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The farmer-to-farmer adult learning manual

A process and resources for the development of
farmers as peer educators



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A process and resources for the development of farmers as peer educators

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UNIVERSITY OF CANBERRA*

2017

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 Australian and developing-country researchers in areas where Australia has special research competence. It also administers Australia's contribution to the International Agricultural Research Centres.

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Cover: Women village community educators discussing family financial decision-making cards as part of the Family Farm Teams module *Communicating and decision-making as a family farm team*, Alona ward, Lumusa district, Western Highlands province, Papua New Guinea (Photo: Sanni Harri, University of Canberra)

Foreword

Agricultural extension and education are important tools in the policy toolkit to facilitate agricultural development in developing countries. We have known for a long time that farmers learn at least as much from other farmers as they do from professional educators or extension officers. This manual brings these two ideas together by suggesting a process and providing resources to support the development of farmers as peer educators. Farmers are better able to tailor technical information to their local context and culture, and peer educators can become important role models for others.

This manual was developed in an innovative ACIAR-funded project in Papua New Guinea (PNG) led by Professor Barbara Pamphilon from the University of Canberra. It has been designed so that it can be easily adapted for use in other developing countries as well as PNG. Smallholder farmers across the world are keen to learn ways to improve their agricultural production, food security and family incomes. This publication is a valuable resource for agencies wishing to support farmers to become active adult learners and to build agricultural learning communities.



Professor Andrew Campbell
Chief Executive Officer, ACIAR

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- Kwinkya (Western Highlands province)—Susan Trapu
- Tinganagalip (East New Britain province)—Caroline Misiel, Marshall Marum, December Misiel
- Vunapalading 1 (East New Britain province)—Judith Robin Bobo, Steven Liai, Roslyn Nguangua, Michael Ningi
- Tubusereia (Central Province)—Tau Egi
- Hisiu (Central Province)—Mary Apa and Ikupu Vaku

Introduction

Smallholder farmers in Papua New Guinea (PNG) are key agricultural producers. They provide the essential food crops for their families and local community. They provide for their families' health, education and daily living costs by selling surplus crops and/or cash crops, such as coffee, cocoa and coconut. However, this subsistence production expertise cannot address the many challenges these farmers face today. To be successful agricultural producers, these farmers need core information on matters such as soil preparation, nursery practices, pest management, weed control, irrigation/drainage, harvest and postharvest management, as well as emerging information on new crop varieties and management of the effects of climate change.

As technical solutions have been developed to meet these learning needs, many valuable training of trainers (TOT) programs have been designed to transfer the information to farmers. Such programs are typically developed through training pilots that result in a final education manual that can be used in other similar farming communities. However, it is essential that farmers are also empowered to adapt the information for local application and are encouraged to maintain the Indigenous practices that complement the new practice. In other words, they need to be active learners with the confidence to adopt, adapt and achieve.

As there will always be limits on the number of follow-up visits by external trainers, farming communities also need to develop peer learning systems that enable innovations and adaptations to be taken up across the wider community. In this way, local practices are strengthened and sustained. When farmers see themselves as active problem-solvers, they look to their own knowledge, strengths and resources as well as seeking expert knowledge. The development of an active learning community is key to sustainable agricultural development and is the focus of this manual.

The history of the manual

This manual was developed as part of the Australian Centre for International Agricultural Research (ACIAR) project ASEM/2010/052 (*Examining women's business acumen in Papua New Guinea: Working with women smallholders in horticulture*, see <<http://aciarc.gov.au/project/asem/2010/052>> for further details). The aim of this project was to improve the uptake and impact of training and small business development for women smallholder food crop producers in three provinces of PNG (Central Province, East New Britain and Western Highlands). The project's history, activities and resources are available via the project website, *The PNG women farmers business project*: <<http://pngwomen.estem-uc.edu.au/>>.

The project was conducted from 2012 to 2015 by the University of Canberra (UC) in partnership with the Pacific Adventist University PNG, the Baptist Union PNG and the National Agricultural Research Institute of PNG.

The project explored how the sociocultural and contextual issues of each region impacted on the business and farming practices of women subsistence food crop producers and their families. From this knowledge, the project developed a process for the development of teams of local farmers as peer educators, known as village community educators (VCEs).

The VCEs were concurrently trained in the Family Farm Teams Program. The program enables farming families to explore issues of gender and culture within families, seeking to encourage more effective, sustainable and gender-equitable farming and business practices (see Pamphilon and Mikhailovich 2016; reference details on p. 20).

The VCE training process and initial Family Farm Teams modules were designed by Professor Barbara Pamphilon (UC). These were further developed through piloting and consultation with the PNG partners and the UC project team. The full process was piloted in the Baiyer Valley (Western Highlands province) and the Gazelle Peninsula (East New Britain province). A modified version was piloted in Central Province.

University of Canberra team

- Project Leader: Professor Barbara Pamphilon
- Senior Researcher: Associate Professor Katja Mikhailovich
- Central Province: Adjunct Professor Barbara Chambers
- Professional Associate: Anne Cleverley

PNG teams

- Pacific Adventist University: Dr Lalen Simeon and Deborah Kakis
- National Agricultural Research Institute (Lae): Dr Norah Omot

Central Province

- Fresh Produce Development Agency: Regina Malie and Poela Utama
- Hisiu leader: Mary Apa
- Tubusereia leader: Tau Egi

East New Britain province

- National Agricultural Research Institute (Kerevat) leaders: Kiteni Kurika and Elizabeth Medline Ling (NARI) and Kwadile Tuam (Department of Primary Industry)
- Vunapalading 1 leaders: Judith Robin Bobo, Steven Liai, Roslyn Nguangua and Michael Ningi
- Tinganagalip leaders: Caroline Misiel, Marshall Marum and December Misiel

Western Highlands province

- Baptist Union of PNG leader: Fredah Wantum
- Kwinkya leader: Susan Trapu
- Kumbareta leaders: Kay Simon and Lessie Pyare

The manual principles and learning domains

This manual presents a process for the development of farmers as peer educators. It draws on the following adult learning principles:

Adult learning principles

Principle	What it means
The need to know	Adults learn best when they can see the usefulness of the topic for their life or work.
Learner's self-concept	Adult learners need to make choices and have some control over their education.
Role of the learner's experience	Adult learners need to have their experience and skills recognised and used.
Readiness to learn	Adult learners want information at the right time that is focused on their goals.
Orientation to learning	Adult learners want to help plan their learning and have it be practical.
Motivation	Rewards for learning may be as much internal (for example, personal satisfaction) as external (for example, more income).

Further resources

Video

Finley J. 2010. Andragogy (adult learning)
<<https://www.youtube.com/watch?v=vLoPiHUZbEw>>

Book

Knowles M.S. 1990. The adult learner: a neglected species, revised edition. Gulf Publishing Company: Houston.

Website

Adult Learning Australia 2016. Adult learning principles
<<https://ala.asn.au/adult-learning/the-principles-of-adult-learning/>>

The manual integrates seven adult learning domains:

- Empowerment education—farmers are active learners not ‘empty vessels’ to be filled.
- Place-informed education—the integration of local cultural and agricultural knowledge is an essential component of training.
- Strengths-based learning—the different knowledges and strengths of women, men and youth are key building blocks for sustained farming improvements.
- Experiential action learning—a problem-solving learning orientation enables farmers to become adaptive lifelong learners.
- Participatory learning—a process of participatory learning enables farmers to learn together and share the range of their knowledge.
- Low-literacy learning—farmers who have had little or no school education can learn through visual, experiential, practical and discussion methods.
- Farmer-to-farmer learning—farmers learn through informal modes, such as observation, role models and community interaction, as well as through formal training sessions run by peers.

These are outlined in the following pages and further resources are provided for each.

Empowerment education

Empowerment education creates an environment in which people can talk together about what they know, think critically about problems and their solutions, and ultimately make changes happen. It assumes that adult learners have knowledge and experience that can be built upon, and that by relating new information to what people already know, the learning can be made more relevant. It is a method that values the learners, rather than imposing the ideas from a more dominant teacher or culture to less socially powerful students. If learners are engaged in their education, they are more likely to believe in themselves as problem-solvers who are able to affect their own group or community.

Further resources

Video

Sanchez C. 2012. Freire's concept of banking education
<<https://www.youtube.com/watch?v=QoxHpNYFg5E>>

Book

Freire P. and Freire A.M.A. 1994. Pedagogy of hope: reliving pedagogy of the oppressed. Continuum: New York.

Articles

Blackburn J. 2000. Understanding Paulo Freire: reflections on the origins, concepts, and possible pitfalls of his educational approach. *Community Development Journal* 35(1), 3–15.

Jones A.M.E. 1997. Training for empowerment? A comparative study of nonformal education for women in small island countries. *Compare: A Journal of Comparative and International Education* 27(3), 277–286.

Seuneke P.L.M. and Bock B.B. 2015. Exploring the roles of women in the development of multifunctional entrepreneurship on family farms: an entrepreneurial learning approach. *NJAS—Wageningen Journal of Life Sciences* 74–75, 41–50.

Websites

ABCD in Action 2017. Asset-based community development, community engagement and mobilization
<<http://abcdinaction.org/>>

Empowered Communities 2017. [Australian Indigenous empowerment]
<<http://empoweredcommunities.org.au/about.aspx>>

Place-informed education

Place-informed education is education informed by knowledge about the local environment. Education that is relevant to the learners' location and situation makes sense to them and can be readily applied. Place-informed education is particularly important in the context of families and farming. It is valuable to ask learners to provide local information on family roles, agricultural issues, local weather conditions, markets and other factors specific to that place. The process of asking learners to identify characteristics of the local environment also helps them to think about the effect these different factors have on their lives, and this is a first step towards analysing what is working well and what can be improved.

Further resources

Video

tvoparents 2011. Place-based learning in Aboriginal communities [Suzanne Stewart of University of Toronto explains why learning from your own community works]
<<https://www.youtube.com/watch?v=h0kRVhva0w4>>

Book

Smith G. and Sobel D. 2010. Place- and community-based education in schools. Routledge: New York.

Articles

Alexander J., Gopalakrishnan R. and Reshma J. 2015. Reflections on use of participatory methods in the capacity building program for tribal community health volunteers. *Indian Journal of Community Health* 27(2), 290–294.

Diouf W., Sheckley B.G. and Kehrhahn M. 2000. Adult learning in a non-Western context: the influence of culture in a Senegalese farming village. *Adult Education Quarterly* 51(1), 32–44.

Pamphilon B., Mikhailovich K. and Chambers B. 2014. 'Training by Papua New Guinea women, for Papua New Guinea women': lessons from the development of a co-constructed course for women smallholder farmers. *International Journal of Lifelong Education* 33(6), 721–736.

Yasmin T., Khattak R. and Ibrahim N. 2013. Facilitating earthquake-affected rural women communities toward sustainable livelihoods and agriculture. *Agroecology and Sustainable Food Systems* 37(5), 592–613.

Websites

UNESCO (United Nations Educational, Scientific and Cultural Organization) 2010. Indigenous knowledge and sustainability [valuing and using Indigenous knowledge]. Module of 'Teaching and learning for a sustainable future: a multimedia teacher education programme'
<http://www.unesco.org/education/tlsf/mods/theme_c/mod11.html>

Promise of Place 2017. Place-based education [school-based place-informed education]
<<http://www.promiseofplace.org>>

Strengths-based learning

Strengths-based learning acknowledges that adults bring many talents to the learning situation. As learners, people achieve more and have greater confidence if they build from these strengths. One method used in strengths-based learning is appreciative inquiry. This focuses on asking questions about what works in a given situation and building on that situation's success. The goal of appreciative inquiry is to ask questions in a positive manner, rather than focusing on the things that have gone wrong. In this context, it respects, or *appreciates*, the expertise of different members of a family or community, and allows knowledge and information to be shared between group members.

Further resources

Videos

Pritchard G. 2009. Strengths based learning [mini lecture]
<<https://www.youtube.com/watch?v=Gve3ap-E8c0>>

iisdvideo 2011. Appreciative inquiry—a beginning [a story from India]
<<https://www.youtube.com/watch?v=pVBMMJ0RMao>>

iisdvideo 2011. Skownan—dreaming the land [a North American First Nation story]
<https://www.youtube.com/watch?v=EzBv_tS11mk>

Book

Cooperrider D. and Whitney D. 2005. *Appreciative inquiry: a positive revolution in change*. Berret-Koehler Publishers: San Francisco.

Articles

Kevany K.M. and MacMichael M. 2014. Communities of knowledge and knowledge of communities: an appreciative inquiry into rural wellbeing. *Gateways: International Journal of Community Research and Engagement* 7(1), 34–51.

Marujo H.Á. and Neto L.M. 2014. *Felicitas Publica* and community well-being: nourishing relational goods through dialogic conversations between deprived and privileged populations. *Journal of Psychology in Africa* 24(1), 161–181.

Website

Appreciative Inquiry Commons 2017. [Portal devoted to sharing resources and practical tools on appreciative inquiry]
<<https://appreciativeinquiry.case.edu/default.cfm>>

Experiential action learning

Experiential action learning is the learning that comes from a group of people working together towards an outcome, thinking about their experiences along the way, and improving what they are doing based on those reflections. It can be a group reflection on a shared project or it can take the form of individuals thinking about their own practice and bringing those reflections to the group for discussion. The role of the group in both cases is to intentionally explore, clarify and problem-solve by reflecting on experience. Experiential action learning is a tool for ongoing improvement of any activity or enterprise.

Further resources

Video

Sprouts 2015. Experiential learning [a cartoon explanation]
<<https://www.youtube.com/watch?v=aF63HHVbpQ8>>

Book

Kolb D.A. 1984. Experiential learning: experience as the source of learning and development (volume 1). Prentice-Hall: Englewood Cliffs, NJ.

Articles

Miettinen R. 2000. The concept of experiential learning and John Dewey's theory of reflective thought and action *International Journal of Lifelong Education* 19(1), 54–72.

Percy R. 1999. The experiential learning cycle and its application towards the transformation of governmental extension services in sub-Saharan Africa. *International Journal of Lifelong Education* 18(5), 370–384.

Website

McLeod S. 2013. Kolb—learning styles. *SimplyPsychology*
<<http://www.simplypsychology.org/learning-kolb.html>>

Participatory learning

Participatory learning means engaging all members of the family or community in learning. A variety of tools can be used to unlock the ideas of participants with any level of literacy, including pictures, diagrams, music or other non-written forms of communication and analysis. Participatory learning is more effective than having experts simply consult with communities, and then create solutions for them, not with them. Instead, participatory learning involves the community members in analysing the situation and developing their own solutions, and using the knowledge of experts where it fits for them.

Further resources

Videos

Jayakaran R.I. 2010. The total health village: addressing poverty with participatory learning [conference presentation]. The Lausanne Movement
<<https://www.youtube.com/watch?v=oOWVFIRU6bo>>

International Refugee Trust 2013. Energy saving stoves: an example of participatory learning and action
<<https://www.youtube.com/watch?v=Lv1igov9LBc>>

Indian Council of Agricultural Research 2012. Farmers participatory action research programme (FPARP) at Sugarcane Breeding Institute
<<https://www.youtube.com/watch?v=GL5kin1fZul>>

Book

Groves L. and Hinton R. (eds) 2004. Inclusive aid: changing power and relationships in international development. Earthscan: London.

Articles

Alexander J., Gopalakrishnan R. and Reshma J. 2015. Reflections on use of participatory methods in the capacity building program for tribal community health volunteers. *Indian Journal of Community Health* 27(2), 290–294.

Chambers R. 1994. Participatory rural appraisal (PRA): analysis of experience. *World Development* 22(9), 1253–1268.

Pamphilon B. 2015. Weaving knowledges: the development of empowering intercultural learning spaces for smallholder farmers in Papua New Guinea. *Multicultural Education Review* 7(1–2), 108–121.

Zuber-Skerritt O. 2015. Participatory action learning and action research (PALAR) for community engagement: a theoretical framework. *Educational Research for Social Change (ERSC)* 4(1), 5–25.

Website

IIED (International Institute for Environment and Development) no date. Participatory learning and action (PLA) introductory video and PLA archive. IIED: London
<<http://www.iied.org/participatory-learning-action>>

Low-literacy learning

While improving literacy is an important long-term goal for farming communities, low literacy need not be a barrier to learning. Low-literacy learners are not the same as illiterate learners. While the latter are unable to read, the former can read simple words and sentences, but may not read every word on the page and not be able to scan as easily as high-level readers. They may become tired or distracted if the text is too dense or long, and then miss important information. To make training effective with low-literacy learners, simple language with supporting images can be used to convey new information that can then be processed through visual, experiential, practical and discussion methods. As learners are exposed to simple written materials, their literacy will improve somewhat, which helps develop 'functional literacy' or literacy that is relevant to their lives.

Further resources

Video

Fairtrade ANZ 2014. Fairtrade ANZ is empowering PNG farmers through training
<<https://www.youtube.com/watch?v=seZ49SBr2jM>>

Articles

Miller J.E. 2001. How to write low literacy materials. Journal of Extension 39(1). Available at
<<https://joe.org/joe/2001february/tt2.php>>

Taylor E. 2012. Fostering transformative learning in non-formal settings: farmer-field schools in East Africa. International Journal of Lifelong Education 31(6), 725–742.

Website

UNESCO (United Nations Educational, Scientific and Cultural Organization) Institute for Lifelong Learning 2017. Vulnerable groups
<<http://www.uil.unesco.org/literacy-and-basic-skills/vulnerable-groups>>

Farmer-to-farmer learning

Research has shown that farmers throughout the world often prefer to learn new techniques and ideas from other farmers. This learning can take place both informally, through spontaneous conversations, or in a more deliberate way, with teams of farmers forming to trial new methods and review results together. Farmers can be role models to others in their area. They can adapt training to suit local conditions and culture.

Further resources

Videos

Then F. 2014. Learning by doing and not teaching [in Thailand]
<<https://www.youtube.com/watch?v=g0O6VAbnDt8>>

SNV World 2016. SNV Uganda: dairy farmer-to-farmer mentoring
<<https://www.youtube.com/watch?v=Hm33ebUMHng>>

World Agroforestry Centre 2014. Regrowing Aceh: farmers training farmers
<<https://www.youtube.com/watch?v=3IGxAveg1bM>>

Articles

Mukute M. and Lotz-Sisitka H. 2012. Working with cultural-historical activity theory and critical realism to investigate and expand farmer learning in southern Africa. *Mind, Culture and Activity* 19(4), 342–367.

Phillips D., Waddington H. and White H. 2013. Better targeting of farmers as a channel for poverty reduction: a systematic review of farmer field schools targeting. *Development Studies Research* 1(1), 113–136.

Websites

Galvis A. 2015. Farmer to farmer learning materials for agroecology. Food First Institute for Food & Development Policy: Oakland, CA
<<https://foodfirst.org/farmer-to-farmer-learning-materials-for-agroecology/>>

Institute for Land, Water and Society (ILWS) 2017. Farmer to farmer learning. ILWS, Charles Sturt University
<<https://www.csu.edu.au/research/ilws/research/international-research/easlp-project/farmer-to-farmer-learning>>

How to use the manual

The manual is designed to be used in parallel with any agricultural training. The peer educators/village community educators (VCEs) learn about the core practices of learning facilitation and training and apply those skills to the agricultural topic. The example used in this document is the Family Farm Teams Program (see Pamphilon and Mikhailovich (2016) and Pamphilon et al. (2017) for further details).

In order to enable place-informed training that utilises the knowledge, strengths and cultural practices of farmers, a worksheet process is used. The worksheets are simple photocopy sheets that are given out at the start of the training. They have been written in simple language with room for individual notes or drawings. Throughout the training of VCEs, facilitators record local additions, such as examples of role-plays, agricultural examples, training successes and challenges. These are then added to the worksheets and become the final manual for that area. Unlike other training processes, the final manual is an end product that is built up collaboratively with the participants across their training as peer educators, their delivery of the agricultural course and through its evaluation.

This manual is a shift from the conventional TOT (training of trainers) to TOPP (training of place-based peer educators).

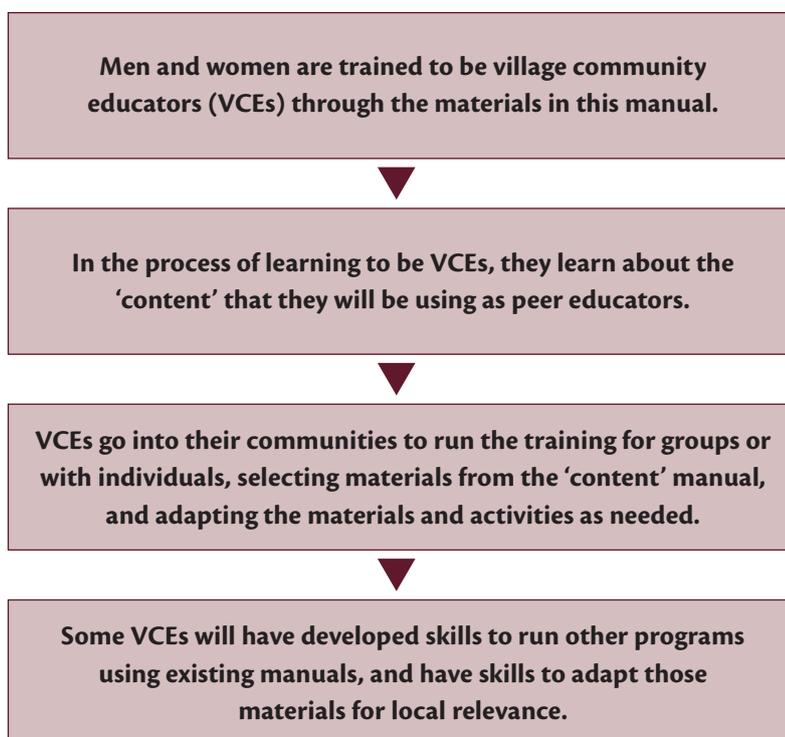
Further resources

Pamphilon B. and Mikhailovich K. 2016. Building gender equity through a Family Teams approach: a program to support the economic development of women smallholder farmers and their families in Papua New Guinea. ACIAR Monograph No. 194. Australian Centre for International Agricultural Research: Canberra. 36 pp.

Pamphilon B., Mikhailovich K. and Gwatirisa P. (2017). The Family Farm Teams manual. ACIAR Monograph No. 199. Australian Centre for International Agricultural Research: Canberra. 84 pp.

How the training happens

It is essential to select a diverse range of community members as VCEs to ensure that the knowledge of women, men, older people and young people is integrated. This also enables a more effective ripple effect through informal learning across women, men and youth in the community. The VCEs will need to be supplied with a training kit (large paper, marker pens, tape, pens and paper), handouts from this manual, and a manual or handouts about the 'content' they will deliver (for example, the Family Farm Teams modules or agricultural training, such as pest management, irrigation, marketing etc.).



Step 1: The TOPP worksheets

The TOPP worksheets cover the basic skill components of a training course in six sections:

1. How adults learn
2. Planning a training course
3. Designing training activities
4. Running training activities
5. Evaluating training
6. Reporting on training

These worksheets comprise a 1-page sheet per topic that presents the core ideas in simple language. As they have been designed for farmers who have low literacy, there are places for notes or drawings that can act as a memory aid or reminder. These are designed as an adjunct to the experiential group work, not as stand-alone information sheets.

If the VCEs are literate, further worksheets could be added; for example, how to design pre- and post-testing surveys.

Step 2: The experiential group work

The experiential group work is the key learning activity to help the VCEs learn about being a peer educator. According to the time available, the group work can be conducted in half-day or day sessions in a block or across a number of weeks. The following part of the manual has six sections, as specified above. While Sections 2 to 6 are usually presented sequentially, Section 1 is best revisited across the TOPP program.

The group work is designed to introduce the VCEs to each TOPP topic/skill, who then apply that to the agricultural topic at hand. Each team that uses TOPP will have their own ways to explain farmer learning in their context and will be able to create learning activities that suit their VCEs. For example, a TOPP program that focuses on new techniques for pest management would spend additional time on knowledge and skill development and may add further worksheets on these topics (see the Appendix for an example). Each program will have its own impact measurements and reporting expectations for the VCEs.

It is important when leading the experiential group work that gender dynamics are managed proactively. In many countries, men have had the right to speak first and often speak on behalf of women. However, this means that women will not be able to share their own perspectives and their own learning will be limited. It is a good practice and modelling for the VCEs to explain this and show gender-inclusive practices across the training; for example, alternate between males and females when asking for contributions, break into gender-specific groups for some discussion topics, and always highlight how the knowledge of men and women is complementary.

Village community educator worksheets

The worksheets on the following pages are designed for the training of place-based peer educators (TOPP)

The Family Farm Teams Program is used as an example on each worksheet. For other programs, these boxes would be replaced by relevant information from that program. The Appendix shows ideas that may be relevant to using the training in the context of pest management.

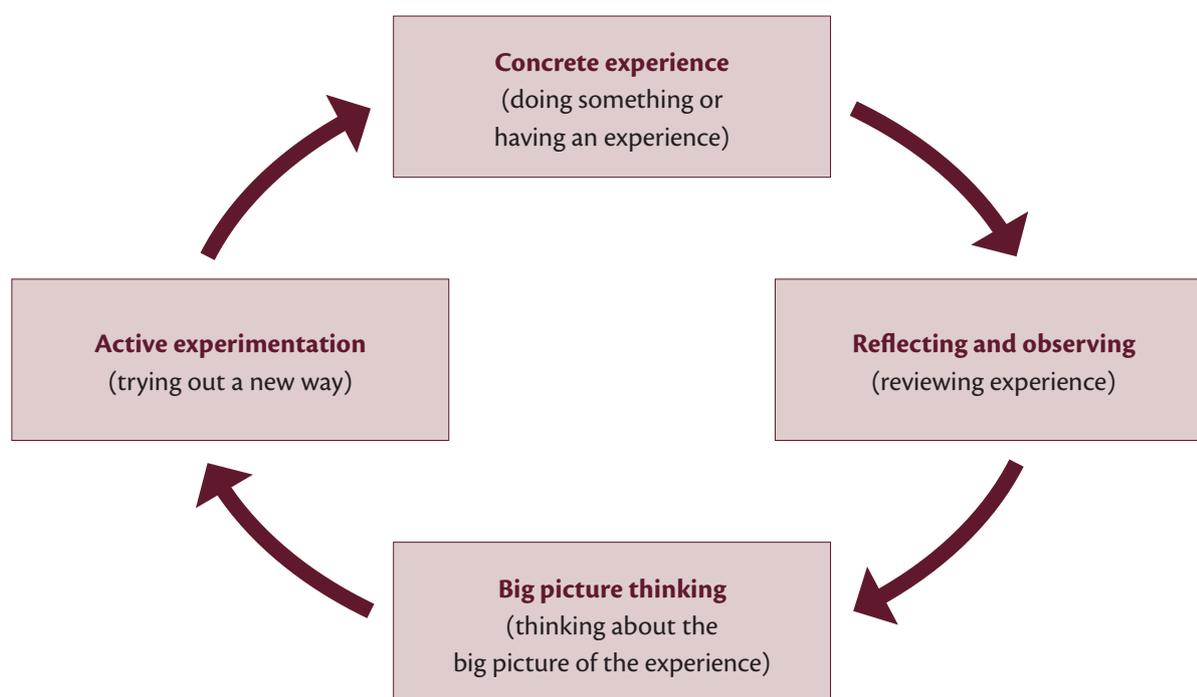
SECTION 1: HOW ADULTS LEARN

1.1: The experiential learning cycle

Adults have a lot of experience that can be a very good basis for further learning. They value new learning that builds on what they already know or that helps them solve current problems they face.

The experiential learning cycle (below) helps people to move beyond simple 'trial and error' by using all the steps in the cycle. Each time they try a new way after their 'big picture' thinking, they are moving forward as a learner. This becomes a cycle of active learning.

The cycle below is an adaptation of the work of David Kolb.



Source: Kolb D.A. 1984. Experiential learning: experience as the source of learning and development (volume 1). Prentice-Hall: Englewood Cliffs, NJ.

SECTION 1: HOW ADULTS LEARN

1.2: Different ways of learning

Everyone is different when it comes to the way they learn best. When you're training other people, it's important to include activities that help people with different ways of learning to understand the session.

Different **learning ways** include listening, seeing, doing, sharing, and trial and error.

Listening—some people like to listen to others explain and discuss a topic.

Seeing—some people like visual drawings, diagrams and charts.

Doing—some people like to be hands-on with activities and try a new skill by having a go themselves.

Sharing—some people like to be in a group and discuss a topic, problem-solve an activity and learn together.

Stories—some people like to hear a story and then discuss what that means to them.

Trial and error—some people like to do an activity first to see if they can work it out. They try again and again, each time changing what they do until they get it right.

How best do you learn? Is it one way or a couple of ways?

FAMILY FARM TEAMS PROGRAM

We will be using a number of ways to help people learn.

Listening—we will be talking about the importance of families and also about some of the barriers we can't change.

Seeing—we will use some family farm team drawings and have some prepared posters to use.

Doing—we will have time for the family heads to sit together and start to work on their own family goals.

Sharing—we will spend some time in women's and men's groups.

Stories—we will tell some stories of Australian families and of PNG families.

NOTES

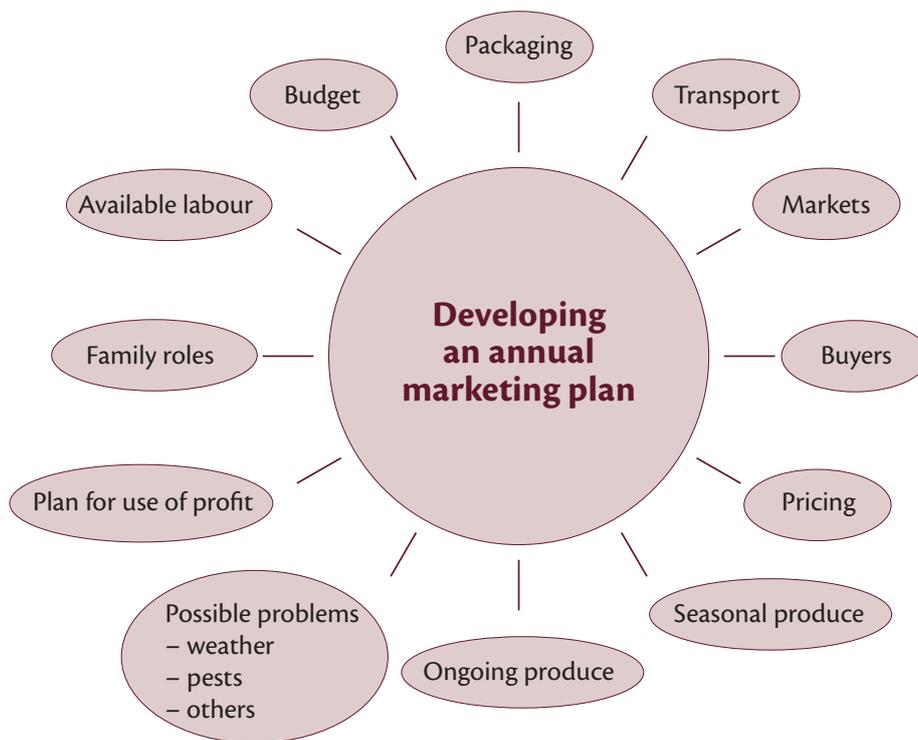
SECTION 2: PLANNING A TRAINING COURSE

2.2: How to decide the session topics

A course is divided into sessions. Each session should focus on a particular area that you want people to learn. For example: learning how to identify places to sell produce (see below) or how to describe your produce to buyers. This becomes a session topic.

A good way to decide each session topic is by 'brainstorming' ideas. On a piece of paper, draw a circle in the middle with the word that explains your course topic. Then, imagine yourself going through the course and what you would want to know. As each idea comes to you, write it in a circle on the page. Keep on going until you have no more ideas. You might even get other people to brainstorm with you.

You now have a page full of possible ideas for each session. You may find that some are similar and can be grouped together, or some may not be needed. Write a list of the final session topics in the order you think is most logical and you now have a basic course guide.



NOTES

SECTION 3: DESIGNING TRAINING ACTIVITIES

3.1: Developing session learning aims

When we are planning a learning group, we need to be clear about what we want people to learn. The three main **learning aims** are **knowledge, skills** and **attitudes**.

We may want them to learn some facts/knowledge (what is a budget?) or some skills (how to draw up an annual budget) or we might want to help them think about attitudes (that they may not be good at maths, but they really can learn to budget). So, for each session that we plan, we decide to which area our learning aim belongs. Some sessions will have just one aim (for example: 'This session aims to teach people how to build a seedling nursery') or, as below, a session might have a number of aims.

Example of a **knowledge aim**:

- This session aims to teach people the parts of a budget.

Example of a **skill aim**:

- This session aims to teach people how to make an example of a budget.

Example of an **attitude aim**:

- This session aims to help people be positive about their ability to budget.

FAMILY FARM TEAMS PROGRAM

In our Family Farm Teams Program workshops, many of the session aims are about attitudes. For example, we want people to think about their attitudes to their family members, and especially about better ways for women and men to work together more equally.

We will have some knowledge aims; for example, for people to know about the barriers that they cannot change, or knowing about the categories of goals that would help farming families.

Some of the skills we develop are farm mapping and planning with seasonal calendars.

NOTES

SECTION 3: DESIGNING TRAINING ACTIVITIES

3.6: Designing a session plan

Once we have decided all the types of activities we will do, we need to put that together in a plan. This makes sure we are clear about our learning aims, our activities, our time estimation, and the resources needed. It can include our evaluation comments. The plan helps us to work as a team. An example of a session plan is shown below. On the next page is a blank table you can use to create a plan.

Session learning aims: to teach people what a budget is, how to draw up a budget and how to be confident in doing budgets

Time, topic and VCE	Way of learning	Resources needed	My evaluation comments
10.00 to 10.15 am About budgets (knowledge)—Maria	Short talk: what is in a budget?	Examples of a budget on a chart	
10.15 to 11.00 Trying out a budget (skills)—John	Working in pairs: design your own budget	Large piece of paper and pens for each pair	
11.00 to 11.15	Morning tea	Drinks arranged	
11.15 to 11.25 How to feel positive about budgets (attitude)—Sara	Short talk: a story about how I was worried when I first did a budget, but with practice I feel better	Short notes of my story	
11.25 to 11.45 How to feel positive about budgets (attitude)—Sara	Two pairs: ask each pair to join another pair and together think of one good idea for doing a budget	Nil	
11.45 to 11.50	Group talk: each group selects one person to report the most important point to the large group	Write down each idea on a chart	
11.50 to 12.00 Checking what else people need to know—John	Question and answer time		

FAMILY FARM TEAMS PROGRAM

Each team of VCEs will work together to design session plans that will suit their participants. This will help in allocating roles and making sure the time is used well. It will also enable us to make sure both women and men have equal roles as VCEs.

It will be good to meet as a team soon after the workshop and discuss each part of the session and make comments on each activity. Your team leader can collect this information.

This process means that we learn as we go, and that our leader's report can help other villages who want to learn from us.

NOTES

SECTION 3: DESIGNING TRAINING ACTIVITIES

Learning plan blank

Session learning aims:

Time, topic and VCE	Way of learning	Resources needed	My evaluation comments

SECTION 3: DESIGNING TRAINING ACTIVITIES

3.7: Developing the materials you need

The purpose of using different materials in your course is to help you to explain the topic and to help your participants to understand the information. With each session, you may have different materials.

When we talk about **materials**, we mean:

- **Handouts** (like this)—pieces of paper you have created with notes and diagrams for the people to take home with them. Handouts are great to refer to after a course. Each person should get a copy of every handout.
- **Paper charts/posters**—a collection of prepared, large posters that are placed on a stand or wall that you show one by one as you go through the information. You only need to make one copy to show to the group.
- Making a poster can be quite simple. Have fun with colours to make important points stand out. You might use a drawing to show the connection between things, or a line with events along the way to show a time line. Practice drawing on a small piece of paper first. Be creative!
- **Blank paper**—great for group activities, to draw diagrams or to put up on a wall with points the group is making in a discussion.
- **Marking pens**—for large group activities and to write up ideas on the blank paper.

People can be asked to bring their own materials, such as an exercise book and a pen. This encourages them to be committed as active learners. Sometimes people are asked to pay a small charge when these materials are provided.

FAMILY FARM TEAMS PROGRAM

It can be costly to create handouts and get them photocopied, so one good solution is to use large paper to draw up major points in advance or as you go. People can see these easily and also write down what is most important to them. We will write these in Tok Ples (local language) as far as possible so that people hear and see the ideas in their mother tongue.

We will use posters to show the format of a family farm plan. Then each family will be able to copy the format and work as a team to draw their own farm on one side and their plan for their farm in 5 years on the other side.

NOTES

SECTION 4: RUNNING TRAINING ACTIVITIES

4.2: Talking in front of a group

Giving a good talk in front of a group is about being confident and making it interesting. Have the support material you need, such as short notes and posters, ready before the talk.

Practice the talk in front of friends and family or by yourself. Try to relax—you'll get better each time!

It's important to talk slowly and clearly and loud enough so the audience can keep up with what you're saying.

Stand in a place where everyone can see you and don't block any posters or charts you're using.

Useful tips:

- Introduce yourself at the start, then explain what topics you will cover in your talk.
- Smile and be expressive (different voice tone and hand gestures).
- Use eye contact with each person to get their attention.
- Use the right language for your audience (simple is best!).
- Maintain the right speed (slower is better).
- Use pauses between points.

FAMILY FARM TEAMS PROGRAM

We will try to do as many talks as possible in Tok Ples (local language) and use as many local examples or local stories as we can. Some topics for talks will be 'the difference between gardens and a family farm', 'the three food groups we should eat every day' and 'ways to encourage youth on our family farm'.

We will plan to have both women and men give talks as men and women have different experiences to share. This also reinforces the message that women and men together make the strongest team.

NOTES

SECTION 4: RUNNING TRAINING ACTIVITIES

4.4: Presenting a role-play/drama

One VCE usually gives a short introduction that explains that this is a drama that will help us think about an issue. The VCE does not mention the issue in detail as this will stop people thinking.

The negative drama is always done first. After the negative drama, people can discuss what they think in pairs or small groups, or you can go straight on to the positive drama.

The positive role drama is always done second, so people are left with the positive example in their head.

Give people time to discuss the drama and to talk about what messages are important. You should decide ahead if it is best for people discuss the drama in family groups, mixed groups or separate men's and women's groups.

After people have talked in small groups, another VCE can then explain the key messages.

After the drama, send the participants on a break so that you can have a short meeting with the actors. This is called a 'de-brief' and helps the actors not be affected by the roles they played:

- Ask each actor to tell the group how they are different from the negative character they played (so that the bad role does not stay in their head).
- Ask each actor, what was the best part of the positive drama (so that the positives stay in their head).

FAMILY FARM TEAMS PROGRAM

There are many topics that can be used to help people learn more about being a family farm team through drama. Some of the dramas we might use in the Family Farm Teams Program workshops are:

- making decisions (about farm, finances, work roles, family)
- unequal workloads
- communication
- conflict management.

Local stories created by local teams will have the best impact.

NOTES

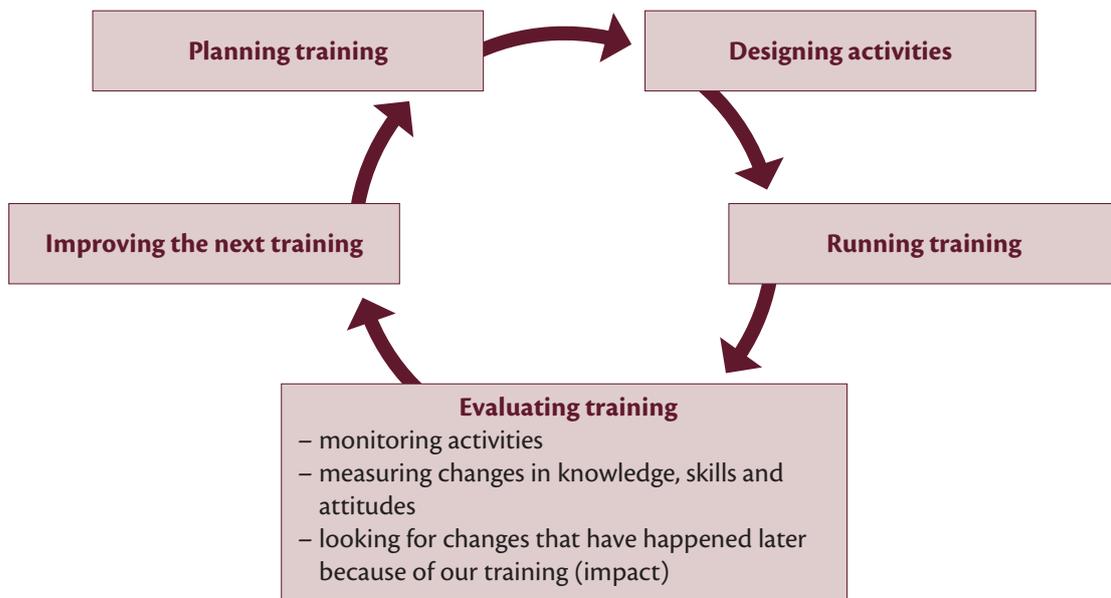
SECTION 5: EVALUATING TRAINING

5.1: The training cycle and where evaluation fits

The drawing below shows the training cycle that has been used in this manual. It shows that evaluation has three parts: finding out how people are reacting during the session and at the end (monitoring); checking or measuring the changes in knowledge, skills and attitudes; and then seeing if there are actual changes in what people do. This is called impact. There will be short-term impact which might be seen very quickly and long-term impact for the things that are harder to change.

FAMILY FARM TEAMS PROGRAM

We will use all three forms of evaluation, but many of the changes in families will take time so we will not expect to see the bigger changes, such as fully profitable family farms, for a number of years.



NOTES

SECTION 5: EVALUATING TRAINING

5.3: Measuring changes in knowledge, skills and attitudes

If you are trying to **improve knowledge and skills** you can use **formal feedback**. For example, you might do a short survey at the start (pre-test) and a short survey at the end (post-test), to see if there has been a change in what people know. Make sure those who are not strong readers know that someone else can help them fill in the form. We usually don't ask people to put their name on the form, but we always ask them to write Male or Female so we can see if there are different responses from men and women.

After the training, we can then compare how much the group improved—for example, in the pre-test Question 2, 50% of people rated themselves at 1 (very low), 40%

at 2 (low) and 10% at 3 (OK). After the training, 80% rated themselves at 4 (good) and 20% at 5 (very good).

If you are trying to help people **develop skills**, you can test them in a practical way at the end of the session; for example, watch them pot up small seedlings the way that was shown.

If you are trying to **improve attitudes**, this cannot be tested the same way as knowledge or skills. When an attitude changes, we then see people behaving differently. So, after the training, we need to look for changes in people's mindsets that have led to changes in behaviour (see Topic 5.5).

Pre-test question examples (please circle your answer)

1. How do you rate your current **knowledge** about markets for your food crops

1 **2** **3** **4** **5**
very low low OK good very good

2. How do you rate your current **skills** in making a written farm budget

1 **2** **3** **4** **5**
very low low OK good very good

Post-test question examples (please circle your answer)

1. After the training, how do you now rate your **knowledge** about markets for your food crops

1 **2** **3** **4** **5**
very low low OK good very good

2. After the training, how do you now rate your **skills** in making a written farm budget

1 **2** **3** **4** **5**
very low low OK good very good

FAMILY FARM TEAMS PROGRAM

We will be able to see skill development when people are taught how to do a seasonal calendar and plan their family farm. We will then be able to look for impact changes, such as more regular income from improved production.

Some of the behaviours that will show attitude change might be when a man and woman go to market together (instead of the woman only), and when women, men and youth share the home jobs, such as cooking and child care. We will work together to develop a list of family changes we might hope to see so we can report on those changes.

NOTES

SECTION 5: EVALUATING TRAINING

5.5: Finding out about the impact of your training

We see the immediate impact of our training when we collect feedback that tells us of people's **reaction** and knowledge or skill development on the day. But the important first impact is seen when they **apply the learning**. This means we need to plan observations to see what people have learnt by watching if they changed any of their practices as farmers or as families. For example, people are now planting each crop in a separate plot.

The second impact is when we see the **benefits** from that learning. Some benefits can be explained in numbers. For example, in one family, the single crop plots have produced a greater amount of produce and higher quality. This has given the family an increased income from 100 dollars/kina to 250 dollars/kina a month.

Some benefits can be found by asking for **stories of change**. Each VCE can be asked to bring ONE story about THE most important change they have seen in the families they trained. The story does not use real names, but it would be told like a parable—a story that has an important lesson. When all the VCEs meet, they can hear each other's story and then look at the lessons across all the stories and see their themes.

Talking with community leaders—it is good to talk to church, school and ward leaders who know what is happening in the village, as they may have noticed improvements following your training.

The impact numbers and the stories of change help us improve our training and give us important information to share with funding bodies and others, such as local government groups.

FAMILY FARM TEAMS PROGRAM

We will be looking to see if there are any family changes:

- Are men doing things differently in the garden/block, in marketing or in their family?
- Are women doing things differently in the garden/block, in marketing or in their family?
- Are youth doing things differently in the garden/block, in marketing or in their family?

We will collect information to see if people have improved their family wellbeing. This could include:

- having money for church, school fees and health costs
- improving their home and its equipment and comfort
- improving their farm through new crops, fences, animals and equipment.

NOTES

SECTION 5: EVALUATING TRAINING

5.6: Evaluation surveys

It is good to find out the impact of our work by talking directly to the people we trained. The following survey is an example from the Family Farm Teams Program. It would be photocopied back to back (double-sided). For a family with a man and woman head, both sides would be filled in. For single-headed families, only one side would be filled in.

FAMILY FARM TEAMS PROGRAM

The **purpose of the survey** is to see if there have been any changes in families because of our Family Farm Teams Program training.

Please select **5 families** who have attended all Family Farm Teams Program modules that were run in your area.

- Ask the man and the woman family head if they are happy to answer the questions, which are about their family before and after the training.
- Tell them it is OK if they do not want to be involved and they can skip any question they don't want to answer.
- Tell them you will not write down their names.
- Tell them that you will be giving the survey to the Project Leader, and that you will not tell anyone of the scores they gave.
- Tell them that you will **speak to the man and the woman separately**.

Explain that for each question, you want them to give a score using the fingers of one hand.

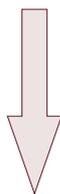
- 5 fingers is the TOP score

- 4

- 3

- 2

- 1



- No fingers is the lowest score

Please use **one sheet per family**—the man's answers on one side, the woman's on the other side (remember to speak to them separately).

Family farm teams farmer evaluation: *man* *woman* (please circle one)

(Finger scoring: 5 fingers = top score to 0 fingers = lowest score)

Before the training	Score	Since the training	Score
Was your family working as a family farm team?		Is your family working as a family farm team now?	
Did your family have farm goals?		Does your family have farm goals now?	
Did your family plan what to grow for sale?		Does your family now plan what to grow for sale?	
Did your family earn enough money from farming to pay for daily living?		Does your family now earn enough money from farming to pay for daily living?	
Did your family save enough money to buy major family items?		Is your family now saving enough money to buy major family items?	
Were family decisions about money shared by men and women?		Are family decisions about money now shared by men and women?	
Did women have a greater workload than men?		Do men and women now have similar workloads?	

How would you rate the training	Score
It changed the way I farm	
It changed how I plan my farm	
It changed how I sell my crops	
It changed my budgeting and saving	
It changed the way our family works together	
It gave me new hopes for my family's future	

From the training, my family's income has increased	Yes No	If yes, dollars/kina a month
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My family has used the money to

SECTION 6: REPORTING ON TRAINING

6.1: Reporting through a VCE meeting

Because a lot of people are not confident in writing, the leader can call a meeting and ask the VCEs to report verbally. The following is an example that can be used for discussion and then recorded for each village report. The following report could be set out on two pages and printed back to back.

PAGE 1

Family Farm Teams Program: summary training report		Date
Village name	Leader name	
Training topics		
Names of VCEs who delivered training		
Women:	
.....	
.....	
Men:	
.....	
.....	
Number of times the training was done		
Total participant numbers: Women..... Men.....		

PAGE 2

What were the positive comments from the participants?
.....
.....
How could this training be improved?
.....
.....
Are there any other comments on this training?
.....
.....

SECTION 6: REPORTING ON TRAINING

6.2: Formal reports

If the training leaders are literate, the following headings could be used to design a written report form.

<p>Family Farm Teams Program: training report</p> <p>Report by..... Date.....</p> <p>Training topic(s).....</p> <p>Training location, date and time:.....</p> <p>Names of VCEs who delivered training</p> <ul style="list-style-type: none">■ Women■ Men <p>Summary of training activities (or attach session plan)</p> <p>Participant numbers</p> <ul style="list-style-type: none">■ Women■ Men <p>Evaluation methods/activities (attach any evaluation tools, such as surveys, checklists)</p> <p>What were the main findings of your evaluation?</p> <ul style="list-style-type: none">■ Knowledge■ Skills■ Attitudes <p>How did men and women respond to the training?</p> <ul style="list-style-type: none">■ Women■ Men <p>What were the most effective learning activities for men and women?</p> <ul style="list-style-type: none">■ Women■ Men <p>What were the most challenging learning activities for men and women (why)?</p> <p>Were there any other challenges (such as language, literacy)?</p> <p>How could the training could be improved for this group of participants?</p> <p>Do you have any further comments?</p>
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APPENDIX

Applying the training to different subjects—integrated pest management as an example

Topic	Learning activity
1: How adults learn	
The experiential learning cycle	Example of the learning cycle as a problem-solving process for a common pest.
Different ways of learning	Break into groups to find examples of how people have learnt about pests in the past (one group each looks at listening, seeing, doing, sharing, and trial and error).
2: Planning a training course	
How to write a course aim	Break into groups to write a course aim related to pest management. Conclude session with the actual aims of the course.
How to decide the session topics	Give people paper to record the topics that could be covered in pest management. Each person combines their list with another person, then twos combine into fours. Record these on large paper. Add any topics that have been pre-prepared as part of the course.
Who will attend the training?	Small groups identify possible target groups (which can later be used for roll-out planning).
Training—where, when and for how long?	Allocate one possible target group (for example, mothers, youth, families) to each small group, which then decides on the most appropriate time, place etc. for that target group.
3: Designing training activities	
Developing session learning aims	Break into three groups. Each is allocated a learning aim (knowledge, skills or attitudes) to develop.
Designing introductory activities	Conduct one or more relevant introductory activities and analyse together (for example, each person answers the question, 'What is your pest of the year?')
Designing a talk	Identify the factual information that will be needed in a talk format. Have handouts on facts available, such as types of pests.
Designing activities for pairs	Pairs discuss the local methods of managing pests.
Designing a role-play/drama	Small group of men and women design short role-plays, such as using pesticides: (1) the good, (2) the bad and (3) the ugly practices.
Designing a session plan	Hand out a basic course design for pest management—to be added to by the VCEs.
Developing the materials you need	Work in small groups to create posters using local symbols and language.

Topic	Learning activity
4: Running training activities	
Leading activities	Series of practical sessions with relevant training guidelines (for example, how to use pesticides safely) with the focus on managing the group so that everyone practises the steps carefully).
Talking in front of a group	How to identify pests—short talk, then photo identification game.
Answering questions	How to use the factual resources.
Presenting a role-play/drama	Three mini-dramas on the use of pesticides: (1) the good practice, (2) the bad practice and (3) the ugly practice. Discussion after each drama on the main lessons.
Running a follow-up session	One week follow-up for technical skills check. One month for general follow-up.
5: Evaluating training	
Finding out what people thought of your training session	Rating list (rate each activity from 1 to 5) for the main topics covered.
Measuring changes in knowledge, skills and attitudes	Pre- and post-test of knowledge and skills. Skills test, such as correct mixing and application of three different pesticides.
What do you do with the feedback?	Meeting of the training team to look at feedback to decide: <ul style="list-style-type: none"> • what should be improved in future courses • any areas that need additional training.
Has anything changed after your training?	Visits to selected farmers to assess new practice and skill levels using pre-determined impact indicators.
Evaluation surveys	As per program goals and indicators.
6: Reporting on training	
Reporting through a VCE meeting	Adapted for topic areas.
Formal report	Program pro-forma co-designed or explained.



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