



Australian Government

Australian Centre for  
International Agricultural Research

**SMALLHOLDER COFFEE PRODUCTION IN  
PAPUA NEW GUINEA – EXTENSION OFFICER  
TRAINING GUIDE**

**UNIT 1: EXTENSION PRINCIPLES**

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**MODULE 2:  
THE EXTENSION OFFICER - ROLES  
& EFFECTIVENESS**



Curry G, Tilden G, and Aroga L (2023)  
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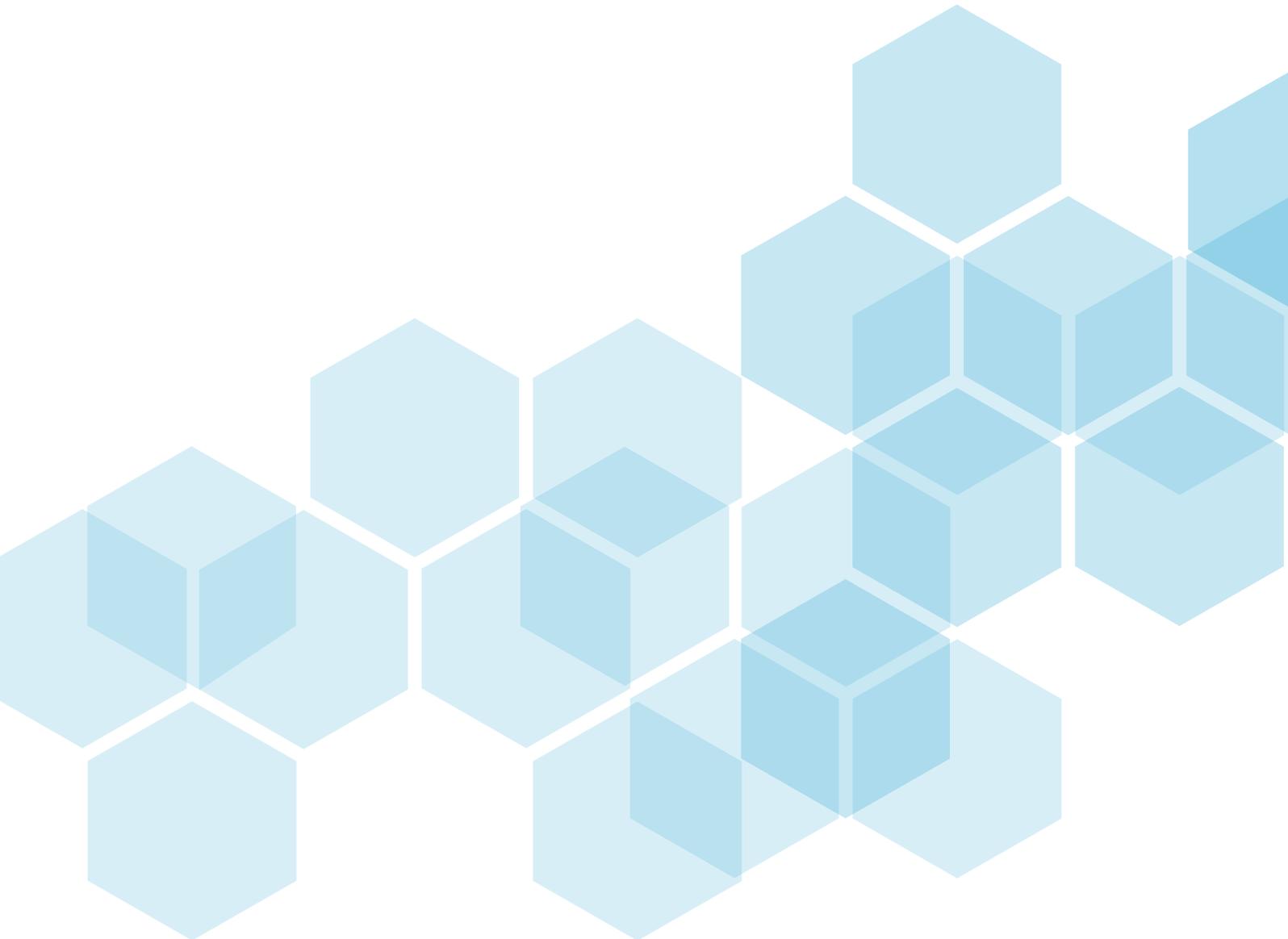
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# **MODULE 2:**

**THE EXTENSION OFFICER - ROLES  
& EFFECTIVENESS**



## The Smallholder Coffee Production in Papua New Guinea Training Program

The training program contains modules prepared in partnership with the Australian Centre for International Agricultural Research (ACIAR) and by CARE-International.

The structures of the Extension Officer Training Program and the Farmer Training Program are shown in the table below.

Some modules also contain references to additional training that learners are encouraged to complete as part of their training.

## ACIAR Resource

Monograph MN220 Smallholder Coffee Production in Papua New Guinea: a training package for extension officers and farmers. This package contains the modules for both the extension officer training guide and the farmer training guide. The ACIAR monograph is available online from [www.aciar.gov.au](http://www.aciar.gov.au)

Hard copies of the ACIAR training package may be available by contacting ACIAR or the Coffee Industry Corporation (CIC)

## CARE Resources

Organisational Strengthening Training  
CARE Family Money Management Training

The CARE modules are available online from <https://pngcdwstandard.com/resources-for-use-by-cdws-working-with-wards-communities-groups-and-smes>

Hard copies of the CARE modules may be available by contacting the CIC or CARE-International.

## Extension Officer Training Program

Title	Module reference
Introduction to smallholder coffee production in Papua New Guinea	ACIAR Smallholder Coffee Production in Papua New Guinea Training Package
<b>Extension Principles</b>	
Introduction to the Coffee Extension Officer and Farmer Training Guides	ACIAR Extension Officer Training Guide Unit 1 Module 1
The extension officer - roles and effectiveness	ACIAR Extension Officer Training Guide Unit 1 Module 2
<b>Knowing Your Farmers</b>	
Getting to know our coffee smallholders	ACIAR Extension Officer Training Guide Unit 2 Module 1
What factors affect smallholder coffee production?	ACIAR Extension Officer Training Guide Unit 2 Module 2
Strongim grup: course facilitator guide	CARE Organisational Strengthening Training

## Farmer Training Program

Title	Module reference
<b>Becoming a Coffee Farmer</b>	
Knowing your coffee tree	ACIAR Farmer Training Guide Unit 1 Module 1
Coffee nursery development	ACIAR Farmer Training Guide Unit 1 Module 2
Establishing a new coffee garden	ACIAR Farmer Training Guide Unit 1 Module 3
<b>Managing Your Coffee Garden</b>	
Weed control	ACIAR Farmer Training Guide Unit 2 Module 1
Maintenance pruning and rehabilitation	ACIAR Farmer Training Guide Unit 2 Module 2
Shade management	ACIAR Farmer Training Guide Unit 2 Module 3
Drainage	ACIAR Farmer Training Guide Unit 2 Module 4
Pest and disease management	ACIAR Farmer Training Guide Unit 2 Module 5
Coffee berry borer management	ACIAR Farmer Training Guide Unit 2 Module 6
Soil fertility and nutrient maintenance	ACIAR Farmer Training Guide Unit 2 Module 7
Intercropping in your coffee garden	ACIAR Farmer Training Guide Unit 2 Module 8
<b>Harvesting and Processing Coffee</b>	
Coffee harvesting and processing	ACIAR Farmer Training Guide Unit 3 Module 1
Coffee grading systems and pricing	ACIAR Farmer Training Guide Unit 3 Module 2
Establishing a mini wet factory	ACIAR Farmer Training Guide Unit 3 Module 3
<b>Coffee Marketing</b>	
Understanding the domestic coffee market	ACIAR Farmer Training Guide Unit 4 Module 1
Kamapim ol prairiti	CARE Organisational Strengthening Training
Kamapim ol eksen plen	CARE Organisational Strengthening Training
Setim gutpela kastom bilong ronim grup	CARE Organisational Strengthening Training
Wok bilong meneja na memba na lida	CARE Organisational Strengthening Training
Coffee certification	ACIAR Farmer Training Guide Unit 4 Module 2
Fairtrade certification	ACIAR Farmer Training Guide Unit 4 Module 3
Family money management	CARE Family Money Management Training



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## Recommendations for additional training

In addition to this extension officer training module, it is recommended that trainee extension officers also complete the CARE-CIC or Family Farm Teams Program to develop a collaborative approach to training. These training programs can be found at:

### **CARE-CIC Training Manuals**

<https://pngcdwstandard.com/resources-for-use-by-cdws-working-with-wards-communities-groups-and-smes/>

### **Family Farm Teams Program**

**The PNG Family Farm Teams Manual**

[www.aciar.gov.au/publication/books-and-manuals/png-family-farm-teams-manual](http://www.aciar.gov.au/publication/books-and-manuals/png-family-farm-teams-manual)

**Building gender equity through a Family Farm Teams approach**

[www.aciar.gov.au/publication/books-and-manuals/building-gender-equity-through-family-teams-approach](http://www.aciar.gov.au/publication/books-and-manuals/building-gender-equity-through-family-teams-approach)

**The farmer-to-farmer adult learning manual**

[www.aciar.gov.au/publication/books-and-manuals/farmer-farmer-adult-learning-manual](http://www.aciar.gov.au/publication/books-and-manuals/farmer-farmer-adult-learning-manual)

**Business Training for Family Teams – A Facilitator’s Manual**

[www.canberra.edu.au/research/faculty-research-centres/csc/archive/family-farm-teams-program/family-farm-teams-resources/PAU-Business-Skills-Facilitators-Manual.pdf](http://www.canberra.edu.au/research/faculty-research-centres/csc/archive/family-farm-teams-program/family-farm-teams-resources/PAU-Business-Skills-Facilitators-Manual.pdf)

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Improving Livelihoods of Smallholder Coffee Communities in Papua New Guinea (ASEM/2016/100)



# INTRODUCTION

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## **Aim of Module:**

The aim of this module is for extension officers to gain a clear understanding of their roles and responsibilities, to learn what personal qualities, characteristics and skills are necessary to become an effective extension officer, and how to prepare for a farmer visit, training or field day.

To be an effective agent of change, an extension officer must not only have a high level of technical knowledge but must also have a good understanding of his or her diverse roles and responsibilities. They must also possess the personal attributes, characteristics and skills needed to form strong respectful relationships with farmers. If an extension officer is planning to visit farmers, or is facilitating training or holding a field day, some important preparation must first be undertaken. This is to ensure he/she has a good understanding of the farmers' situations so that the visit, training or field day exercise is as effective as possible.

## **LEARNING OUTCOMES:**

By the end of this module trainee extension officers will have:

- ✓ A better understanding of their roles as extension officers
- ✓ An awareness of the importance of developing good relationships with male and female farmers
- ✓ An improved ability to identify the characteristics and qualities that make an extension officer effective
- ✓ A better understanding of some of the important skills required to work effectively with coffee farmers
- ✓ An awareness of the range of communication techniques and their benefits for use in providing training and advice to farmers
- ✓ An improved ability to solve farmers' problems
- ✓ How to plan for a farmer visit, farmer training or a field day
- ✓ How to evaluate and follow-up on their training

## LESSON PLAN:

The module has five parts:

Section 2.1 Roles

Section 2.2 Relationships with farmers

Sections 2.3 to 2.4 Characteristics, qualities and skills of an effective extension officer

Sections 2.5 to 2.6 Communication and training techniques, and Experiential Learning

Sections 2.7 to 2.9 Farmer visits/training – planning, evaluation and follow-up

## TIME REQUIRED TO COMPLETE THIS MODULE: 5 DAYS

## TEACHING AIDS:

- Butchers' paper and marker pens (or white board and white board marker pens)
- Sticky notes
- Diagrams
- Paper and pens
- Farmer profile checklists

## 2.1 WHAT IS THE ROLE OF THE EXTENSION OFFICER?

Extension officers play many roles and are expected to work with coffee smallholders and communities to improve their:

- Skills and knowledge of coffee production to raise productivity and the quality of coffee produced
- Coffee incomes
- Living standards and well-being

### What do farmers expect of an extension officer?

Working with coffee smallholders is not easy as there are many demands on them and their time. Farmers expect a lot from their local extension officer. Farmers expect their extension officer to:

- Carry out regular farm visits
- Solve their production problems
- Assist them to obtain farm inputs
- Answer questions
- Offer advice and training on a range of agronomic and technical aspects of coffee that will help increase their production and income
- Offer advice on social problems or conflicts within and between families in the village, to help families improve their social well-being

### What are the key roles of an extension officer?

Some of the key roles of an extension officer are:

- **Facilitator of change.** The most important role of the extension officer is to be a facilitator of change – to show the farmer how to identify problems and how to take responsibility for solving these problems to improve their farm management practices
- **Problem solver.** In this role extension officers are expected to find out the difficulties and problems faced by both male and female farmers and work with them to find practical ways to overcome their farming problems

## 2.1 WHAT IS THE ROLE OF THE EXTENSION OFFICER?

- **Communicator.** The role of the communicator is to transfer new skills, knowledge, and management practices to farmers. Good communication skills are essential for being an effective extension officer
- **Trainer.** A major part of the work will be training and advising farmers through the use of a range of training techniques and ensuring both men and women participate in training and are motivated to learn in a supportive environment
- **Specialist.** In the eyes of the farmer, the extension officer is seen as a 'specialist' in coffee production and management. As a 'specialist' it is the extension officer's role to share their knowledge and expertise with farmers, so they too also become specialists
- **Community Development (Rural Development) worker.** An important role is to help farmers to identify the development priorities for their households and communities, and assist them to develop strategies to help them meet those priorities



The diverse roles of an extension officer

## 2.2 DEVELOPING GOOD RELATIONSHIPS WITH FARMERS

To perform the diverse roles of an extension officer successfully, requires developing **good working relationships** with farmers. Good relationships with farmers, means farmers are more likely to accept the advice of their extension officer and allow him or her to assist them with their problems.

### How to develop good relationships with farmers



**Showing respect** to coffee farmers is the key to building good working relationships and trust. Respect can be developed by:

#### Spending time with farmers

Farmers appreciate it when extension officers show interest in their well-being by spending time with them to listen to their problems and work with them to find solutions. Women especially appreciate being included in meetings and discussions. Living with farmers for short periods and being prepared to travel to remote areas, rather than sitting in an office in town, is central to being an effective officer. Farmers are a lot more receptive to advice when they know and respect an officer through spending time with them, rather than meeting them once in a training session. Spending time with farmers means:

- Regularly visiting farmers and following up on their problems
- Not favouring certain growers (The Wantok System)
- Talking with farmers and all household members: both men and women
- Participating in the cultural festivities and events in the villages

### Active listening

Whilst an extension officer may be knowledgeable about the technical aspects of coffee they are not always knowledgeable about the farmer and the challenges they face in their efforts to increase coffee production and incomes. An officer must be prepared to listen to farmers and learn about their problems. Active listening is often prevented because the extension officer assumes he/she knows the problem and the solution. Active listening is taking the time to hear what others say and accepting that communication is a two-way flow. Active listening involves:

- Creating an honest and open listening environment
- Giving your full attention to growers
- Monitoring feelings and growers' needs and concerns
- Suspending your own expectations
- Not assuming that you know what is best for the farmer
- Listening before attempting to solve problems



Active listening and developing relationships with farmers  
(Source: CARE International)

### Accepting and valuing difference

Farmers belong to a wide variety of cultural and religious groups. They also come from a range of educational backgrounds and life experiences, which often influence their beliefs, values, opinions, behaviour, and capacity to learn and participate in community events. Be open to seeing things from other people's point of view. Explaining things from their point of view can help get information across to them. Appreciating the differences among farmers means:

- Accepting other cultural beliefs and religions
- Being open to other points of view
- Accepting that people might have other priorities which do not match your own
- Appreciating that people have other ways of doing things

### Understanding another's situation

Not all farmers are the same. The large diversity of situations found among farmers, and their many different challenges, means there is not one set of training or advice that is suitable for all growers. Understanding another's situation demonstrates respect to the farmers through:

- Appreciating the complexity of the farmer's situation
- Identifying barriers to and opportunities for change
- Appreciating and accepting criticism from farmers (usually it is not personal, they may be upset at the lack of government services and blame you as a representative of the government)

### Tips to keep in mind

In developing good relationships with farmers and encouraging them to adopt advice, there are two important things to keep in mind:

- Non-verbal communication is important. Non-verbal communication includes the clothes you wear, facial expressions, eye contact, body posture, and the tone of your voice. All these can affect how people will take in the information you give. A clean and tidy uniform, for example, is important
- Arguing with farmers can lead them to resent the extension officer and perceive him/her to be rude and arrogant. It is better to avoid arguments with farmers and look for alternative ways to get your message across



An extension officer working with farmers

**Objective:**

To encourage extension officers to discuss and reflect on their relationships with farmers (farmers includes both men and women, so you may also wish to consider how to increase women farmers' engagement in extension activities)

**You will need:**

Paper and pens for each group

## EXERCISE 1

### The principles of building relationships with farmers

When we think about developing good relationships with farmers there are a few principles we can follow. For example, showing farmers that you are keen to listen to what they have to say encourages open and honest discussion and co-operation. Also, treating all farmers equally in your dealings with them is important. There are many more principles to follow to build good relationships with coffee farmers.

**Part One**

**Step 1:** Ask the participants to think about, from their own experience, what they consider are the key principles of developing good relationships with farmers.

**Step 2:** You can begin the exercise by asking the participants to add to the following list.

**Principle 1:** Visit and interact with farmers (both men and women farmers)

**Principle 2:** Listen to their problems

**Principle 3:** Treat all farmers equally by not showing favouritism to some growers

**Principle 4:**

**Principle 5:**

**Principle 6:**

**Principle 7:**

**Principle 8:**

**Principle 9:**

### **Part Two**

**Step 1:** Form small subgroups and ask each subgroup to discuss one principle in detail

**Step 2:** A spokesperson from each subgroup then presents back to the entire group their take home message on the principle

**Step 3:** The entire group then discusses the effects of each principle and thinks of examples where these principles might be challenged. The group then comes up with strategies or solutions to ensure the principles are upheld.

## 2.3 WHAT CHARACTERISTICS AND QUALITIES DOES AN EXTENSION OFFICER NEED TO SUCCESSFULLY FULFIL THEIR DIVERSE ROLES?

### Key personal characteristics and qualities

An extension officer must conduct themselves at all times in a way that farmers will develop **respect** and **trust** for them. To successfully carry out the demanding and challenging roles of an extension officer, there are many personal characteristics and qualities that are important.

These include being:

#### **Multi-skilled**

- The various roles of the extension officer show that they must have expertise in many areas
- An extension officer must be a skilled communicator, listener, change agent, a visionary (to see what changes are desirable and how those changes can be facilitated), and have expert knowledge to improve the coffee production of the farmer
- Extension officers are often asked to assist or give advice to farmers on many things apart from coffee
- Farmers often expect extension officers to be a jack-of-all-trades, that is, an expert in multiple tasks and subjects

#### **A dynamic leader**

- Creating a vision of change in the mind of the farmer is very difficult and requires an extension officer to demonstrate leadership and be dynamic to drive and facilitate change

#### **Ethical at all times**

- An extension officer is a representative of their organisation and the coffee industry and therefore must conduct themselves ethically—in a way that will not undermine their own reputation, that of fellow extension officers, and their own organisation
- Unethical behaviour will create distrust and hostility towards the extension officer and act as a barrier to farmers accepting the advice of the officer

### **Passionate and having a positive attitude**

- An extension officer must have a passion and a commitment to bring about positive change to farmers' lives
- This can be achieved by maintaining a positive attitude to other people, fostering self-esteem, treating people with respect, and commenting positively on their achievements
- A positive attitude also means avoiding negative personal comments and making people feel defensive or inadequate

### **Alert and adaptable**

- As social, economic, and environmental change occurs in rural villages, extension officers must be aware of these changes and be prepared to adapt their roles and advice to fit with the new social and economic circumstances at the village level
- The extension officer must be alert and adapt how they do their job as things change around them (e.g. the arrival of new pests like CBB)

### **Knowledgeable**

- You must know your subject well
- Give correct, clear, and up-to-date information to the farmer
- This helps the farmer to have confidence in the extension officer

### **Sensitive to the local context of farmers**

An extension officer must be aware that the problems and issues facing farmers will differ depending on their circumstances. Some examples of these differing circumstances include:

- Farmers in remote areas and those near a road/highway or living near town
- Young families and older families
- Male and female farmers
- Farmers with plenty of land and those short of land
- Those with good access to labour and those with limited access to labour

### **Humorous**

- Humour often works to help people relax and keep them interested in what you have to say

## What behaviours and characteristics should an extension officer avoid?



### Extension officers should not:

- **Do the work of the farmer.** An extension officer should facilitate change among farmers and not do the work of a farmer. For example, an extension officer should not do all the work to set up a coffee demonstration garden. Rather, he/she should assist farmers by guiding the work
- **Act unethically.** For example, extension officers should not take cash from farmers to purchase farm tools without writing an official receipt for the farmer; nor should they consume alcohol during working hours
- **Make promises** or commitments to farmers that they are not confident they can keep (keep appointments with farmers)
- **Assume you have all the knowledge.** Extension officers must be prepared to learn from the farmers: they are innovators, and therefore you must be receptive to farmers' ideas and new farming techniques. Do not assume that you know what is best for the farmer
- **Favour one grower or group over another.** Extension officers should treat all farmers equally and avoid favouritism. This means not showing bias to a particular person or excluding a group of farmers such as women

### Objective:

Brainstorm and discuss a list of things that extension officers should do and not do

### You will need:

Butchers' paper or white board; marker pen



## EXERCISE 2

### To do and not to do

**Step 1:** The trainer forms groups and chooses one volunteer from each group to lead steps 2 to 5.

**Step 2:**  Discuss and make a list of things that extension officers **should do** (the chosen volunteer forms the list based on the group's inputs).

**Step 3:**  Discuss and make a list of things that extension officers **should NOT do**.

**Step 4:** The trainer can reflect and discuss his or her experiences based on the points listed.

**Step 5:** The trainer can then discuss with the trainees how best to adapt or consider these points in practice.

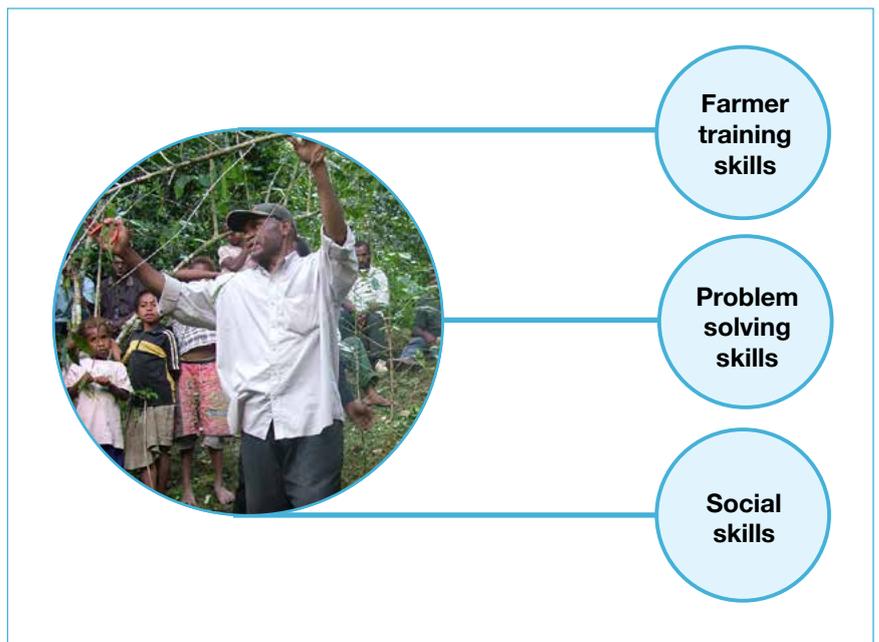
## 2.4 WHAT ARE THE KEY SKILLS REQUIRED TO BE AN EFFECTIVE EXTENSION OFFICER?

### Skills required to be an effective extension officer:

To be effective in the many roles of an extension officer outlined in the previous sections requires specific skills. Some of the key skills are:

- Farmer training skills
- Problem solving skills
- Listening skills
- Technical skills
- Community development skills
- Creative thinking skills
- Leadership skills
- Social skills
- Communication skills

This section focuses on three main skills: Farmer training and communication skills; problem solving skills; and social skills. Extension officers regularly draw on these skills in their everyday activities with farmers.



The three key skills required by an extension officer

## Developing an environment for change

Before considering the specific skills needed to become an effective extension officer, it is important to understand what makes an effective learning environment for conducting training or working with farmer groups. The learning environment should be one that:

1. Encourages participation of all members of the community
2. Motivates people to improve existing practices

This learning environment is created by:

- Recognising the role of both the husband and wife in coffee production and a range of other livelihood activities
- Recognising that coffee farming households are part of a larger community and therefore have other obligations and demands on their time
- Supporting and encouraging participation of all the community – young, old, men and women
- Understanding that farmers have different experiences and skills (e.g. education, family, work experience, cultural identity, etc.)
- Communicating effectively
- Demonstrating an understanding of how people/farmers learn
- Discussing with farmers how the skills and knowledge or information they are to receive is relevant to improving their livelihoods and well-being

### **Contribution to household livelihoods by both men and women**

It is well known that families are better able to improve their well-being if both men and women contribute to and take responsibility for maintaining and supporting household livelihoods. It is therefore important for an extension officer to emphasise to farmers that improvements in coffee production and the overall well-being of all household members will be enhanced when a family works as a cohesive and supportive unit. This can be achieved by:

- Fathers sharing parenting and household tasks with mothers and encouraging their sons to do the same amount of subsistence and household work as their daughters
- Men using income the household has earned to meet daily household needs before spending money on themselves

- Women having more influence in decision-making processes regarding household assets and the use and distribution of household income
- Men and women sharing decision-making about how their income can be managed to meet household and personal needs
- Eliminating bullying, dishonesty and violence over access to and control over resources like money, land and family labour within the household
- Increasing respect and communication between men and women
- Raising men's awareness and understanding of the contribution women make to the household and community



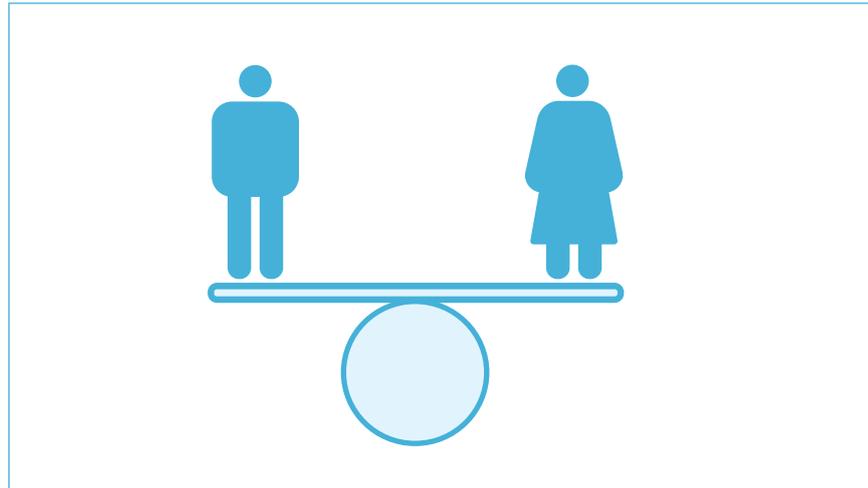
A household working together as a cohesive unit to improve their wellbeing

### Improving the social setting

It also needs to be recognised that coffee farming households do not exist in isolation from the village/community in which they reside. In many villages, social problems and conflicts can often undermine people's efforts to improve their standard of living. Improving the social setting in which coffee production takes place not only provides a more supportive and motivating environment for coffee farmers to improve their production, but brings benefits to all aspects of village life for both men and women. When working in the village, an extension officer may take the opportunity to talk to community leaders (young and old, men and women) to discuss ways to facilitate change to improve the social well-being of all community members. This may include people working together to encourage:

- Less anti-social behaviour and less violence in the community
- Young men and women to become more involved in productive economic activities

- Men to act as positive role models to other men and youth
- Male leaders to take responsibility for community safety alongside women leaders
- Women to take leadership roles in mixed groups of men and women
- Women to take up new leadership roles in coffee farming groups
- Space for women's voices to be heard and respected on a range of community issues and in decision-making processes



Men and women to be given an equal voice in the community.

As an extension officer and a facilitator of change, reducing social problems and conflicts both within and between families in the village is an important first step to creating an environment for positive change.

### **Being aware of your own abilities, experiences and values**

Before working in a community, it is important that an extension officer is aware of his/her own abilities, experiences, and values as an individual. Being confident in one's own abilities is an important part of awareness to fully engage with farmers and to transfer information, skills and other support to farmers, to bring about positive change in the household and community.

### **Understanding the farmer and developing a relationship with them**

Awareness is also about understanding farmers and developing relationships with them to create a supportive and comfortable learning environment. The sections above, in this module, touched on some principles of developing good relationships with farmers that are necessary to create a good learning environment. The following points should be kept in mind when working with farmers and conducting training:

- Ask questions that help you to understand what motivates farmers in coffee production, other livelihoods and more generally in their lives. Not all farmers have the same level of motivation to increase coffee production, for example. Whether you agree with them is unimportant. How deeply you can understand them is the main goal
- Think of the farmer as a storehouse of important local knowledge. Dig deep, with enthusiasm to bring that knowledge to the surface. Be grateful for their knowledge contributions
- Encourage farmers to share their beliefs, opinions and personal experiences
- Put aside your own judgements and actively listen to what farmers are telling you
- Find ways to take some elements of what each farmer offers and blend them together into a mix that is suitable to the situation
- Be genuinely interested in wanting to know more about the farmer
- Approach your training in the spirit of discovery, enquiry and experimentation
- Develop trust with the farmer by being trustworthy and expecting the same from others

## Social skills for providing advice and training to farmers

The social skills of the extension officer are very important for getting farmers to open up and talk about their problems and to adopt advice. Some of the important social skills an extension officer should possess when working with smallholders are:

**Enthusiasm.** Being enthusiastic engages, inspires and motivates others.

**A willingness to become part of the community.** Display an interest in the culture and daily lives of the community (e.g. learn a few words of the local language) and listen to their concerns.

**An awareness of culturally-appropriate behaviour and communication.** This means learning about the cultural and social system of the village/area in which you are conducting training (PNG is very diverse, culturally and socially).

**The ability to develop a good rapport and working relationship with farmers.** Some examples of ways to develop a good rapport or connection with farmers are by being friendly, showing interest in farmers, asking questions, actively listening to them, remembering people's names and previous conversations, and finding common ground. Farmers will be more likely to accept your advice to modify their practices and allow you to assist them with their problems if you develop a good rapport with them.

**Sensitivity and an ability to deal with community criticisms.** Sometimes in areas where government services are absent, villages will vent their frustrations through hostility to an extension officer as they see them as a representative of the government. It is better to listen to their concerns and show an understanding rather than take the criticism personally.

**An ability to be flexible and deal with difficult situations.** Not everything will work according to plan and an extension officer may find themselves in situations where a problem has emerged and plans need to change. Skills in responding to difficult situations in an appropriate and ethical manner are important and necessary.

## Skills for working with smallholder groups

Many smallholders belong to formal and informal grower or farmer groups. Groups are formed either by farmers themselves, or by farmers and staff of the Coffee Industry Corporation (CIC), the private sector, NGOs (Non-Government Organisation) and International NGOs (INGOs) involved in rural development or the coffee industry. These groups vary in size from around 30 members to much larger groups with memberships of up to 500. Many groups are also operating as organised and formal institutions such as cooperatives. Extension officers should be aware of the advantages and disadvantages of farmer groups and cooperatives, including the key problems commonly experienced by groups that can constrain their effectiveness.

Refer to the following modules in the group governance training series developed by CARE PNG and ACIAR:

1. Kamapim ol Praoriti
2. Kamapim ol Eksen Plen
3. Setim Gutpela Kastom Bilong Ronim Grup
4. Wok Bilong Meneja na Memba na Lida
5. Financial Management Manual
6. Research your business ideas (Kamapim bisnis plen part 1)
7. Analyse and decide on a business idea (Kamapim bisnis plen part 2)
8. Develop a business plan (Kamapim bisnis plen part 3)

CARE-CIC Training Manuals can be downloaded from:

<https://pngcdwstandard.com/resources-for-use-by-cdws-working-with-wards-communities-groups-and-smes/>

Farmer groups can provide an effective and efficient mechanism for the delivery of extension services. It is important that extension officers have a good knowledge of the farmer groups they are working with. Extension officers need to understand the:

- Benefits that members derive from group membership
- Strengths of the group
- Leadership of the group and its capacity
- Problems and challenges encountered by the group at different stages of the group's life. These can include problems in:
  - Group leadership and governance
  - Factionalism (e.g. conflicts between *haus lains*)
  - The appropriation of group assets for personal use
  - Lack of trust in group leaders
  - Transport and marketing problems
  - Socio-cultural demands for money that undermine profitability

Extension officers need to provide groups with the necessary support and information. They also should help solve problems and resolve conflicts in the groups before the problems become too big to manage.

One of the roles of extension officers is to facilitate linkages of farmer groups with CIC, coffee processors/exporters, development organisations and other service providers.

Some things to be aware of and considered by extension officers:

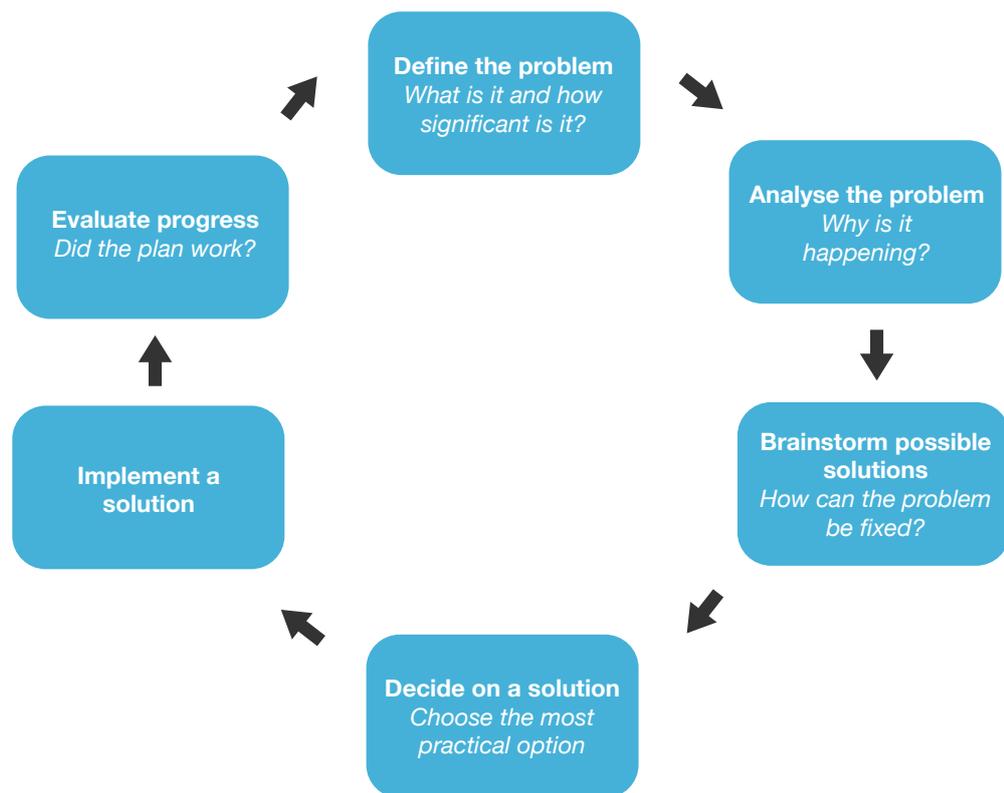
- Identify and map out in a diagram the different groups that farmers are involved in (e.g. savings groups, church and sports groups)
- Familiarise yourself with the farmer group, its members and leadership
- Maintain regular communication with the group leadership and management
- Attend group meetings
- Be aware of conflicts and dynamics within the group
- Act as a facilitator and advisor to the group rather than as a member or a leader
- Provide support in promoting good governance of the group and in building capacity (e.g. record keeping, bookkeeping, etc.)

- Provide support to plan group activities
- Organise training workshops and meetings
- Play a facilitating role in promoting democratic practices in the group, especially by encouraging leadership roles for women in the group
- Monitor and assess group progress

## Problem-solving skills

A major role of the extension officer is to find out the difficulties and problems faced by farmers and to work with them to find practical solutions to these farming problems. A good extension officer is a good problem solver. To be a good problem solver one must first have the skills to **identify the problem** and then find a **suitable solution**. Most people try to solve problems before they have developed a complete understanding of the situation. However, it is crucial to have a good understanding of the problem before developing a solution.

The best approach to problem solving is to follow a set of logical steps. Sometimes following a step-by-step procedure for defining problems, generating solutions, and implementing solutions can make the process of problem solving seem less overwhelming.



General step-by-step guide to problem solving

The following steps are useful for extension officers to follow to identify and solve problems:

### **Step 1. Know your farmer**

Develop a good understanding of the farmer or farmer group and their coffee farming livelihood systems. Knowing your farmer is very important.

### **Step 2. Factors affecting production**

Find out the major factors influencing farm management practices and levels of production. Work closely with farmers to learn about the constraints on their production and productivity from their perspective, and avoid assuming you know the issues.

### **Step 3. Evaluate and identify problems**

Evaluate all the factors identified in Step 2 and identify the key problem or problems. Sometimes the problem/s may not be obvious and therefore you need to take time to properly evaluate all aspects of household coffee production. You work like a detective trying to find out from the farmers what they themselves see as being responsible for their low production levels and coffee incomes. The more defined the problem, the more likely it is that you will find a workable solution.

### **Step 4. Rank the factors**

Rank in order of importance the key factors preventing the household or group from raising their coffee production and income. Find out the underlying reasons for these constraints.

### **Step 5. Solutions**

Identify appropriate and realistic solutions to assist farmers overcome the main problem/s identified in Step 4. Not all problems can be addressed – e.g. impassable roads or land constraints, but many can (e.g. labour shortages). Solutions should be identified in a collaborative manner with farmers through informal meetings and discussions or brainstorming solutions in a group. This may take a lot of time and effort before a workable solution is found and agreed on.

### **Step 6. Program or plan**

Together with the farmer or group, develop a program or plan to implement as a solution.

### **Step 7. Follow up**

Follow up with the farmer or group to review how successful the program or plan has been in solving the problem/s. If not fully successful, there may be a need to reassess the approach to tackle the problem/s.

To assist extension officers identify smallholder problems, a smallholder profile checklist is provided in this module in the section on 'Planning for a smallholder visit'.



An extension officer working with farmers in the field.

**Objective:**

To engage in a participatory discussion to brainstorm various challenges faced by extension officers in performing their duties. Think of the different challenges faced by male and female extension officers. Some problems will be the same for male and female extension officers, and some will be different. Analyse their causes and problems and explore possible solutions.

**You will need:**

White board, white board marker pens, butchers' paper, pens, and sticky papers

## EXERCISE 3

### Solving problems faced by extension officers

#### Part One: Identifying problems and their causes

**Step 1:** Ask participants to get into small groups

**Step 2:** Discuss (and note) what are the main challenges faced by extension officers that prevent them from performing their roles effectively? Examples could include institutional barriers such as lack of leadership from senior management or poor roads that make it difficult to deliver extension to isolated communities. Are there particular barriers that female extension officers might face? How can these barriers be overcome?

**Step 3:** On butchers' paper/white board write the list of constraints, and give each one a letter code (e.g. A, B, C and D).

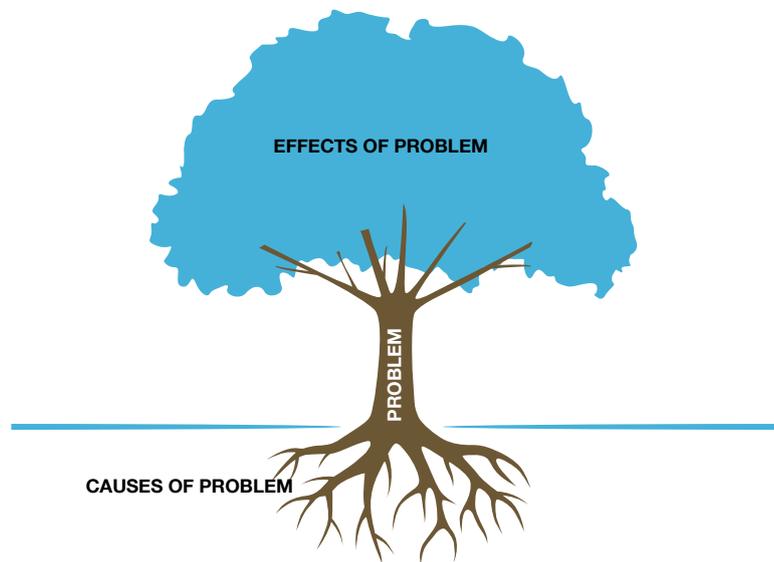
Problems
A. e.g. Infrastructure
B.
C.
D.
E.
F.
G.
H.

**Step 4:** Each identified problem/constraint can be classified as internal (within a village or community) or external (beyond the village). Generally, external problems are more difficult to resolve.

Problems	Internal/external
A.	
B.	
C.	
D.	
E.	
F.	
G.	
H.	

**Step 5:** In this step, participants engage in further analysis of the problem by trying to identify the underlying reasons for the problems using a 'Problem Tree Analysis' (see the figure below).

- The analogy of a tree is helpful to brainstorm and analyse the underlying reasons for the problems faced by extension officers and the effects of the problem. The 'Problem Tree Analysis' tool can also be used when working with farmers to understand their problems, the underlying causes and the effects or impacts of the problem on their coffee production.
- Think of a tree trunk or a main stem of a young tree representing a problem. Its roots represent various causes and underlying factors behind the problem. Likewise, the condition of the branches and leaves represent the effects of a problem (e.g. yellowing of leaves, and reduced tree productivity)
- Each problem identified in Step 4 can be analysed by discussing its cause and consequences
- Participants can draw a problem tree on butchers' paper; write down causes, problems and effects on sticky papers and put them on a respective location of the tree as in the example below
- Each group can use a problem tree to tease out the cause and effects of one problem



Problem Tree

### Part Two: Finding solutions to problems

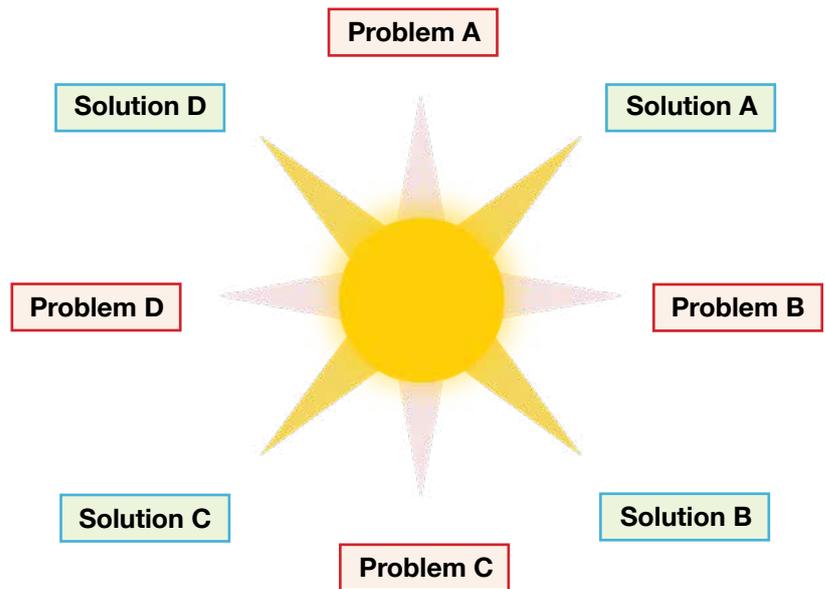
**Step 1:** Alongside each problem identified and analysed, ask participants to identify solutions to help them overcome the problem or barriers.

Each group tackles one problem and provides a solution to the problem/ constraint. For example: Group One can deal with Problem A; Group Two deals with Problem B and so on.

Example: Poor access to markets may be addressed through trying to encourage farmers to form farmer groups and link with exporters.

**Step 2:** Prepare the following diagram on butchers' paper or on a white board.

**Step 3:** Ask each group to post their solutions and specific task/ actions for the solution identified (ways to achieve the solution) under a respective problem/constraint. A facilitator of each group can list the specific tasks for each solution or post the sticky papers.



Sun Ray Exercise (Idea adapted from GTZ, n.d)

**Objective:**

To make extension officers aware of some of the social problems that may occur in villages and how these problems may be solved

**You will need:**

Butchers' paper or white board; marker pen



## EXERCISE 4

### Solving village social problems

**Step 1:** List some of the social problems that commonly occur in villages and how they may affect coffee production and family livelihoods.

**Step 2:** Discuss how an extension officer may help solve these problems.

**Objective:**

Identifying the benefits of having female farmers involved in training and how to encourage their participation

**You will need:**

Butchers' paper or white board; marker pen



## EXERCISE 5

### Participation of female farmers in training

**Step 1:** The trainer forms groups and chooses one volunteer from each group to lead steps 2 to 4.

**Step 2:** Discuss and make a list of why Extension Officers should involve female farmers in training and discussion groups (think of the benefits of including women).

**Step 3:** Discuss and make a list of how Extension Officers can encourage more women to attend extension training.

**Step 4:** The trainer can reflect and discuss his or her experiences based on the points listed.

## 2.5 FARMER COMMUNICATION AND TRAINING TECHNIQUES

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Much of the work of an extension officer involves training and advising farmers. Using a mixture of different training techniques helps motivate people to learn, and also caters for the different ways that people learn. Farmers learn more when a range of different communication techniques are used to deliver extension messages.

### Extension techniques

To create the conditions for farmers to learn, some effective techniques and activities to use include:

- Field days
- Farmer visits
- Demonstration blocks
- Group work: games, role plays, brainstorming
- Information communication technologies: Audio-visual material, PowerPoint, mobile phones, social media
- Posters and pamphlets
- Radio
- Farmer notes
- Training manuals

**Table 1.** Extension techniques and their benefits in extension training

Extension techniques	Extension benefits
<b>Field days</b>	<ul style="list-style-type: none"> <li>• Effective way to provide information to a large group of farmers</li> <li>• Farmers are given the opportunity to ask questions and learn from the experiences of other farmers present</li> <li>• Provides the opportunity for a range of learning techniques to be used (e.g. games, PowerPoint, etc.)</li> </ul>
<b>Farmer visits</b>	<ul style="list-style-type: none"> <li>• Essential element to building relationships with farmers</li> <li>• Highly valued by farmers</li> <li>• Opportunity for farmers to discuss their problems</li> <li>• Opportunity for extension officers to learn more about farmers' management practices and help them overcome their problems</li> </ul>
<b>Demonstration blocks</b>	<ul style="list-style-type: none"> <li>• Excellent 'look and see' way of learning. Visible evidence to farmers of what changes can happen if certain practices are followed</li> <li>• Suitable for a large illiterate population</li> <li>• An effective way to motivate growers to change their behaviour</li> </ul>
<b>Group work (games, role playing, brainstorming)</b>	<ul style="list-style-type: none"> <li>• Fun and novel way to learn</li> <li>• Individuals learn more when they are actively engaged in their own learning</li> <li>• Useful for targeting extension to marginal groups such as women and youth</li> <li>• Group exercises provide a stimulating experience for farmers to identify problems and solutions, generate ideas, and formulate plans</li> </ul>
<b>Audio-visual material (e.g. video clips)</b>	<ul style="list-style-type: none"> <li>• Cost effective</li> <li>• Helps overcome the limitations on regular face-to-face extension training</li> <li>• Suitable for reaching a large illiterate population and smallholders not attending field days</li> <li>• Use of local farmers and local language in videos to improve 'credibility' of message</li> <li>• Engaging way to get messages and ideas across to growers</li> <li>• Stimulates discussion among farmers</li> <li>• Farmers can learn independently and at their own pace</li> </ul>
<b>PowerPoint</b>	<ul style="list-style-type: none"> <li>• PowerPoint programs are easy to learn</li> <li>• Good at visually demonstrating certain concepts such as nutrient up-take by plant roots, etc., and for showing graphs and charts</li> <li>• Effective way to supplement oral presentations to make them more interesting</li> <li>• Excellent graphic images and there is scope to incorporate video clippings</li> <li>• Simple and easy to update as new information becomes available</li> <li>• Cost effective</li> <li>• An effective way to complement hands-on training</li> </ul>
<b>Mobile phones</b>	<ul style="list-style-type: none"> <li>• Broadcast messages to large numbers of growers</li> <li>• Useful for providing up-to-date information quickly to growers</li> <li>• Frees-up time for extension officers to focus on solving farmer problems</li> </ul>

Extension techniques	Extension benefits
<b>Social media</b>	<ul style="list-style-type: none"> <li>• Broadcast messages to large numbers of growers</li> <li>• Useful to provide up-to-date information quickly to growers</li> </ul>
<b>Posters &amp; pamphlets</b>	<ul style="list-style-type: none"> <li>• Assists in communicating research findings and extension messages to growers</li> <li>• Effective means to conduct awareness</li> </ul>
<b>Radio</b>	<ul style="list-style-type: none"> <li>• Cost-effective</li> <li>• Wide coverage</li> <li>• Popular among smallholders</li> </ul>
<b>Farmer notes</b>	<ul style="list-style-type: none"> <li>• An effective way to complement hands-on training</li> <li>• Suitable learning method for literate farmers</li> <li>• Farmer notes can be shared with other immediate and extended family members</li> </ul>
<b>Training manuals</b>	<ul style="list-style-type: none"> <li>• An effective way to provide instructions on farming techniques and processes</li> <li>• Literate farmers can use training manuals as a reference book</li> <li>• Training manuals can be shared with other immediate and extended family members</li> </ul>

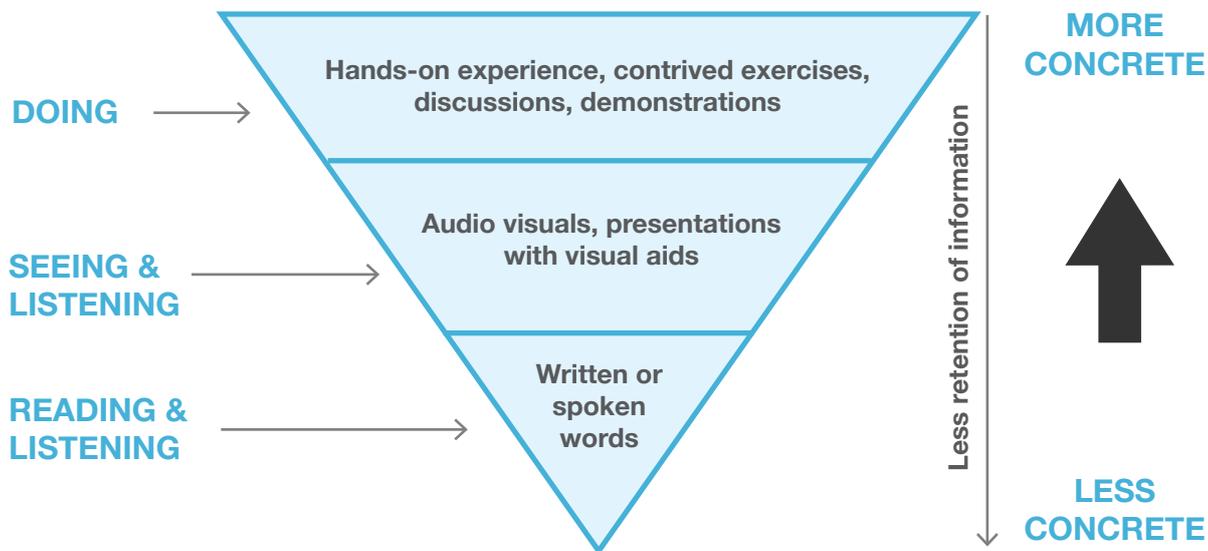
## Which extension techniques to use

The choice of techniques to use to train farmers will depend on the **local situation** and the **type of farmers** you are working with. For example, some techniques will be more suitable and useful than others if most of the farmers you are working with are illiterate. In PNG, the use of visual support tools such as video clips and PowerPoint have not been used widely, but they have proven very effective in training farmers in other countries and are very useful for those growers with low literacy levels or who are too busy or reluctant to attend field days or demonstration plots.

## How do we learn?

How people learn and how much they will remember depends on the technique used to teach them. It is well known that individuals will learn more and retain more information by what they “do” rather than what they “hear”, “read” or “observe”. This is illustrated in what is known as the “cone of experience” (see figure below).

The learning cone indicates that hands-on, real-life experience will allow participants to remember the training information best when they are given the opportunity to ‘do’ what they have learnt (e.g. a ‘hands-on’ exercise). This does not mean reading and listening are not valuable learning experiences, but they are less effective than observation (e.g. visual aids or seeing a demonstration) and doing the real thing. Therefore, it is recommended a trainer uses a mix of learning methods.



The cone of experience

**Note:** The type of technique you use to get your message across will have an impact on the effectiveness of your message. The cone of experience shows that spoken or written words are less effective than visual aids (e.g. graphs, charts, hand-outs, videos) and hands-on exercises and discussions.

Whatever method you use, there are some key principles of teaching and learning that have been identified as increasing the learning experience of individuals. As a trainer, farmers will learn more if you keep in mind that individuals learn more if your presentation has the following elements:

**Clarity.** Communication is clear to the learners and easy to understand. Use plain language.

**Variability.** A variety of training styles and techniques increases learning. Use a mix of personal experiences, examples, visual aids, exercises, etc.

**Enthusiasm.** Appear enthusiastic and excited as this motivates individuals to listen and learn.

**Task-orientated.** Ensure you have a focus to your presentation and that participants learn something at the end of the training.

**Opportunity to learn.** Give people an opportunity to learn the information you present to them in the face-to-face training. For example, provide some hands-on application of the information.

**Involve participants in the learning process.** Provide lots of opportunities for farmers to discuss issues, ask questions, do exercises, etc. Methods that involve the participation of people, such as growers sharing stories, demonstrations, and group discussions are most effective for learning.

**Enjoyment.** If people enjoy themselves and have fun they are more likely to remember your message.

### How do farmers learn?

Transfer of skills/knowledge occurs best when:

- The coffee farmer knows what they are supposed to be learning
- The coffee farmer values what the extension officer wants them to learn and believes the information will be useful to them
- The extension officer explains by SHOW and TELL
- The coffee farmer has a chance to LEARN BY DOING
- The coffee farmer has a chance to go over what they have learned at the end (REVISION)
- The coffee farmer feels comfortable and supported

## Empowering farmers

- Farmer-demand driven extension has been found to be effective in empowering farmers. It is not just training but an exercise in collaborative problem-solving
- Most farmers already have some experience and skills in coffee farming so you are adding to their existing knowledge
- It is important that extension officers and local farmers share their expertise in order to understand the best solutions to local problems
- Ask the farmers questions and listen to them
- Farmers can often come up with their own solutions with a little additional information and discussion with others
- It benefits individual members of farmer groups participating in the training if they work together as a team to find solutions that are valued by and relevant to them
- It is best to approach the training as a helper rather than as a teacher
- Your goal is to empower the farmers, and this can be achieved more easily by giving responsibility to the group

The bullet points above are adapted from the following two Family Farm Teams training manuals:

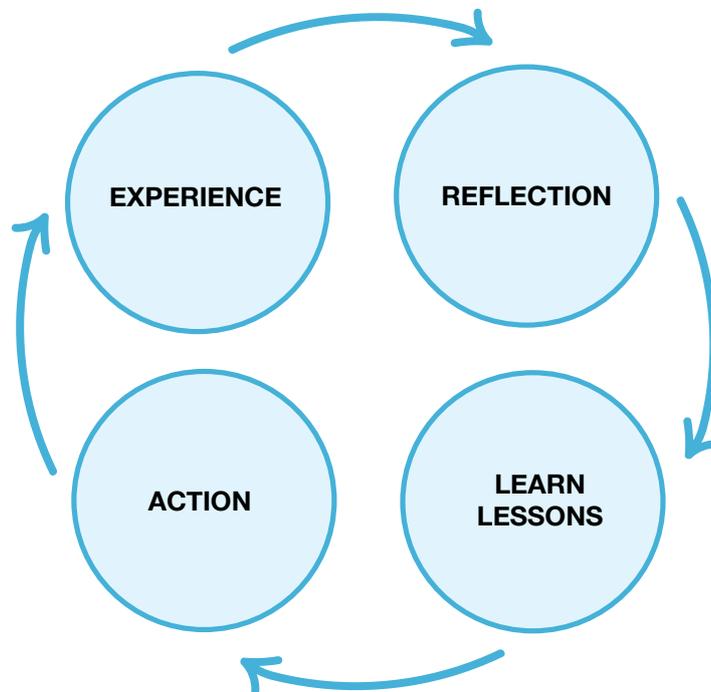
Vanua et al. (2019) Business Training for Family Teams – *A Facilitator's Manual - First steps to starting a small business*. [www.canberra.edu.au/research/faculty-research-centres/csc/archive/family-farm-teams-program/family-farm-teams-resources/PAU-Business-Skills-Facilitators-Manual.pdf](http://www.canberra.edu.au/research/faculty-research-centres/csc/archive/family-farm-teams-program/family-farm-teams-resources/PAU-Business-Skills-Facilitators-Manual.pdf)

Pamphilon B and Mikhailovich K (2016) *Building gender equity through a Family Teams approach*. [https://research.aciar.gov.au/genderequity/sites/co-lab.aciar.gov.au/genderequity/files/2019-02/mn\\_194\\_family\\_teams-web-updated\\_4-10-2016.pdf](https://research.aciar.gov.au/genderequity/sites/co-lab.aciar.gov.au/genderequity/files/2019-02/mn_194_family_teams-web-updated_4-10-2016.pdf)

## 2.6 EXPERIENTIAL LEARNING CYCLE

Much of the skills of an effective extension officer come from experience. Experience is the best teacher, BUT only if we learn from it! The Learning from Experience Cycle is made up of four stages:

1. Learning from an experience
2. Reflecting upon the experience
3. Lessons learnt from the experience
4. Putting the lessons learned into practice (action)



The learning cycle

(Source: Pamphilon, B. and Mikhailovich, K., 2016)

Each stage is described below:

## Experience

The extension officer conducts a training activity, such as processing cherry to parchment.

## Reflection

Taking time to think about what happened during the training experience. This can be done by the extension officer doing a training debrief and taking time to think about why, for example, were the women too shy to speak or ask questions during the cherry processing training.

## Learn Lessons

Think deeply about what happened during the training experience. For example, it is known that women are very active in cherry processing, so they should have been able to speak and ask questions during the training. Why did they not do so? Was it because the women farmers did not feel comfortable and supported in the presence of men, or did the men dominate the activity and discussions?

## Action

It is important that the extension officer puts any lessons learned into practice. For example, if the extension officer repeats the training on cherry processing with the same or another group, he/she should ensure women are fully supported and comfortable in the training. Forming smaller groups allows women to feel comfortable and more likely to speak and ask questions during the training. It may even be necessary to have a separate training session for the women.

In essence, being engaged in the experiential learning cycle will enable you to improve your skills and become more effective as an extension officer in empowering farmers. Present, reflect, learn and put the lessons you have learnt into action at the next training. Remember that learning is a lifelong process; there will always be lessons to learn from each training you conduct.

## 2.7 PLANNING FOR A SMALLHOLDER VISIT

Up to this point in the module we have learnt about the extension officer's roles and responsibilities, how to communicate effectively and how to learn from training experiences. In this section we consider how to prepare for a farmer or farmer group visit or training session.

### Developing a farmer profile

Before an extension officer can diagnose the problems affecting a coffee farmer's ability to increase production and income, the first step they must do, as outlined in this module, is to develop a good understanding of the coffee farming livelihood system and the main factors influencing the farmer's management practices and farm productivity.

To assist you to identify smallholder problems in a logical step-by-step manner, a checklist can be used to develop a profile of your farmer or farmer group. The checklist should be completed with the assistance of the farmer or farmer group. The checklist helps you sort through all the factors that might be affecting coffee production.

### Farmer profile checklists

1. Start with the things that are easy to identify and observe:
  - Type of grower (typology) (Checklist 1)
  - The conditions of the coffee garden (Checklist 2)
2. Then start exploring some of the factors that are harder to observe such as:
  - Type of household production unit (Checklist 3)
  - External factors influencing production (Checklist 4)
  - Smallholder livelihood strategies (Checklist 5)
3. Finally, there are the hidden factors that only become known as the extension officer develops a trusting and respectful relationship with your farmer:
  - Internal household factors influencing production (Checklist 6)

All these factors interact to influence production.



## Checklist 1. Typology of coffee growers

### What type of grower or grower group are you working with?

Not all coffee farmers are the same. Despite the many differences amongst coffee farmers, we can identify four main categories of coffee farming households. Each category has a set of characteristics and constraints on coffee production that must be taken into consideration when providing extension advice.

Checklist 1. Typology of coffee growers		
Smallholder or Grower group name:		
Village:	District:	Date:
Type of coffee grower	Main constraints on increasing coffee income (add to the list of constraints below)	Comments
Coffee growers with poor market access (remote locations without road access; very poor road conditions)	E.g. Low income households, many without pulpers.  High transport costs	
Coffee growers close to markets (with good road access)	E.g. Households have access to many income sources in addition to coffee. These compete with coffee for land, labour and time.	
Vegetable/coffee growers (usually good market access)	E.g. Women reluctant to work in coffee as they make more money selling pineapples.  Could be short of land	
Subsistence/coffee growers	E.g. Elderly growers, little motivation to harvest their coffee.	



## Checklist 2. Coffee garden characteristics

### What is the condition of the coffee garden?

The condition of the coffee garden will have a large influence on its potential productivity. Visit the farmer's coffee holdings to assess the coffee garden on each of the factors listed in the table below.

Checklist 2. Coffee garden characteristics		
Smallholder or Grower group name:		
Village:	District:	Date:
Characteristic	Assessment – V. Good, Good, Average, Poor, V. Poor	Comments
<b>Physical features</b>		
<b>Terrain:</b>		
Drainage:	E.g. Poor	Drains blocked because not maintained for a long time
<b>Soils:</b>		
<b>Access to water:</b>		
<b>Coffee garden maintenance</b>		
Standard of maintenance:	E.g. Very Poor	Farmer's tools broken
Health of trees:	E.g. Poor	Yellow leaves & little cherry
Weeds/sanitation:	E.g. Poor	High levels of weeds
Shade management:	E.g. Poor	Yields are low due to heavy shade
Pruning:	E.g. Very Poor	No pruning for at least 3 years
<b>Pest and disease control:</b>		
<b>Fencing:</b>		
<b>Pig damage:</b>		
<b>Farming practices</b>		
General:	E.g. Good	
<b>Subsistence/coffee growers:</b>		
<b>Age of trees:</b>		
<b>Harvesting regularity:</b>		
<b>Nutrient recycling:</b>		
<b>Intercropped with food crops:</b>		
<b>Presence of mulch:</b>		
<b>Soil maintenance:</b>		



### Checklist 3. Type of household production unit

#### How does the household organise the main factors of production (especially labour and land)?

This checklist assesses the household characteristics and how coffee production is organised. It is concerned with how the household manages time and labour in coffee production and their investments in their coffee gardens (e.g. tools, land, training, etc.). A household's reliance on coffee income to meet their household needs often affects how they organise and manage household labour and the amount of investment they will put into their coffee gardens. These factors have a big impact on the farmers' coffee production and productivity.

Spend time with the farmer's family to determine the following characteristics of the household production unit.

Checklist 3. Type of household production unit		
Smallholder or Grower group name:		
Village:	District:	Date:
Type of household production unit	Profile	Comments
Size of household:	E.g. 6 members, 4 children in school	High demand for coffee income to pay school fees
Age of the household head (elderly or young):	E.g. Older household. Offspring have married and moved away	Low demand for cash
Availability of family and extended family labour:	E.g. Limited availability	Family members concentrate on garden produce for sale at local markets
Division of labour within the household – who does what:	E.g. Husband does all the coffee work; wife concentrates on food garden production	Wife says she does not receive much coffee income so concentrates on producing food crops for local markets
Access and willingness to hire labour:		
Ownership of tools:		

### Checklist 3. Type of household production unit

Time management:

Cultural obligations:

Access to land:

E.g. Limited for coffee

Rent land for production of vegetables. V. good income

Level of engagement in the cash or subsistence economy:

Reliance on coffee as a major income source:



## Checklist 4. External influences

### What are the external influences affecting a farmer or farmer group's coffee production?

External influences are factors that are often beyond the control of the farmer, but which have an impact on their coffee production and how the household operates as a production unit. For example, strong village leadership can facilitate partnerships with coffee buyers to assist households in the village to sell their coffee, and this can have a major influence on a household's labour commitment to coffee production. Discuss the following external factors with the farmer or farmer group and make an assessment of how they affect their coffee production and the amount of time and labour they invest in coffee.

Checklist 4. External influences		
Smallholder or Grower group name:		
Village:	District:	Date:
External factors	Influences	Comments
Land tenure & disputes:		
Tribal warfare:	E.g. High	Keen to harvest but it is too risky to travel to town to sell parchment
Price of coffee:	E.g. Low prices	Group not interested in coffee garden sanitation because they think returns are too low
Access to buyers & markets:		
Environmental constraints (e.g. poor water supply):		
Weather:		
Road condition:		

### Checklist 4. External influences

<b>Access to transport:</b>	E.g. Poor	Not many vehicles available to transport coffee
<b>Alternative income opportunities other than coffee:</b>	E.g. High	Live near town so alternative livelihood opportunities. More interested in pineapples than coffee.
<b>Village leadership:</b>		
<b>Law and order:</b>		
<b>Coffee theft:</b>	E.g. High	Acts as a disincentive to look after coffee garden
<b>Pests and diseases</b>		
<b>Access to extension advice &amp; training:</b>		
<b>Access to credit:</b>		



## Checklist 5. Alternative livelihood strategies

### What other livelihood strategies is the household involved in?

Coffee farmers are not just coffee farmers. They are often involved in a range of different livelihood activities in addition to coffee production. This means that they often have competing demands on their time and labour, and this explains why some growers are more willing or able to commit labour to coffee production than others.

A good extension officer will find out the range of livelihood activities farmers are engaged in and how these alternative livelihoods affect their commitment of time and labour to coffee production.

### Checklist 5. Alternative livelihood strategies

Smallholder or Grower group name:

Village:

District:

Date:

**Alternative livelihood strategies**

**Profile**

**Comments**

**Subsistence gardening:**

**Commercial production of vegetables/fruit:**

E.g. High

The wife does very little work in coffee because she spends much time growing & selling broccoli

**Betel nut:**

E.g. None

**Marketing:**

**Informal retailing:**

**Formal employment:**

**Small business enterprises:**

**Number of alternative income sources:**

E.g. Several

The family has little commitment to coffee as income is better in other activities



## Checklist 6. Internal household influences

### What are the internal household factors influencing coffee production?

Internal household influences are those factors that are difficult to recognise immediately, and only become known to an extension officer as he/she builds up a good relationship of trust and respect with the farmer. These 'hidden' internal factors may relate to who controls the distribution of the coffee income, questions of who makes decisions about coffee production, what conflicts and disagreements exist among family members, such as between a father and his sons or between husband and wife. These play a crucial role in explaining family unity and cohesiveness and the willingness of individual household members to commit their labour to coffee. More productive households tend to be those where there are good relationships between family members and where family members cooperate in household production.

It is important for extension officers to spend time with the farm family to understand how internal household factors might be influencing production. To obtain a complete picture of what is happening within the family it is important to talk to both the husband and the wife as they often have different stories to tell.

Checklist 6. Internal household influences		
Smallholder or Grower group name:		
Village:	District:	Date:
Internal household factors	Assessment	Comments
Education levels of household heads:		
Family unity and cohesiveness:	E.g. Conflicts over labour and coffee money	The sons & wife reluctant to harvest coffee because they are underpaid by male household head
Family conflict:		
Distribution of coffee income among family members:		
Cash management:		
Commitment to coffee production:		
Cash needs for family & cultural purposes (e.g. number of children in school or bride price payments):		

## Checklist 6. Internal household influences

Personal characteristics of household heads:

Family leadership:

Gambling or alcohol problems:

## The farmer profile tree

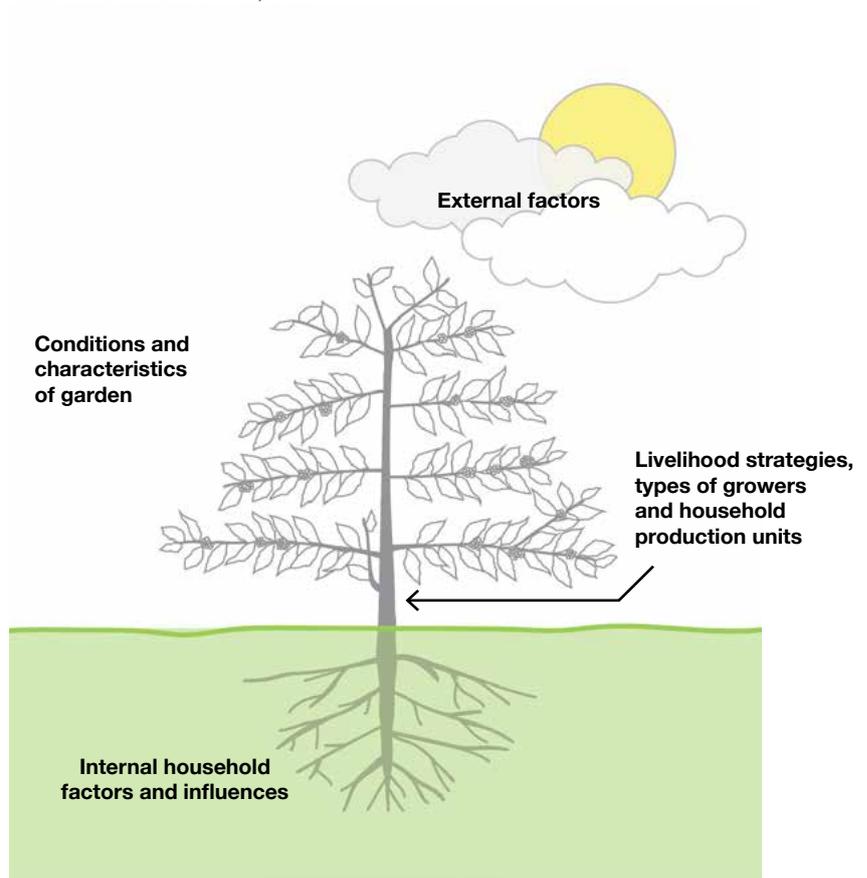
After you have completed your checklists, you are now in a better position to complete your farmer profile. One way to think of all these factors and their interrelationship is in terms of a coffee tree:

**Roots of a tree:** Internal household factors and influences

**Stem/trunk of a tree:** Livelihood strategies, types of growers and household production units

**Branches, leaves, fruits:** Conditions, characteristics of coffee garden

**External factors:** Sun, rain



Farmer Profile Tree



**Objective:**

To create a profile of a farmer or farmer group using the six farmer profile checklists

**You will need:**

The six checklists and paper and pens for each group

## EXERCISE 6

### Creating a farmer or farmer group profile

**Step 1:** Ask the trainee extension officers to break into small groups.

**Step 2:** Participants can create a scenario to form a farmer or farmer group profile using examples based on the villages where they are from or where they work as extension officers.

**Step 3:** On completion of the checklists, ask each group to summarise their farmer or farmer group profile. Draw a farmer profile tree

**Step 4:** Ask each group to share their farmer or farmer group profiles with the other groups.

## 2.8 PLANNING FOR TRAINING

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Successful extension training is not a matter of luck. It must be well planned and organised in advance. Careful planning well ahead of the chosen date helps ensure that training sessions run successfully and provide effective training with farmers learning new skills and practices. This section will help extension officers prepare for community training and field days.

### Preparing for a community visit

A community visit involves the extension officer/s visiting a community to conduct training with farmers usually through presentations, group workshops and hands-on activities.

Several activities are involved in planning a visit to a farming community. These include:

1. Reminding key community members of the visit and the goals and objectives of the training as agreed previously with the farmer group (it is useful to remind the group what was agreed upon)
2. Informing the community of the expected number of training participants, training venue, date/time of the training, expected number of extension officers to visit the community, and arrangements for accommodation of extension officers
3. Prior to the extension visit, seek confirmation from community leaders that all arrangements are in place and community members will be available to participate in training during the planned visit
4. Emphasise to the community that it is important that participants include both male and female household members. This will encourage a family team approach to farming
5. Confirm the community is in full support of the proposed visit before it takes place
6. Undertake any pre-training activities that may be required. These will be listed in each training module
7. Prepare extension material and the teaching aids that are listed in each training module
8. Monitor the safety and security situation to ensure a problem-free visit to the community
9. Keep key members of the community informed and engaged from the initial planning phase of the visit and throughout the duration of training
10. Ask a community leader to carry out community awareness prior to the visit/activity

## Planning a field day

### The purpose of field days

- Field days provide an excellent way to educate and circulate information to a large number of farmers
- They are an excellent way to bring together different extension methods to train, advise and provide farmers with information
- Field days can be used to introduce new ideas
- They provide an opportunity for farmers to also share their ideas, concerns, and their own experiences
- They are also important for building good working relationships with smallholders

### The planning process

Careful planning well ahead of the chosen date helps ensure successful and effective field days. Before planning the content of field days the extension officer should ask himself or herself four important questions:

1. **WHAT** is the key message and purpose of the field day?
2. **WHO** are my audience? (New or experienced farmers, business-minded farmers, male, female, old/young farmers, farmer group, block holder)
3. **WHERE** will the field day take place?
4. **WHEN** is the best time to hold the field day?

Each of the above questions needs careful consideration.

### WHAT – Key message

Before deciding to hold a field day the extension officer must be clear on the purpose and key messages of the field day. Under CIC's farmer demand-driven extension approach, the group will already have indicated the areas of coffee production where they would desire training. The key messages can be refined after giving more consideration to the WHO, WHEN and WHERE questions.

### WHO - The audience

Thinking about the audience for the field day will help with targeting the message to suit the farmers' needs and pitching it at the right level. Are the farmers new to coffee production or are they highly experienced coffee growers? Are female farmers well represented in the group? Each group may have different interests, knowledge, and experience, and the extension message will need to be targeted to each group's needs.

### WHERE - Location

When selecting the location, ensure that it is suitable and accessible for all stakeholders involved in the field day and that transport and other necessary resources for the day will be available.

### WHEN - Date

The extension officer in consultation with community leaders should select a date that provides plenty of time to publicise the field day and prepare posters, handouts, audiovisual equipment or guest speakers from other organisations.

Also, the extension officer must be careful to choose dates for training that do not conflict with important activities in the community calendar. For example, avoid holding training during busy times in the school or church calendar, and it probably would not be wise to hold training during the peak of the coffee season, especially when coffee prices are high. Involving community leaders in choosing the dates for the training will avoid conflicts with other activities in the community's calendar.

## Developing the key message in more detail

Once the WHO, WHERE and WHEN are considered, it is time to think more about WHAT is the key message and how best to get that message across to growers. At this point the extension officer may want to ask himself or herself:

- What is the main subject of my presentation and what are the major points or ideas I want to get across to the farmers?
- What do I want to achieve at the end of the field day? That is, what are the main objectives of the field day (e.g. increase farmers' knowledge on how to look after their soils)?
- What do I want smallholders to know and do after the field day?

A clear message and understanding the purpose of the field day will allow a focus on the type of information and other resources the extension officer will need to prepare for the field day.

## Structure of the field day

When the information is gathered, the extension officer should develop a plan (or structure) for the presentation. The following is a guide:

### 1. Introduction

Introduce yourself and tell farmers what you are going to talk about. Clearly state the aims, objectives and activities of the field day.

### 2. Discussion

The discussion should cover the main points you would like to get across to growers. Make a list of the main points and follow each main point with detailed information to support your points. Make it clear when each main point begins and ends. The discussion section of the field day is the most important.

Remember, the goal is to keep people interested in what you are saying and you can do this by making use of examples, stories from your own experience, personal experiences of smallholders, humour, asking questions to encourage involvement of smallholders, and directly involving smallholders in activities.

Charts, posters, demonstrations, and hands-on experience are very useful. The use of different and interesting communication techniques is important in capturing the interest of farmers to ensure they take up your message (see Table 1 for extension techniques).

### 3. Farmer participation

Participation allows farmers to engage with the learning through group discussions, stories, hands-on exercises, and/or question and answer sessions. When planning what type of farmer participation activity or activities to use, think about the “Cone of experience” diagram. Also, keep in mind, when people enjoy the training and are having fun they are more likely to remember the message.

### 4. Conclusion

Summarise what was presented and restate the important points. A strong ending is important. Talks should be ended by thanking growers and their leaders, and by providing an opportunity for farmers to ask any final questions before you leave.

After each field day, if there is an opportunity, it is worthwhile to seek feedback from farmers as to how satisfied they were with the day and how much they learnt (The next section is on training evaluation).



## EXERCISE 7

### Planning a field day

As part of this exercise, choose a topic for a field day, such as pruning coffee and shade trees and ask the trainees to do a fieldwork plan based on the following:

#### Field day plan

##### TOPIC:

##### INTRODUCTION

- Introduce yourself
- Define the topic

##### DISCUSSION

- List main points of discussion
- List the learning techniques to be used and their value for improving understanding of the topic

##### FARMER PARTICIPATION

- Identify the technique/s to use and justify why they have been chosen

##### CONCLUSION

- Summarise the main points
- Final questions and discussion

## 2.9 TRAINING EVALUATION AND ASSESSMENT

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At the end of each training course, it is useful to conduct a debriefing session with participants and evaluate the training in terms of which techniques worked well and which did not. Furthermore, it is important to evaluate the transfer of knowledge and to follow-up on the training to see whether farmers are using their new knowledge and skills in practice.

### What is an evaluation?

- An evaluation is a reflection on the training that has been undertaken and identifying which elements of the training worked well and which could be improved

### What is the purpose of an evaluation?

- It is a form of reflection, drawing on lessons learnt (a part of the Experiential Learning Cycle described in Section 2.6)
- It helps the extension officer to take note of and review each day's activities so as to continuously improve the quality and effectiveness of the training
- It helps the extension officer report on his/her field activity upon completion
- It can be used in planning for future training
- It is an important resource for other extension officers who may be facilitating training

### How to undertake an evaluation

- The best way to evaluate training is by undertaking a daily debrief. A debrief may take many forms, it can be done individually, in pairs, or in groups, depending on the number of extension officers involved in the activity
- The daily debrief can be done using guiding questions to help. Two basic questions to ask participants are:
  1. What **DID** work well today?
  2. What **DID NOT** work well today?

- An extension officer should take the time to answer these two questions. In addition, the extension officer should make note of 'what needs improvement and how can this be done.' Sharing your answers with the farmers is another way of improving your skills as a trainer
- In the case of a field day, if there is an opportunity, it is worthwhile to seek feedback from farmers as to how satisfied they were with the day and how much they learnt. Ask them the questions above

## Assessment and further action

Finally, on completion of the training evaluation there are important steps the extension officer must work through:

1. Work with the group to evaluate the transfer of skills and knowledge or information
2. Confirm with the farmers what the next steps will be following the visit and who will be responsible for making the next steps happen
3. It is important to follow-up on training at a later date to assess if the transfer of skills and knowledge is being applied in practice
4. Thank the farmers/group for their time



Coffee extension officers at the completion of training.

## 2.10 KEY MESSAGES FOR THE EXTENSION OFFICER

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- Extension officers have many roles. The most important one is to be a facilitator of change
- Extension officers must conduct themselves in a way that farmers will develop respect and trust for them
- Developing good relationships with both male and female farmers is central to being an effective extension officer
- An effective extension officer possesses a range of important skills. These include social skills for better communication, and problem solving skills
- The use of a variety of training and communication techniques tailored for local situations helps create effective learning experiences for farmers (such as field days, demonstration blocks, audio-visuals, group work, use of modules, posters, etc.)
- Individuals learn more and retain more information from hands-on exercises and visual aids than from written or spoken words
- Most training participants will have farming experience. The key is to empower them by asking questions and listening to them and working together as a team to learn new practices and solve problems
- Creating a smallholder profile is a useful tool for assessing and exploring solutions for farmers' problems
- To be successful, farmer/farmer group training or field days must be planned well in advance and well-presented, which means they require careful preparation
- After conducting training it is important that it is evaluated and assessed. This will inform the extension officer as to what worked and what did not work for farmers. Follow-up assessment will determine if the skills and knowledge transferred to farmers are being put into practice

## 2.11 SOURCES OF FURTHER INFORMATION

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Pamphilon B, Mikhailovich K and Gwatirisa P (2017) *The PNG Family Farm Teams Manual*. ACIAR Monograph No. 199. Australian Centre for International Agricultural Research: Canberra. [www.aciar.gov.au/publication/books-and-manuals/png-family-farm-teams-manual](http://www.aciar.gov.au/publication/books-and-manuals/png-family-farm-teams-manual)

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. [www.aciar.gov.au/publication/books-and-manuals/building-gender-equity-through-family-teams-approach](http://www.aciar.gov.au/publication/books-and-manuals/building-gender-equity-through-family-teams-approach)

Trainer's handbook; PNG National Standards for Community Development Workers - Core Unit 1 (2012) <https://pngcdwstandard.com>

Vanua H, Simeon L, Kakap R, Vai C, Flowers E and Pamphilon B (2019) *Business Training for Family Teams – A Facilitator's Manual: First steps to starting a small business*, Pacific Adventist University, Port Moresby.

Other training manuals complementary to the Extension Officer and Farmer Training Guides can be found at the following websites:

### **CARE Training Manuals**

<https://pngcdwstandard.com>

### **Family Farm Teams Program**

[www.canberra.edu.au/research/faculty-research-centres/csc/livelihoods-and-learning-for-sustainable-communities/family-farms-teams-program](http://www.canberra.edu.au/research/faculty-research-centres/csc/livelihoods-and-learning-for-sustainable-communities/family-farms-teams-program)



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