This is often a good opportunity to celebrate the importance of the partnership and its successes.

Developing external linkages

Linkages and partnerships with new agencies need to be continually developed in line with the evolving needs of the landcare group.

This is an important role for the landcare facilitator, requiring good communication and negotiation skills, networks, and access to information about agencies and their expertise. It is best if one of the farmer leaders in the group can assist you by playing a leading role in brokering the linkages.

Always be on the lookout for new development programs and agencies that may be relevant to the landcare program. Keeping in close contact with LGU officials and staff is a good way to keep updated on new programs.



Pooling resources to plant 15,000 trees in Claveria

During his time as *barangay* captain of Madaguing in Claveria, Misamis Oriental, Samuel Abrogar successfully led the planting of 15,000 assorted timber-tree seedlings.

The activity was supported by the Community Agriculture Technologies Project run by LFPI with funding from the Australian Centre for International Agricultural Research (ACIAR). The project brought together LFPI, the Department of Environment and Natural Resources (DENR), the municipal and provincial LGUs, and the Misamis Oriental State College of Agriculture and Technology (MOSCAT).

The collaborators planned massive tree-planting activities in the *barangays*. At first, Samuel thought success was unlikely, given the scale of the project and the need for resources such as seedlings and manpower.

'These constraints were addressed by several meetings conducted with partners', he explains. 'We finally came up with a detailed plan and sharing of resources.'

The local community, led by Samuel, pledged the labour force needed to identify sites, prepare the land and plant the seedlings. DENR committed to providing the seedlings. MOSCAT pledged the involvement of their faculty, staff and students. And LFPI committed to oversee the activity.

'We planted 15,000 assorted seedlings in the degraded forest margins and along roadsides in the vicinity', says Samuel.



A successful tree-planting project in Madaguing, Claveria, Misamis Oriental, relied on collaboration between LFPI, the Department of Environment and Natural Resources, the municipal and provincial local government units, and the Misamis Oriental State College of Agriculture and Technology.



Keeping up the supply of resources

To develop and remain active, a landcare group needs an ongoing supply of resources—people, cash and materials. Here are some ways you can help to sustain the flow of resources:

- Partner agencies need to remain actively involved in the program. Make sure they recognise the importance of pooling their resources with those of the other partner agencies.
- Consider each partner's ability to contribute, and recognise and understand their funding limitations.
- Remember the importance of integrating landcare with partner programs and priorities and, ideally, having resources allocated through these programs. Be aware of each partner's processes—they are always unique to each organisation. Knowing the best people to talk to, and the best time of year to approach them, increases your chances of success.
- Look for help from your landcare 'champion' in the partner agency. A champion is someone within the organisation who has the credibility and influence to promote landcare and negotiate with key decision makers in their agency.
- Get the *Kagawads* (*barangay* councillors) involved in training. It helps to engage them in landcare and may improve their attitudes to providing support.

Some groups will not survive

Groups generally continue to exist only while they have a need and common purpose. Landcare groups are no different.

The problems facing rural communities in the Philippines, particularly in the uplands, are so significant in terms of importance and scale that we expect landcare to continue for many years. But we need to recognise that not all landcare groups will be successful, and not all will want to continue.

If a landcare group loses momentum and the farmers do not respond eagerly to your interventions, it is often best to allow the group to disband. This does not indicate failure; it just means that the group is not yet ready for the complete landcare process. Experience has shown us that often these groups re-form when they recognise either a new need or the value of the landcare approach.

Building on the landcare group structure

Once a landcare group is stable, you may consider building on its strength to broaden its scope to the municipal or even provincial level. Here are some mechanisms you can use:

- farmer trainer groups
- municipal landcare associations
- farmer research committees
- strategic plans
- links with community organisations.

Farmer trainer groups

When a landcare group has built reasonable capacity, it may consider forming a farmer trainer group (FTG) to pass on its specialised knowledge to other farmers. This extends the farmer-to-farmer training concept. If the group can tap into an area of demand, the FTG can become an income-generating activity for the landcare group.

Farmer trainers need to be carefully selected. They should be capable leader types, be active and successful adopters within the landcare group, have good farms suitable for demonstrations and be able to communicate well with other farmers.

You can help the FTG to promote its services to the landcare network. If you can get the FTG to accredit itself with the LGU, that may help it win clients. Non-government organisations may also be willing to promote and use its services.



Members of the Alubijid Farmer Trainer Group in Misamis Oriental graduated in 2007.



Seeing is believing for Bohol farmers

Zacarias Polinaria was one of the first adopters of landcare in the mountainous municipality of San Isidro in Bohol. He thought the landcare message was positive and wanted to experiment on his farm. Over time he gained skills in landcare, especially agroforestry, and is now training other farmers.

'My farm is a model for other farmers', he says. 'I am not good at giving lectures; I can only train farmers when I can show them something on my farm.'

'I feel good because farmers from other *barangays* and municipalities have visited my farm. I like to show them how I have improved things.'

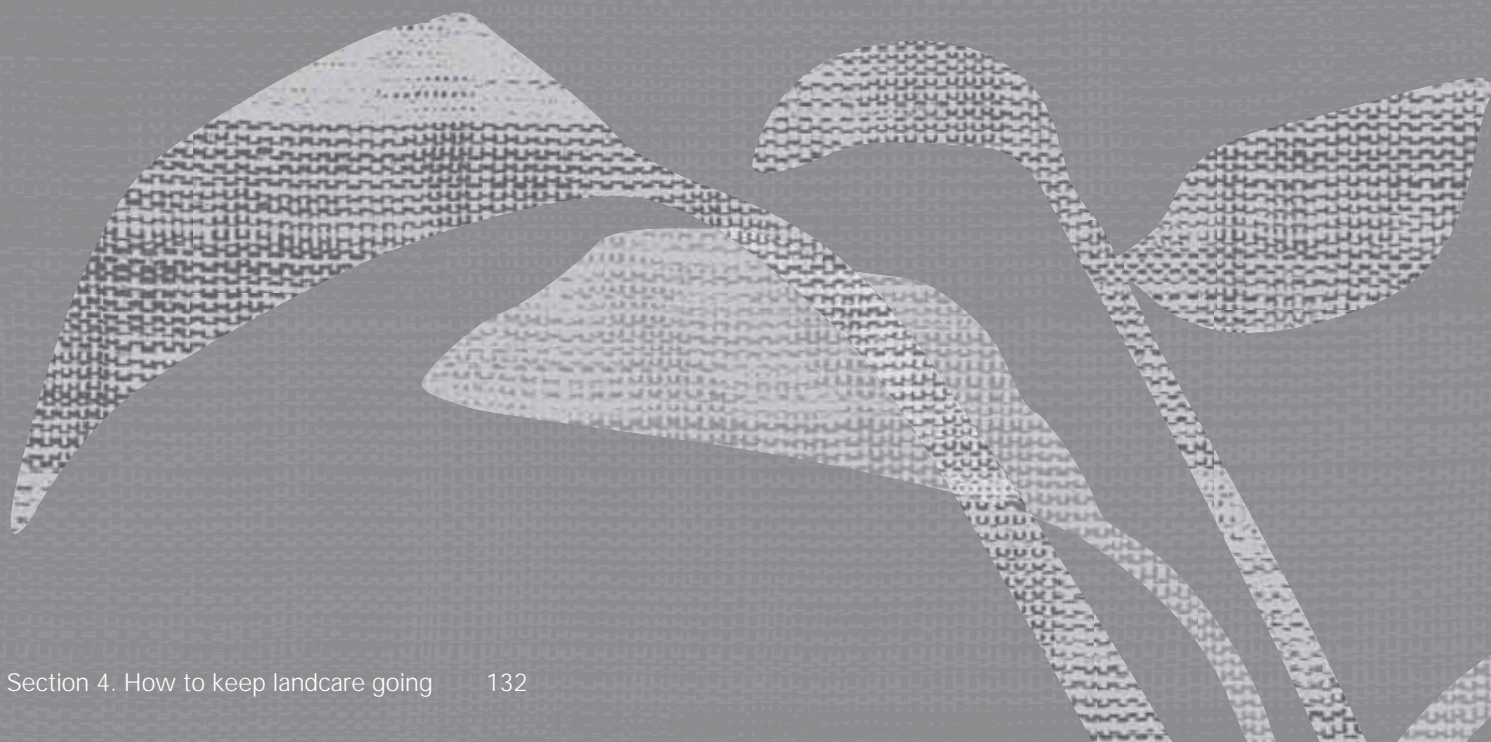
'Teaching other farmers is effective in promoting landcare when it is combined with formal training by agricultural technicians.'

Zacarias believes farmer trainers are effective because they are practising landcare on their own farms.

'In the early stages it can be difficult to convince other farmers about landcare, but when they see the actual benefits, such as reduced soil erosion, they are more likely to apply landcare technologies on their land.'

'One of my neighbours did not attend any of the trainings but when he saw the results on my farm improving the health of the land and the soil, he replicated everything I had done without me having to convince him. Just seeing the results was enough.'

Zacarias Polinaria believes farmers learn best by seeing landcare in practice. He trains farmers on his farm at San Isidro, Bohol.



Lantapan Landcare Association brings bargaining power and camaraderie

by Lorena Loma

Lyndon Arbes says his greatest achievement was in building the capacity of farmers in Lantapan to collectively address issues affecting their communities and livelihoods.

Lyndon has been involved in landcare since 1999 as a landcare facilitator at Lantapan in Bukidnon in northern Mindanao. As part of his role, he provides technical training and capacity building to farmers. He is passionate about helping to improve their social and economic wellbeing while protecting their environment.

'Before landcare, farmers were very passive in addressing local and environmental issues', says Lyndon. 'They did things individually and were driven always with the mindset of attending training and meetings to get financial support. But through landcare, they saw the benefits of working together as a group to address the issues that confronted their daily lives'.

Landcare groups from various *barangays* of Lantapan have since got together to form the Lantapan Landcare Association. The association has established links with groups and individuals and has more bargaining power in accessing their support.

The association has actively partnered with the LGU to implement environmental and livelihood projects. This not only helps build the capacity of landcare members but also links them to a wider network that has the potential to address their ongoing needs. 'This is crucial in sustaining their activities', says Lyndon.

'I believe the farmers' mindset has changed for the better', says Lyndon. 'They have learned many things. They are now more cohesive and learn to socialise themselves, gaining new friends and establishing new linkages. Today, they not only value money, but also people, relationships and camaraderie.'



Members of the Lantapan Landcare Association in Bukidnon learn how to handle and sow seeds.

Municipal landcare associations

When a number of landcare groups within a municipality develop a degree of self-sufficiency and have strong leaders and active programs, they may consider forming a municipal landcare association. The advantages include the pooling of resources and skills, greater collective potential to link with external agencies and funders, and a higher profile in the municipal community.

With an association, representation on the municipal development council may be possible; landcare issues reach a wider audience; and the potential for accessing provincial projects and funds increases.

Farmer research committees

When a municipal landcare federation or a large landcare group reaches the stage where it is capable of strategically analysing its members' needs and identifying inputs, it may wish to form a farmer research committee.

The committee is designed to initiate research by farmers on their own farms. It liaises with research providers on small farmer-led research projects, and interacts with farmer research programs such as the government's PCARRD Magsasaka–Siyentista (Farmer–Scientist) Program.

Strategic plans

The development of a higher-level structure such as a municipal landcare association or a farmer research committee requires a strategic plan that identifies the vision, mission, goals and objectives of the organisation. The plan may be for the long term (5+ years), the medium term (3–5 years) or the short term (up to 3 years).

To develop a strategic plan, you need:

- strategic planning expertise, and funding; there may be opportunities for support from the LGU or local participating non-government organisations
- commitment from the group's members, particularly from leaders, office-bearers and long-serving members
- up to 2 days of time to see the process through to completion.

Useful strategic planning activities include:

- analysing the strengths, weaknesses, opportunities and threats of strategies, policies or institutional set-ups
- exploring relationships among stakeholders and communities
- discussing priorities for development and land use
- identifying causes and effects of problems.



Students from Gerardo Astilla Sr. High School of Malamba, Marilog, Davao City, take part in landcare activities.

Tips for strategic planning

- Make sure everyone has the opportunity to speak.
- Make sure an action plan forms part of the final strategic plan.
- Before the group disperses, make sure that everyone understands their responsibilities, including who is responsible for distributing the results of the planning.
- Celebrate the completion of the planning—throw a party!
- Proudly display the vision and mission in the group's office or in a suitable public area.
- Remind the group to respect the result of the planning and that it should be changed only if absolutely needed.

Links with community organisations

Community groups can play a valuable role in expanding landcare in the local community. They can support farmers directly in implementing landcare, and indirectly by promoting landcare's principles to the broader community. The landcare facilitator is important for brokering linkages and getting the community involved.

You can connect with schools through both teachers and students—teachers from the perspective of getting landcare included in school curricula, and students from the perspective of experiencing landcare on a practical level in the school grounds and positively influencing their parents. Parent-teacher associations can also be involved.

Local church leaders can play an important role by introducing to their congregations the principles of landcare and how to apply them on farm.

Professional groups in major rural towns and cities are often interested in environmental advocacy and may be able to actively promote the concept of landcare within government, private industry and non-government organisations.



Staying strong as a landcare facilitator

The role of the landcare facilitator is always challenging and can, at times, be very trying. You need patience, endurance and a willingness to continually explore new horizons.

To keep you strong as a landcare facilitator, you need:

- monitoring and evaluation of the landcare program
- a phase-out plan for how you will withdraw from landcare groups
- professional development and networks.

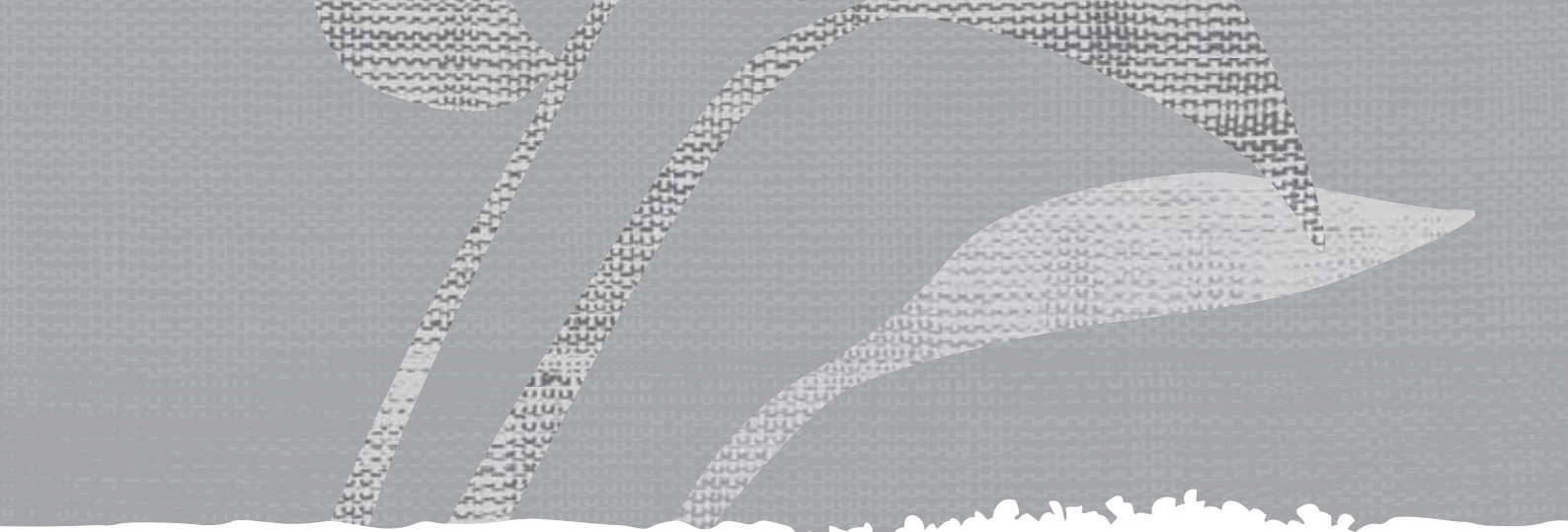
Monitoring and evaluation of the landcare program

The better you can demonstrate the outcomes and benefits of the landcare program, the more knowledgeable you will be of the best processes to use, and the more confident you will be in the success of the program. It is also more likely that funds will continue to be made available. Overall, your role will be more rewarding.

Remember that, while it is important to have an effective monitoring and evaluation program in place, it is also important not to over-monitor. Just measure the things that you need to measure in order to clearly show the outcomes and benefits.

Here are some indicators of success for a landcare program:

- The landcare facilitator is socially and professionally accepted in the community.
- Community members are working together cohesively to address their local issues.
- Landcare group members are building their capacity and adopting landcare technologies related to natural resource management.
- Landcare group members are increasing their income through diversified farming systems promoted through landcare.
- Social capital within the landcare group and the broader community is improving.

- 
- The community's interest in landscape issues outside of their immediate locale, for example in downstream areas, is increasing.
 - The community's interest in sustainable use of natural resources is increasing.
 - The community or landcare group is sharing its knowledge with other farmers in the community.
 - The LGU is supporting landcare programs.
 - The community or landcare group acknowledges LGU support for landcare activities.
 - The community or landcare group is accessing support from service agencies such as the Department of Agriculture, the Department of Environment and Natural Resources and the Department of Agrarian Reform.

A phase-out plan

Once the landcare group is established, it is important to develop a phase-out plan for how you will eventually withdraw from the group. You can carry out the plan when the farmers are self-sufficient, when you believe the facilitation service is no longer required, or when the resources run out. The plan helps to clearly set the terms of your role as landcare facilitator in the minds of the farmers.

Professional development and networks

Maintain an active professional development program by attending any extension or landcare training that becomes available, and by reading and researching the literature.

Develop a close network with other landcare facilitators in the region. You can jointly participate in training and, where appropriate, help each other out in your respective landcare projects.

Become a member or associate of LFPI so that you receive advice on events of interest.



Developing a network of landcare facilitators can help you support each other.

Supporting the expansion of landcare to new sites

This manual provides a plan for getting landcare started and for keeping it going at new sites. We hope that the contents are clear enough to allow you to understand and work through the process with a minimum of outside help.

However, we understand that there will be instances where you need additional mentoring and advice. For example, when a new site is remote from existing landcare sites, you may find it hard to meet other landcare facilitators face to face and to arrange the logistics of cross-visits to other landcare sites. Or perhaps you want to try landcare in a completely different farming or community development situation to those that we have described in this manual.

In these situations, LFPI is willing to help wherever our resources permit. Some ways we can help are by:

- providing advice by email on important issues in the design and implementation of a landcare program
- hosting your visit (as an interested landcare facilitator) to an appropriate landcare site in the southern Philippines to view processes and activities of interest
- sending one of our experienced LFPI staff to your site to help scope the potential for landcare (funding from your project or local agency might be required for this to occur)
- mentoring you from a distance on an ongoing basis should you get your program underway
- providing training and other services to your site, if required, on a fee-for-service basis
- including you on our email mailing list so that you hear about networking and training opportunities that we offer through our landcare facilitators' network.

If you are developing a new landcare site, please feel free to contact LFPI and provide brief details of your program so that we can keep you in touch with LFPI activities. Visit our website <<http://www.landcarephil.org>> for up-to-date contact details.



Summary – How to keep landcare going

The key points to take away from this section are as follows:

1. Support landcare groups by regularly reviewing and adjusting the action plan, continually building their capacity, improving income-generating activities, keeping partnerships healthy, developing external linkages, strengthening partnerships with LGUs, and keeping up the supply of resources.
2. Build on the landcare group structure by forming farmer training groups, municipal landcare associations and farmer research committees.
3. Build confidence in what landcare can achieve and look to the future by implementing a monitoring and evaluation program, planning for landcare groups to be self-sustaining without your support, participating in professional development, and networking.
4. If you are expanding landcare to new sites, contact us at LFPI and provide brief details of your program so that we can keep you in touch with LFPI activities.







Glossary

agroenterprise A business venture, typically small scale, that can be undertaken on a farm or to support an existing farm business.

agroforestry Land use systems where trees or other woody perennial plants are integrated with crops and/or animals on a piece of land.

barangay A native Filipino term for the smallest administrative/political division or district in the Philippines. A *barangay* generally has less than 1,000 inhabitants residing within the territorial boundary and is administered by a set of elected officials, headed by a *barangay* captain. There are more than 40,000 *barangays* in the Philippines.

bayanihan A native Filipino term for the spirit and effort of people working together as one community to achieve an objective.

biodynamic A method of organic farming that treats the farm as a unified and individual organism, emphasising the importance of balancing the soil, plants and animals as a closed self-nourishing system.

biofumigation A technique of incorporating the plant residues of selected brassica crops into the soil to suppress soil-borne diseases and pests. The brassica residues release biocides (substances that can kill living organisms) into the soil as they decay.

cluster marketing A system of marketing products where a group of five to 15 farmers work together to establish a market-linked agroenterprise in their district. The system's 8-step process includes partnership building, market chain study, cluster formation, product consolidation under a cluster plan, test marketing and enterprise development.

contour farming The practice of cultivating and growing crops across the slope following the contour lines. The resulting rows slow down water runoff, reducing soil erosion.

cross-visit A facilitated visit by a group of farmers to successful farms or businesses, where the visiting farmers can see innovations with their own eyes and interact with the farmers or business operators.

institutional mapping A visual method of identifying and representing the perceptions, relationships and importance of institutions and individuals inside and outside a community.

Opposite: Sergia Subaa farms the steep slopes of north-west Bohol.

local government unit The administrative structure responsible for the functions of central government agencies which were devolved by the Local Government Code of 1991 to local government agencies. LGUs, as local government units or agencies are commonly known, cover regional, provincial, municipal and *barangay* levels.

natural vegetative strips Narrow strips of naturally growing grasses and herbs which are left unploughed along the contours of sloping farmland. They help to control soil erosion and filter pesticides and fertilisers from water run-off.

sitio A native Filipino term for a local village or group of dwellings. A *barangay* is made up of a number of *sitios* (or '*puroks*' as they are more officially known).

vermicompost Compost (also known as 'vermicast' or 'worm castings') which is the end product of the breakdown of organic matter (such as sawdust, straw, manure, leaves) by various species of earthworms. Vermicompost is a nutrient-rich organic fertiliser and soil conditioner.

vermicomposting The process of producing vermicompost.

Further reading

Websites

- ACIAR–AusAID Philippines–Australia Landcare Project
<http://www.landcaremates.org>
Of particular interest are the working papers which capture the experience and impacts of landcare over the project's 10-year history.
- Landcare Foundation of the Philippines, Inc.
<http://www.landcarephil.org>

Books

- *Basic Things You Should Know To Save and Protect Mother Earth – Landcare in School Manual* (2007), CRS-Philippines, Davao City, Philippines.
- *International Course on Participation in Extension: Farmer Led Approaches* (2005), International Institute for Rural Reconstruction, Silang, Cavite, Philippines.
- *Landcare in the Philippines: stories of people and places* (2004), edited by J Metcalfe, Australian Centre for International Agricultural Research, Canberra, Australia (ACIAR Monograph No 112).
- *Scaling Up Landcare in the Philippines: Issues, Methods and Strategies* (2007), Delia Cresencio-Catacutan, World Agroforestry Centre, Nairobi, Kenya.
- *The Clustering Approach to Agroenterprise Development for Small Farmers: The CRS-Philippines Experience. A Guidebook for Facilitators* (2007), CRS-Philippines, Davao City, Philippines. Available for download from http://www.dgroups.org/groups/cgiar/LearningAllianceEA/docs/CRS_AgroEnterprise_Guidebook.pdf [PDF 19 MB]
- *Trainers Manual on Agricultural Extension and Land Management* (2006), Department of Agriculture – Upland Development Programme in Southern Mindanao, Davao City, Philippines.





ACIAR

Research that works for developing
countries and Australia

www.aciar.gov.au

