

SMALLHOLDER COFFEE PRODUCTION IN PAPUA NEW GUINEA – FARMER TRAINING GUIDE

**UNIT 4: COFFEE MARKETING** 

# MODULE 2: COFFEE CERTIFICATION



Curry G, Tilden G and Aroga L (2025) Smallholder coffee production in Papua New Guinea: A training package for extension officers and farmers, ACIAR Monograph No. 220, Australian Centre for International Agricultural Research, Canberra.

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Cover: Processing and marketing coffee (Source: Pr. Albert Ukaiya)

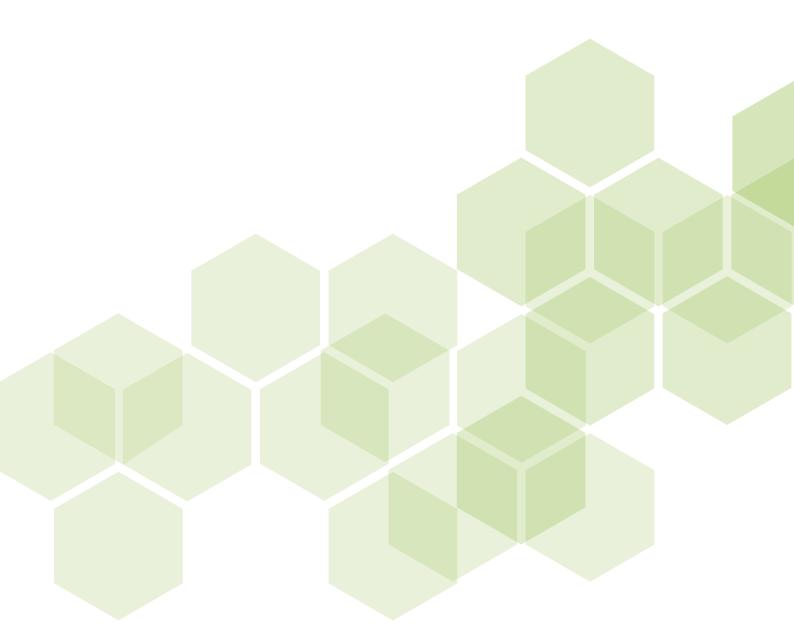


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**UNIT 4: COFFEE MARKETING** 

# **MODULE 2:**

**COFFEE CERTIFICATION** 



### 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.

### **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
Extension Principles	
Introduction to the Coffee Extension Officer and Farmer Training Guides	ACIAR Extension Officer Guide Unit 1 Module 1
The extension officer - roles and effectiveness	ACIAR Extension Officer Guide Unit 1 Module 2
Knowing Your Farmers	
Getting to know our coffee smallholders	ACIAR Extension Officer Guide Unit 2 Module 1
What factors affect smallholder coffee production?	ACIAR Extension Officer Guide Unit 2 Module 2
Strongim grup: course facilitator guide	CARE Organisational Strengthening 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/publication/MN220-PNG-coffee-manual-1



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.

### **Farmer Training Program**

Title	Module reference	
Becoming a Coffee Farmer		
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	
Managing Your Coffee Garden		
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	
Harvesting and Processing Coffee		
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	
Coffee Marketing		
Understanding the domestic coffee market	ACIAR Farmer Training Guide Unit 4 Module 1	
Kamapim ol praioriti	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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**CONTRIBUTING AUTHORS** 

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### CONTRIBUTING AUTHORS

George Curry, Geraldine Tilden, Joeri Kalwij, Matilda Hamago, Reuben Sengere and Tim Sharp

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### **Coffee Industry Corporation Ltd**

Leo Aroga, Brian Manny, Bob Kora and the late Tom Kukhang

#### **CARE International in PNG**

Chris Gard and Takus David

### **Australian Centre for International Agricultural Research**

The development of this module was supported by the following ACIAR-funded projects:

- Improving livelihoods of smallholder families through increased productivity of coffee-based farming systems in the highlands of Papua New Guinea (ASEM/2008/036)
- Improving livelihoods of smallholder coffee communities in Papua New Guinea (ASEM/2016/100)
- Evaluating carbon markets as a pathway to establishing climate resilient coffee agroforestry systems in Papua New Guinea (CLIM/2024/101)









### INTRODUCTION

#### Aim of Module:

The aim of this module is to provide trainee extension officers and farmers with a general understanding of the standards and practices that are required of smallholder coffee farmers in order for them to achieve certification.

Coffee certification is increasingly important for Papua New Guinea (PNG), as consumers demand that coffee producers, processors and exporters comply with specific standards related to social, economic and environmental sustainability. Compliance with these standards often rewards farmers with price premiums and access to new markets. These benefits can be linked to improved quality and long-term sustainability of the industry.

### LEARNING OUTCOMES

By the end of this module you will:

- Understand the meaning of certification and sustainability standards
- Understand the benefits of certification for smallholder coffee farmers
- Be aware of the important elements involved in applying for and maintaining certification status
- Be able to advise farmers/groups about their capacity to meet the requirements
- Understand the certification process
- Be able to describe the objectives and criteria of the major certification organisations
- Be able to find the certification standards applicable to each of the major certifying organisations

### **LESSON PLAN**

The module has three parts:

Sections 2.1 to 2.4 Certification and the three dimensions of sustainability

Section 2.5 How coffee farmers can become certified

Sections 2.6 and 2.7 Descriptions of the major certifying organisations

operating in PNG

TIME REQUIRED TO COMPLETE THIS MODULE: 2 DAYS

### LIST OF SYMBOLS: TEACHING AIDS



Information relating to CBB



Information for farmers that must be taken very seriously



For the Extension Officer

- White board, coloured white board marker pens and white board eraser (or butchers' paper and coloured marker pens)
- A coffee garden where environmental standards meet the core standards of most certifying organisations
- Examples of the codes of conduct and/or certification criteria of at least two certifying organisations
- Samples of certified coffee
- As many manuals as possible from the following training packages (for display purposes):
  - CARE Farmer group organisation and management
  - CARE Organisational Strengthening Training
  - ACIAR MN220 Smallholder Coffee Production in Papua New Guinea: a training package for extension officers and farmers

### PRE-TRAINING DAY ACTIVITIES

- Print sufficient copies of the codes of conduct/certification criteria
- Print two copies of the guiz for each trainee
- Arrange access to a coffee garden where environmental standards meet the core standards of most certifying organisations
- Source CARE and ACIAR training manuals
- See 'Sources of further information' at the end of this module for standards of some of the certification programs

### PRELIMINARY ACTIVITIES

### Quiz

- Before beginning the module topics, ask the trainees to complete the quiz at the end of this module
- Repeat the quiz on completion of the module topics

### **Useful terms**

Term	Definition	More information
Audit	The assessment of the performance of a farmer or farmer group against a certification program's standards. External audits are conducted by an independent auditor or assessor. Some farmers/farmer groups also conduct internal audits (also known as <b>self-assessments</b> ) against the same standards.	Sections 2.1 and 2.5
Certification organisation/ program	The criteria or standards that determine a certification. Each organisation has a label that is used to identify products that meet their certification standards.	Section 2.1
Certification standard/ criteria	The full scope of requirements that a farmer/farmer group must meet to become certified.	Sections 2.2, 2.3 and 2.4
Compliant practices	Farming activities that meet the requirements of a certification standard of a particular program	Section 2.5
Core requirements	Minimum requirements for a farmer or group to meet a certification standard. Many certification programs require that groups continue to make improvements beyond these minimum requirements.	Sections 2.2, 2.3 and 2.4
Full certification	A farmer or farmer group is fully compliant with all standards of the certifying program	Sections 2.2, 2.3 and 2.4
Internal control system	The rules, policies, and procedures designed to help demonstrate that objectives related to operations, reporting, and compliance have been met.	Section 2.5
Managing entity	A company or organisation that manages the certification on behalf of a farmer or farmer group. In some cases, the managing entity is a farmer group or cooperative, but is more common for a processor or exporter to take on this role.	Section 2.1
Non-compliant practices	Farming activities that do not meet the requirements of a certification standard of a particular program.	Section 2.5
Traceability	The ability to trace or follow a coffee product through the supply chain from the garden it was grown in to the end of the production process. This requires detailed record keeping and separation of produce throughout the supply chain.	Section 2.3

### 2.1 WHAT IS CERTIFICATION?

### Introduction

- Certification is a voluntary initiative involving all stakeholders along the coffee production chain, from growers to cafe owners
- It incorporates practices that promote social, economic and environmental sustainability and transparency
- There are several certification programs, with almost all incorporating some combination of these sustainability principles
- For the consumer, certification standards are used as a means of guaranteeing that the coffee was produced in an environmentally and socially responsible way. Many consumers are willing to pay a premium price for certified coffee based on this guarantee
- Some coffee is double or triple certified, that is, certified with more than
  one certifying program. Examples of these include 'Fairtrade + Organic' and
  'Rainforest Alliance + Organic'. This does not necessarily mean that these
  producers receive a double premium, but it communicates to consumers
  that a range of conditions have been met

### Certification in PNG

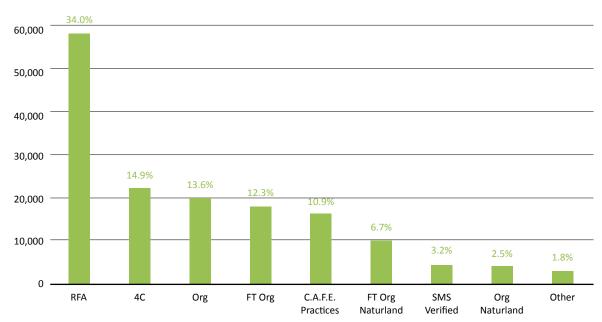
- From 2014 to 2023, PNG coffee exports under certification labels increased at an average rate of 16% per year, reflecting PNG's commitment to quality and sustainability
- In 2023, PNG exported 57,784 tonnes (963,074 bags) of coffee valued at PGK803 million. Twenty per cent of the total value of coffee exports came from coffee exported under certification labels
- The highest volume of certified coffee was exported under the Rainforest Alliance (RFA) label (34% of total certified exports). However, there has been marked growth in exports of both C.A.F.E. Practices (Starbucks) and 4C coffees



Common certification programs operating in PNG

Value and average price of certified PNG coffee exports by label, 2023				
Certification label	Value (million PGK)	Average price (PGK/kg)		
Rainforest Alliance (RFA)	49.42	14.19		
Certified Organic (Org)	22.11	15.84		
C.A.F.E. Practices	21.81	19.52		
4C	20.77	13.63		
Fairtrade Organic	19.93	15.78		
Fairtrade Organic Naturland	10.51	15.20		
SMS Verified	6.70	20.52		
Organic Naturland	3.72	14.37		
Fairtrade (FT)	1.33	15.79		
Rainforest Alliance Organic	0.32	16.81		
Other	1.37			
Total certified coffee exports	158			

### Volume (green bean equivalent) of certified PNG coffee exports by label, 2023



(Data source: Brian Manny, CIC)

Notes: Naturland is a major international association for organic agriculture, based in Germany. SMS Verified is the sustainability arm of ECOM trading, an international commodity trading and processing company based in Switzerland.

### What are the benefits of certification?

The following benefits are associated with certification:

- Better coffee quality
- · Improved production efficiencies
- Sustainable production
- Improved access to markets
- Potentially better prices for farmers, or guaranteed minimum prices
- Capacity building through access to extension and other services

Certifying programs provide advice to farmers on how to become more professional and competitive with respect to growing and selling their coffee. They also provide access to international markets and support networks.

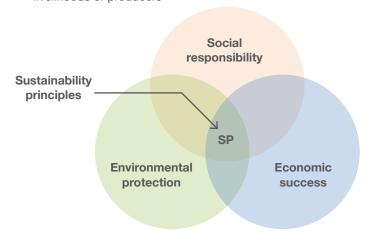
Valuable partnerships can be formed between exporters/processors and certified farmer groups. These partnerships involve responsibilities for both parties:

- The farmer group must make a commitment to supply coffee and continuously work on improving compliance and quality
- The processor/exporter must deliver training, internal audits and other administrative services

The success of these partnerships is very much dependent on both parties fulfilling their responsibilities.

### Common standards required for certification

- Coffee certification involves all participants in the supply chain, from the coffee producer to the roaster
- Standards are specified for growing, storage, processing, packaging and shipping of coffee
- The scope of most of the major certification programs covers three dimensions of sustainability: social, economic and environmental
- All certification standards share these common principles, but the emphasis placed on each principle may differ between certification organisations
- In general, all certifying programs focus on the production of quality coffee in a production system that is sustainable for the environment and for the livelihoods of producers



Coffee certification principles

### How to become certified

- To become certified, all certification programs require an individual producer or a farmer group to meet various criteria relating to each of the three sustainability principles: social, economic and environmental
- The standards are audited by an accredited certifier to confirm that the producer is compliant with the standards. Auditors are independent, registered and trained to ensure transparency and credibility of the certification
- There are several certifying programs, making it confusing to work out which one is the best to join, and what the specific requirements are for each
- The purpose of this training module is to identify the main requirements that are common to all the major certifying programs. This allows producers to work towards certification without having to decide at this stage which program to join
- The sustainability principles will be described in terms of:
  - minimum or core requirements that may allow temporary permission to trade while certification is pending
  - the key criteria for full certification
- Farmers can become independently certified, but this is not recommended in PNG due to the high cost and administration involved. It is more common for individual farmers to have their certification managed by a processor/exporter or a farmer group, referred to as a **managing entity** (see Section 2.5 for further information)
- Producers should have a business relationship with, and firm commitment from, exporters/buyers before investing in a particular certification program

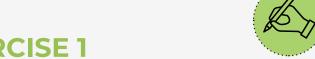


### Important things to consider before starting on the path to certification

- Obtaining certification is a complex process
- It is important for a farmer or farmer group to assess whether the certification process is suitable and viable for them, in order to avoid failure and disappointment
- Interested farmers or farmer groups should consider:
  - The cost of meeting the certification criteria
  - The time and labour involved in becoming compliant and maintaining compliance
  - Their ability to consistently produce enough coffee to cover the costs of certification
  - Their ability to transport the coffee to market
  - If there is a licenced processor/exporter that is willing to help them with certification
  - If they have market access through an appropriate licenced processor/exporter
- The key elements in maintaining certification status are:
  - A strong, sustainable farmer group that has good leadership and governance, accurate and detailed record keeping and the strong support of group members
  - A strong relationship with a licenced exporter/processor

### **Objective:**

For trainees to understand why certified



### **EXERCISE 1**

### Understanding certification

Ask the trainees to form into small groups (these groups will also be used for all future exercises)

#### **Discussion**

- 1. What are certification programs?
- 2. Have any of the trainees been involved in any certification programs? What was their experience? Was it negative or positive? What did they learn from it?
- 3. Why do consumers want to purchase certified coffee?
- 4. What benefits might certification provide for farmers
- 5. What is meant by sustainable coffee production? Ask participants to give examples of social, economic and environmental principles and discuss how they may contribute to sustainable production
- 6. Discuss everything that must be carefully considered before starting on the path to certification

### 2.2 SOCIAL STANDARDS

Social standards of certification focus on the welfare of workers. They aim to provide acceptable working conditions for farmers and their families.

\_\_\_\_\_\_\_\_\_\_



Social standards common to most certification programs



### Democracy and freedom of association

#### Core requirement

Commencement of processes to enable farmers to freely join independent organisations such as farmer associations or groups to protect their interests

#### **Full certification**

- Farmers have the right to establish, belong to and be represented by an independent organisation such as a farmer group of their choice to protect their interests
- All members of the organisation have the right to participate in decisionmaking



### Elimination of discrimination

#### Core requirement

Incidents of discrimination, harassment or abusive behaviour are being addressed

#### **Full certification**

- Incidents of discrimination, harassment or abusive behaviour are being addressed
- Equal membership rights with respect to gender, maternity, religion, ethnicity, physical conditions and political views



# Child labour and the right to childhood education

#### Core requirement

All children are encouraged to attend school – child labour is only acceptable
as part of light family work (work that is appropriate for the child's age and
physical ability) and is undertaken outside school hours

### **Full certification**

· All children of legal age are attending school



### Safe working conditions

#### Core requirement

- Provision of a safe working environment for all family members
- · Working conditions are non-exploitive and there is no forced labour
- Provision of a health and safety program, including an assessment of risks and identification of any hazards that is communicated to all workers
- Farm infrastructure, machinery and other equipment is in good condition, well maintained and poses no danger to human health
- · Provision of a first aid kit
- · A member of the family is trained in first aid

#### **Full certification**

Fully implemented health and safety program, including systematic monitoring



### Capacity and skills enhancement

#### **Core requirement**

 Training to improve agricultural and management practices is available to all family members who are engaged in coffee production, processing and transport

### \*

#### Useful resources

ACIAR's Smallholder coffee production in Papua New Guinea: a training package for extension officers and farmers

#### **CARE** training manuals:

- Family Money Management
- Organisational Strengthening Training

#### **Full certification**

- Implementation of a complete training policy that includes good agricultural and management practices
- · Documentation of all training undertaken

### **Objective:**

To understand the social standards required for coffee certification

#### You will need:

Social standards of a few certifying programs

Copies of some
CARE Organisational
Strengthening Training
manuals

A few modules from the ACIAR training package 'Smallholder Coffee Production in Papua New Guinea'

# EXERCISE 2



### Understanding social standards

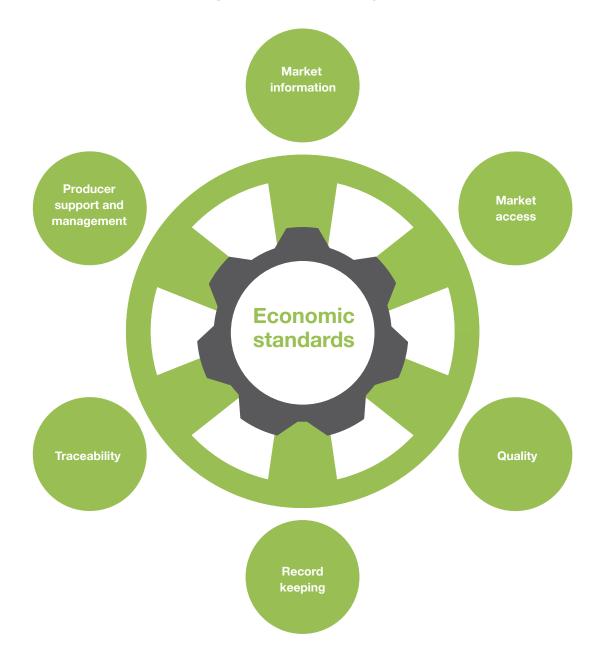
Ask the participants to form into small groups

### **Discussion**

- 1. Discuss the social standards of some certifying programs
- 2. It is simple to understand why social standards may be applicable to large coffee farms (that have a large number of employees, lots of machinery and other equipment) but how might they apply to a small family farm?
- 3. Why might social standards be important to coffee consumers?
- 4. How might certification help to improve the skills of smallholders, particularly those who are members of a farmer group or association?
- Show participants the CARE and ACIAR training manuals and discuss how this form of capacity-building education might help farmers develop their coffee production skills

### 2.3 ECONOMIC STANDARDS

Economic standards allow farmers to generate a reasonable income, have free market access, and secure sustainable livelihoods. The implementation of these standards requires the group seeking certification to establish an **internal management** or **internal control system**.



Economic standards required to achieve sustainable livelihoods for farmers



### Market information

### **Core requirement**

- Farmers receive regular updates on farm gate prices that are connected to local markets that are differentiated for quality
- Producers are aware of pricing mechanisms attributed to coffee quality and can enact processes to take advantage of them

#### **Full certification**

- Farmers receive regular updates on farm gate prices that are connected to local markets and differentiated for quality
- The relationship between quality and price is documented



### Market access

### Core requirement

 The managing entity provides farmers with services such as market information, transportation, financial credit and supply of inputs to improve their access to markets

#### **Full certification**

 The producer assesses the types of services required and the managing entity provides access to services at market rates for fertilisers, pesticides, equipment, credit, planting material/seedlings and technical assistance (Note: farmers should be striving for minimal levels of chemical farm inputs)



### Quality

### Core requirement

- Quality requirements are defined for farmers
- A plan for monitoring quality from the farm to the managing entity

### **Full certification**

- Systematic assessment of quality from the farm to the managing entity
- · Assessments of quality are in place for cherry and parchment



Drying good quality coffee parchment (Credit: Pr. Albert Ukaiya)



### Record keeping

### Core requirement

- Steps are taken to keep records of some production activities, according
  to the producer's level of education (e.g., technical and financial records on
  yields, use of inputs, costs and prices received)
- Templates for record keeping are provided by the managing entity

#### **Full certification**

- Records of all technical and financial aspects of production
- · Documented improvement in the farm's efficiency



### Traceability

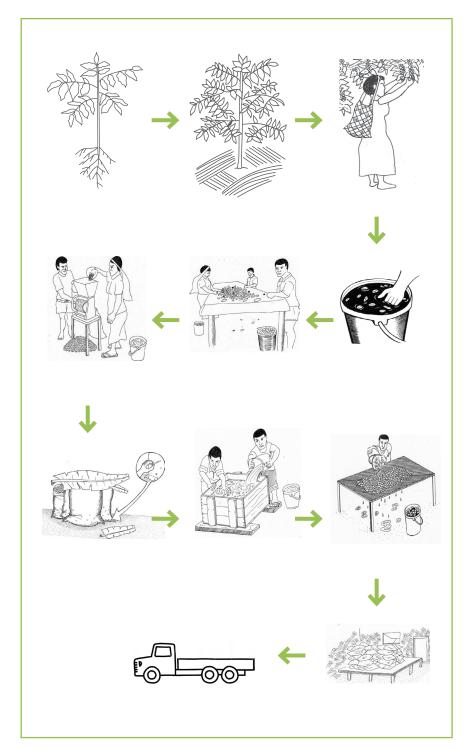
Detailed documentation is required for certification so that an audit trail can be created. An audit trail allows the certifier to trace or follow the coffee back to the certified farm or individual coffee garden and describes the processes and products used in the course of production.

### Core requirement

 Coffee that meets the criteria of the certifying body is kept separate from other sources of coffee

#### **Full certification**

- Compliant coffee is kept separate from other sources of coffee
- Documentation on compliance is available for inspection by auditors



Steps in the on-farm coffee production process from the origin of the planting material to transporting dried coffee parchment to the mill. Detail of each step is to be provided for the audit trail.



### Producer support and management

### **Core requirement**

 The managing entity provides the full scope of requirements and support services to producers to enable them to embark on the certification process

#### **Full certification**

 The managing entity provides support services for producers to ensure they maintain compliance in all three dimensions of sustainability



- Coffee smallholders in PNG are compliant with most environmental and social standards of the major certification programs
- The **greatest risk to compliance** is having internal control systems that are not reliable and not effective
- Sound record keeping and traceability are central to maintaining certification status

### **Objective:**

To understand how certification may help farmers to access market information





### Accessing market information

#### **Discussion**

- 1. How do the farmers currently access market information?
- 2. Do the farmers currently use fertilisers, herbicides, pesticides, tools and equipment, credit, planting material/seedlings or draw on technical assistance?
- 3. Are the farmers familiar with pricing mechanisms attributed to coffee quality (coffee grades)? How do they normally find out this information?
- **4.** How might certification improve farmers' access to market information, inputs and services?

### **Objective:**

To understand the importance of record keeping and traceability

### You will need:

Economic standards of some certifying programs

White board, coloured white board marker pens and white board eraser (or butchers' paper and coloured marker pens)



### **EXERCISE 4**

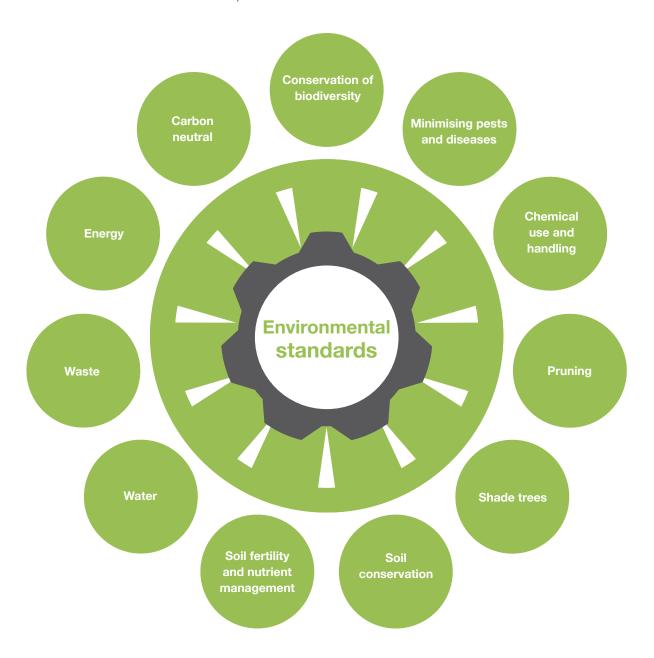
### Record keeping and traceability

#### **Discussion**

- 1. Discuss the following points along the coffee production chain at which records should be kept for certification purposes:
  - Coffee garden inputs and management (e.g., seed/seedling source, variety, fertiliser application, and the management of shade, weeds, pest and disease)
  - Harvesting (containers used)
  - Transport to processing area
  - Processing and handling (including grading, pulping, fermenting, washing, drying, blending)
  - Storage (location and type of structure, pest management)
  - Transport to point of sale
- 2. How will these records enable traceability of coffee?
- Stress to the trainees the importance of keeping good records. If adequate records are not kept by farmer groups, they risk losing their certification status and price premium

### 2.4 ENVIRONMENTAL STANDARDS

Environmental standards relate to the conservation of forests and natural resources. Various activities involved in coffee production may have a negative impact on the environment and it is important that these are recognised and acted upon.



Environmental standards common to most certification programs



# **1** ✓ Useful

### ACIAR Farmer Training Guide modules:

- FT\_U1\_M3 Establishing a new coffee garden
- FT\_U2\_M1 Weed control
- FT\_U2\_M3 Shade management
- FT\_U2\_M4 Drainage
- FT\_U2\_M7 Soil fertility and nutrient maintenance

### Conservation of biodiversity

### Core requirement

- No exploitation of endangered or protected species of native flora or fauna
- · Conservation of natural vegetation
- Protection of sensitive areas, such as slopes, creeks/riverbanks and wetlands
- Development of a conservation program that includes mapping of conservation areas

#### **Full certification**

Implementation of a conservation program





### Measures to minimise pests and diseases

### **Core requirement**

 Where possible, introduction of measures to minimise the incidence and impact of pests and diseases and break their life cycles using biological, physical and other non-chemical control methods

### **Full certification**

• Implementation of an integrated pest management program



### Useful resources

ACIAR Farmer Training Guide modules:

- FT\_U2\_M5 Pest and disease management
- FT\_U2\_M6 Coffee berry borer management





#### Useful resources

ACIAR Farmer Training Guide modules:

- FT\_U2\_M1 Weed control
- FT\_U2\_M2 Maintenance pruning and rehabilitation
- FT\_U2\_M3 Shade management
- FT\_U2\_M5 Pest and disease management
- FT\_U2\_M6 Coffee berry borer management
- FT\_U2\_M8 Intercropping in your coffee garden

### Chemical use and handling

### Core requirement

- Monitoring of pest, disease and weed levels
- Minimal use of pesticides if pesticides are necessary, less-hazardous types should be used, and these should be applied in ways that minimise health risks
- A plan for the safe storage, use and disposal of pesticides and other chemicals
- Training for farmers in safe storage, handling, application and disposal practices as required by legislation and manufacturer's instructions
- Protective clothing available for safe chemical application
- · Records of chemical use and any training received

Note: Some organisations also require the avoidance of most synthetic chemical inputs (e.g., inorganic fertilisers, pesticides, antibiotics and food additives), genetically modified organisms, irradiation and the use of biosolids. In some cases, farmland can only be used for certified production if it has been free from synthetic chemicals for several years (often, three years or more).

#### **Full certification**

- Documented integrated pest management system based on systematic monitoring
- The use of only the lowest health risk pesticides, or, for some certifying programs, organic pesticides only
- Records of chemicals used and rates of application on all crops in the garden or block, not just coffee



### **Pruning**

#### Core requirement

 Implementation of a pruning program to maintain coffee trees, promote new tissue generation and minimise environmental stresses

### **Full certification**

 Adequate pruning according to crop needs, environmental conditions and pruning guidelines



- FT\_U2\_M2 Maintenance Pruning and Rehabilitation
- FT\_U2\_M3 Shade management
- FT\_U2\_M5 Pest and Disease Management
- FT\_U2\_M6 Coffee berry borer management







### Shade trees

### Core requirement

- Some programs allow only native tree species to be used as shade trees
- There may be a requirement for a minimum number of shade tree species
- Some programs require that a minimum level of shade cover be maintained

### Useful resources

ACIAR Farmer Training Guide modules:

FT\_U2\_M3 Shade management

#### **Full certification**

The entire coffee garden is planted with shade trees at an appropriate density. The shade trees preferably fix nitrogen and produce an adequate canopy to optimise the micro-climate and biodiversity



### Soil conservation

### Core requirement

- Measures are taken to protect soils from erosion by use of vegetation and/or plant residues and other appropriate soil conservation techniques
- Vegetative ground cover and mechanical weeding are used to reduce agrochemical use whenever possible

#### **Full certification**

No signs of erosion



Litter from shade trees protects the soil from erosion and suppresses weed growth. Soil fertility also improves as the litter decomposes.



### Soil fertility and nutrient management

#### **Core requirement**

- Development of a fertilisation plan that considers soil and plant needs
- · Recycling of organic matter

#### **Full certification**

- All organic waste is recycled and used as fertiliser
- Use of practices that enhance soil fertility (e.g., crop rotation, intercropping, agroforestry, incorporation of compost or green manures into the soil, the use of ground cover crops, mulch, or any other conservation agriculture practices)
- Fertilisers only applied in accordance with crop needs based on soil/plant analyses. Some certifying programs only allow the use of organic fertilisers and naturally occurring mineral fertilisers



ACIAR Farmer Training Guide modules:

- FT\_U2\_M3 Shade management
- FT\_U2\_M4 Drainage
- FT\_U2\_M7 Soil fertility and nutrient maintenance
- FT\_U3\_M1 Coffee harvesting and processing



### Water

#### Core requirement

- All water sources are identified, and measures are taken to conserve water where possible
- Processes are put in place for the treatment of wastewater from wet processing and sewage
- Hazardous wastes are disposed of safely to prevent contamination of plants, soil and water, and harm to humans or animals

#### **Full certification**

- Maximum conservation of water resources
- · Identification of different wastewaters and appropriate safe disposal of each



Water resources must be protected



## **i**⁄

### ACIAR Farmer Training Guide modules:

 FT\_U3\_M1 Coffee harvesting and processing

### Waste

### Core requirement

Safe disposal of hazardous waste

### **Full certification**

- Minimal waste generation
- Maximum recycling
- All waste generated is disposed of safely



After processing coffee cherry, the pulp can be used as mulch in coffee or food gardens.



### Energy

### Core requirement

- Identification of potential renewable energy sources (e.g., solar energy)
- Reducing energy use

#### **Full certification**

- · Renewable energy sources are used when available
- · Improved energy use efficiency



Solar dryer used for drying coffee parchment.



### Carbon neutral

### **Core requirement**

- No deforestation or destruction of vegetation in protected areas or ecosystems that sequester (store) carbon
- Minimise the use of fertilisers

### **Full certification**

• Implement measures that ensure that an equivalent amount of carbon dioxide (CO<sub>2</sub>) generated in the production of coffee is sequestered on-farm. Practices that promote carbon sequestration on-farm include incorporating cover crops into the soil and planting shade trees. Practices that can be adopted to minimise the loss of carbon from a coffee garden include recycling of weed debris as mulch, retaining intercrop debris in the coffee garden and returning coffee processing waste like pulp to the coffee garden



Shade trees (Leo Aroga)

Cover crop (Esley Peter)

Coffee pulp (Mark Thomas)

### Note on carbon neutral certification

With the burning of fossil fuels (coal, oil and gas) and deforestation over the past few centuries,  $\mathrm{CO}_2$  levels in the atmosphere have been rising. Carbon dioxide is a naturally occurring gas that is vital for life on earth, including plant growth. It is known as a 'greenhouse' gas because it stores energy from sunlight, which causes the Earth's atmosphere to warm. As  $\mathrm{CO}_2$  levels in the atmosphere increase, the Earth's temperature rises, leading to climate change. The developed world is responsible for most of the carbon emissions, but the impact is felt globally.

Because of the potential impacts of climate change on people and the environment, many researchers have been looking for ways to both reduce the amount of  $CO_2$  entering the atmosphere and remove it from the atmosphere. The use of renewable energy sources, such as solar and hydroelectric power, reduces the amount of  $CO_2$  entering the atmosphere. Storing  $CO_2$  in a non-gas form – known as 'carbon sequestration' – removes it from the atmosphere. Trees are an efficient form of carbon sequestration. As they grow, trees absorb  $CO_2$  from the atmosphere and store the carbon in their trunks, branches, leaves and roots. Half of the dry biomass of a tree is carbon.

These carbon reduction efforts can provide opportunities for farmers. While it has not yet been adopted in PNG, carbon neutral certification may provide incentives for farmers to adopt agroforestry practices that reduce the amount of CO<sub>2</sub> in the atmosphere. Key points include:

- Global efforts to reduce climate change have created demand for products that are certified as carbon neutral (i.e. zero greenhouse gas emissions)
- The production, processing and transport of coffee can all produce CO<sub>2</sub> emissions, but farming can also store or sequester carbon. To be certified as carbon neutral, the production of the coffee needs to store more carbon than it emits
- This generally involves both reducing carbon emissions (e.g., by reducing fertiliser use and using energyefficient processing technologies) and storing or sequestering carbon on farm (e.g., by planting shade
  trees or small woodlots)
- Coffee can be certified as carbon neutral at different points in the supply chain. This means coffee could be certified as carbon neutral at just the farm, at both the farm and mill, or at the farm, mill and exporter
- Coffee farmers can potentially receive higher prices for their coffee by adopting farming practices that store enough carbon to offset the emissions produced by coffee mills and exporters
- Carbon neutral certification can be a separate certification or included with other certifications already held (e.g., organic certifications and Fairtrade can include carbon neutral certification)
- Carbon neutral certification is active in a number of other coffee producing countries and has been shown to result in higher prices. It is likely to emerge as a certification opportunity for coffee farmers in PNG in the near future
- Current research is investigating the potential for carbon neutral certification to deliver benefits to smallholder coffee farmers in PNG. A farmer training module on carbon certification will be developed from this research

### **Objective:**

To understand which environmental standards may be most relevant to smallholders

#### You will need:

Environmental standards of some of the certifying programs

White board, coloured white board marker pens and white board eraser (or butchers' paper and coloured marker pens)

A copy of Farmer Training Guide, Unit 2, Module 3, 'Shade management'

### **EXERCISE 5**



### Understanding environmental standards

#### **Discussion**

- 1. Discuss the environmental standards of some certifying programs
- 2. Which environmental standards do the farmers already comply with (e.g., natural vegetation/biodiversity, shade trees, soil fertility management, processing waste)?
- 3. Which of their activities may not comply with some certification programs?
- 4. Do the farmers have shade trees in their coffee gardens? How many species do they have? What density of shade trees are planted in their coffee gardens? Why would shade trees be a requirement for some certifications? (see Farmer Training Guide, Unit 2, Module 3, 'Shade management')
- 5. A complex agroforestry system is a forest structure that combines a diversity of trees and crops to produce a variety of forest and agricultural products. How could the adoption of a complex coffee agroforestry system be an advantage in meeting environmental certification requirements? How else could it benefit the farmer (consider labour inputs, income diversification, pest and disease control, etc.)?

### 2.5 BECOMING A CERTIFIED COFFEE FARMER

Once a decision has been made to become certified, the applicant begins a process that is similar across most certification programs.

### Form a farmer group or cooperative



#### Useful resources

CARE Organisational Strengthening Training manuals:

- Kamapim ol Praioriti
- Kamapim ol Eksen Plen
- Setim Gutpela Kastom Bilong Ronim Grup
- Wok Bilong Meneja na Memba na Lida
- Strongim Grup Course Facilitator Guide

- In most instances, the pathway to certification for a farmer is simpler if they are part of a farmer group that can apply for group certification
- Some certifying organisations require coffee farmers to form a cooperative or farmer group, although informal collaborations may be acceptable as a starting point
- The farmer group may be required to be legally constituted based on written agreement with its members. This will incorporate central management, established decision-making procedures and legal capacity
- The farmer group must be run democratically, meaning all members have a voice in decision-making
- To be successful, the farmer group must have good governance in place.
   This means there are clear rules about how the group runs and how decisions are made
- The farmer group may be required to have a minimum number of members
- The farmer group decides which certifying program to join and all members work together to implement the program

### Affiliation with a processor/exporter

- Farmer groups or individual farmers can be certified under the umbrella of a processor/exporter. This is the better option for smallholder farmers in PNG
- The processor/exporter must have the same certification status as the farmer group or individual farmers
- The processor/exporter takes on the overarching responsibility of certification and provides much of the required resources and administration (e.g., training, record keeping, annual inspections)
- The processor/exporter may cover the certification costs
- Prior to affiliation, the farmer group must develop a supply relationship
  with the processor/exporter to demonstrate that they have the capacity
  to reliably deliver adequate quantities of quality coffee. Once this
  relationship is established, the processor/exporter will work with the farmer
  group or individual farmers to become certified
- Farmer groups can choose to be independently certified and sell coffee independently. However, this option is administratively and financially difficult for groups to maintain
- If a farmer group contributes a small volume of coffee to a certified full container load of coffee (that is, part of a blend), naming rights for the coffee will be with the exporter/processor
- If a farmer group can deliver container loads of coffee, or small quantities of premium quality coffee that can be marketed individually, the group's name can be marketed. This is the preferred option for many exporters/processors

# Selecting a certification program

It is necessary for farmer groups to understand the requirements of the different certifying programs so that they can decide which one to join. The following factors should be considered:

- Current status of the farmer group identify strengths and weaknesses of individual farmers within the farmer group with regard to certification standards
- Production methods prioritise current practices; consider what could be improved in terms of sustainability and the resources available to implement solutions
- · Costs, which will vary between organisations, including:
  - Upfront costs (e.g., for the farmer group to become legally constituted, certifying program application/registration fees)
  - Direct costs involved in meeting the certification standards these are one-off or very infrequent costs (e.g., building of adequate coffee storage facilities, acquiring tools, establishing appropriate shade tree levels)
  - Ongoing indirect costs in maintaining the standards (e.g., documentation, segregation of certified coffee, meeting environmental criteria)
  - Auditing expenses
- · Potential markets and opportunities

Coffee farmers can be certified by more than one certification organisation. Each certification has its own requirements and record keeping, but often they share similar requirements and records. This can make additional certification easier.

# The pathway to certification

The pathway to certification begins with applying to the certification organisation for information on their requirements and standards. Producers then do a self-assessment or gap analysis before auditors visit to conduct a comprehensive review of their farming operations. For certification to be maintained, auditors will regularly monitor compliance with the certification standards.

## Steps to obtain and maintain certification

- 1. Request application
- 2. Receive questionnaire, certification requirements, cost/fee schedule and contract
- 3. Complete questionnaire and pay application fee
- 4. Payment of initial certification fee upon successful application
- 5. Complete self-assessment and gap analysis
- 6. Visit from auditor
- 7. Discuss non-compliances
- 8. Temporary permission to trade or 'in transition' (if production reaches minimum criteria)
- 9. Address non-compliances
- 10. Certificate issued once all non-compliances corrected
- 11. Follow-up audits to check on compliance

# Application and registration

Most certification organisations require producers to apply for registration or membership. Supporting documentation might also be needed. This lets the organisation:

- Establish whether the applicant (farmer group) is bound by the scope of the certification system
- Provide the farmer group with information regarding the certification process, such as the process of implementation, code of conduct and documentation requirements

Applications and registration can often be done online, but this can be too difficult in PNG where internet connections are unreliable, unless a processor/exporter provides assistance. Typically, when the organisation is contacted, a certification package with all the relevant information is mailed to the group.



## Certification package

- Certification standards
- Self-assessment checklist
- Standards implementation guide
- Registration form
- Request for documentation
- · Application/registration fee schedule

Fees for registration, membership and applications vary depending on the organisation. Fees are usually related to the type of farmer group and the area or yield of the production system.

Farmer groups should have a good understanding of the certification program and be well prepared before they proceed with certification.

## **Evaluation of application**

The certifier of the program evaluates the application, provides feedback on the status of the farmer group and recommends how they should prepare for the next step, which is assessment by an independent auditor.

# Preparation for initial assessment

The initial assessment involves a comprehensive review, called an audit, of all parts of the production process. Producers should prepare for this before the audit.

## Internal control system

- All certification programs require some form of comprehensive internal control system
- Internal controls are the rules, policies and procedures designed to help demonstrate that objectives related to operations, reporting and compliance have been met
- They provide a guide for administration and monitoring improvement, and are also a tool for auditors to monitor and assess compliance
- The overall objective of the internal control system is to ensure that it is easy to detect non-compliances in the production system. It also includes ways to prevent or correct issues before the external audit

## Documentation/record keeping

- It is important for the farmer group to have relevant documentation in place before an audit
- Documentation is required for almost all practices undertaken by the farmer group, including records on yields, use of inputs, costs and prices received, risk assessments and training

## Self-assessment and gap analysis

Prior to auditing, all certification programs require the farmer group to undertake a self-assessment. A checklist of the standards required by the certification program is used by the farmer group to review its current practices and conduct a gap analysis. Every individual smallholder must be inspected as part of this self-assessment process.

The purpose of a gap analysis is to:

- Identify gaps between the current production system and the requirements of the certification program
- Identify compliant practices areas that already align with the standards of the certification program
- Identify non-compliant practices areas that do not yet meet the standards of the certification program
- Identify if the group is ready to be audited
- Provide recommendations to help the group make the changes needed to comply with the standards of the certification program



## Fix non-compliances before the audit

If a self-assessment reveals that the group is non-compliant in any areas, these **must be fixed before any formal audit application**. A failed audit can be a costly exercise.

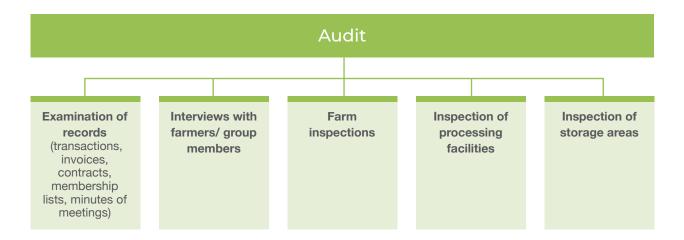
## Scheduling the audit and payment of fees

- Before beginning the certification process, it is important that the farmer group can pay the required fees
- The independent auditor will issue the farmer group with an invoice and after full or part payment, the farmer group will be contacted to arrange the initial audit
- If the farmer group cannot meet the audit fees, the exporter may be able to pay on behalf of the farmer group and later recoup the money from the farmer group's sales
- It is important for farmer group members to be fully available for the auditors and that auditors have full access to all parts of the production process

## **Audit process**

- Auditing is carried out by independent auditors, meaning they do not have
  a vested interest in the outcome of the audit. The auditors are paid the same
  amount of money whether or not the farmer group is considered compliant
- Auditing involves checking and cross-checking information from different sources
- All documents will be inspected, including transactions, invoices, contracts, membership lists and minutes of farmer group meetings (minutes are the written records of what a group discussed at a meeting and the decisions made)
- Auditors inspect processing facilities, storage areas and production sites to check on working conditions, health and safety, and traceability of the product
- Auditors meet and interview workers and members of the group so that they
  can cross-check information and see how the group runs. Problems within
  the group can usually be identified by the auditors during these meetings

- The auditor can choose which farms to visit and which people to interview
- Individual farms are visited by auditors to observe production practices and to talk to farmers individually
- Any non-compliances will be recorded by the auditor
- The certifying program will assess the auditor's report and notify the farmer group of the outcome



## **Auditing process**

The auditing process begins with an opening meeting with the farmer group. The auditor will then review production systems and documents, conduct interviews, inspect production areas and write up a report with evidence of compliance. The audit finishes with a closing meeting.

Auditing process
1. Opening meeting
2. Systems and document review
3. Interviews
4. Inspection of production areas
5. Write up and collation of evidence
6. Closing meeting

## Periodic audits

- All certifying bodies hold periodic audits. These are similar to the initial audit and involve on-farm inspections including a physical tour, examination of records and talking with farmers
- The purpose of periodic audits is to check for compliance with the certifying criteria. Any non-compliances will be noted by the auditor
- The farmer group must correct any non-compliances before a new certificate of certification can be issued
- Some certifying organisations may also conduct unannounced audits if they suspect a non-compliance is occurring

## Official certification

## Temporary permission to trade

- Most organisations have a minimum threshold of criteria that must be met for certification
- The farmer group may be granted permission to trade under the certifying program's label if no major non-compliances are identified
- This is only a temporary allowance to start trading under certain conditions, and does not necessarily represent full certification

## **Full certification**

- Full certification will be granted to farmer groups only when all non-compliances have been resolved
- To maintain certification, the group must continue to meet the standards of the certifying organisation. This will be monitored by the organisation's auditing process
- Farmer groups should do regular self-assessments. This involves an assessment of all individual farmers in the group to ensure they are on the right path for compliance and identify any areas where they need to improve. Some programs stipulate an annual assessment of all individual farmers, others require a percentage to be conducted each year with all being assessed within a fixed period (e.g., three years)

## Certification fees

- All certifying bodies charge annual inspection/certification fees
- · Certifying agencies all have their own fee schedules
- Fees vary significantly depending on the size and type of producer organisation, farm size or production, and location. An advantage of forming a farmer group is that the certification expenses are lower per individual farmer
- For most certifying programs, the certificate holder pays the auditor directly for audit services. Audit fees are not set by the certifying program
- Some auditors charge per diem (per day) for their services while others charge a lump sum based on audit sample size
- Some certification bodies also charge a fee per sale/trade. If a farmer group
  is collaborating with an exporter, the exporter will usually pay this fee (in most
  instances, this is simply passed onto the buyer)

## **Estimated cost of certification**

The cost of certification for a supply chain depends on the number of farmers, buying points and exporter/processor units to be certified. The final exporter/processor is also included if the supply chain falls under investments by the exporter.

#### **Example:** Fairtrade certification for 500 farmers

 In 2024, for a group with 500 farmers, three buying points and one exporter/processor, the estimated annual cost of Fairtrade certification was 110,000 PGK. This cost included 80,000 PGK for compliance and 30,000 PGK for auditing costs.

(Source: Hosea Jr Mailil)

# Producer support services

- All certification bodies provide support services for producers, which are usually funded by membership fees
- The purpose of the support services is to enable farmers to become better organised
- Examples of support services include advisory services and training to help with compliance
- Training may be related to any of the three dimensions of sustainability: social, economic and environmental

## **Objective:**

To revise the major steps involved in becoming certified

### You will need:

White board, coloured white board marker pens and white board eraser (or butchers' paper and coloured marker pens)

# **EXERCISE 6**



## The pathway to certification

### **Discussion**

- 1. Ask participants to list all the steps involved in certification
- 2. Draw a flow diagram based on the list of steps
- **3.** Discuss the meaning of each step to ensure participants have a clear understanding of the process

## **Objective:**

To identify the barriers to certification for smallholders

## You will need:

White board, coloured white board marker pens and white board eraser (or butchers' paper and coloured marker pens)

# **EXERCISE 7**



## Barriers to certification

## **Discussion**

- Ask the trainees to list the likely main barriers to smallholders becoming certified
- 2. Discuss how each of these barriers may be overcome

## **Objective:**

To consider the viability of becoming certified

## **EXERCISE 8**



## Viability of certification

Independent certification can be very attractive to farmer groups, but make this point very clear: **Be careful what you step into.** 

Groups must do a financial sustainability check – for example, can they produce enough quality parchment to cover the costs, who will buy the coffee? There is a large cost to certification, so if the group has limited production, no established buyer, or has trouble moving their coffee from the coffee gardens to the processor/mill, independent certification may not be viable.

## Discussion

- **1.** After learning what is involved in certification, do the farmers think it is potentially viable?
- 2. Can the farmers meet the standards of the certifying programs?
- **3.** If the farmer/group meets these standards, can they consistently produce enough coffee to cover the annual certification costs?
- **4.** Is there a licenced exporter willing to assist the group with certification?

# 2.6 OBJECTIVES OF THE MAJOR CERTIFYING ORGANISATIONS

There is no uniform coffee certification system. However, all the major certifying programs incorporate the fundamental principles of sustainability as described previously in this module. Each certification organisation differs in its approach, but their objectives are similar. Most aim to develop sustainable livelihoods for their members while guaranteeing buyers that the coffee has been produced according to their standards. This section describes the different approaches and missions of the major certification programs operating in PNG. Information has been sourced from the program websites.



## Rainforest Alliance

### Certification

- Rainforest Alliance Sustainable Agriculture Standard
- Auditors: Control Union BV, Sustainable Development Services (SDS), Ecocert, IMO Control India, and Preferred by Nature

## **Description**

- Rainforest Alliance is an international non-profit organisation that works to conserve biodiversity, ensure sustainability of livelihoods and forest communities, promote human rights, and help farmers mitigate and adapt to the effects of climate change
- Rainforest Alliance merged with UTZ in 2018 to become the single entity,
   Rainforest Alliance. The 2020 Certification Program took effect in July 2021
- The 2020 Certification Program requires buyers to pay a sustainability differential, which is a mandatory additional cash payment to certified farms over and above the market price. There are no restrictions or requirements about how this payment is used. The amount is negotiable between the first buyer and the holder of the certification
- In addition, there is a sustainability investment requirement for buyers. Buyers must make cash or in-kind investments to farmers based on the needs identified in the farmers' investment plans. This investment is critical not just for the implementation of the certification scheme, but for ongoing improvements in sustainability (social, economic and environmental). The purpose of the investment is to build a more equitable supply chain

## Requirements of the standard

- Core requirements are fundamental areas of sustainable agriculture that
  must always be met for certification (e.g., group members keep sales receipts;
  plant varieties are selected based on quality, productivity, resistance to pests
  and diseases and suitability for the climate; native vegetation is maintained)
- Mandatory improvement requirements must be met as the producer or producer group advances on its journey to sustainability (e.g., farmers implement measures to prevent pests and diseases and break their life cycles, to support soil health and to improve weed management)
- Self-selected improvement requirements are chosen by certificate holders based on their own risk assessment or aspirations (e.g., farmers renovate the certified crop when needed according to age, disease or other causes, to maintain productivity)

## **Advantages**

 Rainforest Alliance collaborates with Nespresso in supporting farmers that are part of the Nespresso AAA Sustainable Quality™ Program

## **Disadvantages**

 As with all certification programs, there must be sufficient production to cover the full costs of certification

## **Fairtrade**

#### Certification

- Fairtrade Standard for Small-scale Producer Organizations
- Auditor: FLOCERT

## **Description**

- Fairtrade is a non-profit organisation whose goals are to help marginalised small producers achieve better trading conditions and to promote sustainability
- Fairtrade aims to provide support to small producers and to develop producer and trade networks and alliances
- The majority of members must be smallholders who do not depend full-time on hired labour. The farms must be run and managed primarily by household labour
- Fairtrade is an alternative to conventional trade. It aims to provide producers
  with a price that covers the costs of sustainable production (a set minimum
  price) as well as offering an additional premium for producers to invest in
  their communities
- The Fairtrade certification program also addresses issues such as climate resilience, human rights, gender equality, child protection and youth inclusion
- Fairtrade has a climate standard which enables smallholders and rural communities to gain access to the carbon market

## Requirements of the standard

- Core requirements that reflect Fairtrade principles (e.g., a farmer group accepts announced and unannounced audits of its farms and premises)
- Development requirements that refer to continuous improvements that are assessed using a scoring system (e.g., a farmer group is implementing measures to enhance soil fertility)

### **Advantages**

 The enforcement of governance systems is likely to facilitate longer-term sustainability of a certified cooperative or group

## **Disadvantages**

- The need for formal cooperatives with elected officials who manage community funds can create tensions or conflicts if the leaders are not trusted by group members
- Occasional lack of clarity in pricing due to its dependence on world coffee prices, which can fluctuate rapidly
- Fairtrade certification alone may not provide the best value for the farmer.
   It provides more value if it is combined with another certification, such as
   Certified Organic, to improve marketing opportunities





# 4C – The Common Code for the Coffee Community

#### Certification

- 4C Code of Conduct
- Auditors: ICERT and Sustainable Development Services (SDS)

#### **Description**

- 4C is a multi-stakeholder organisation committed to addressing sustainability
- 4C aims at strengthening the production of socially fair, economically viable and environmentally friendly coffee
- The inclusion of smallholder farmers is an important part of 4C certification, which is based on continuous improvement
- The 4C Portal enables the traceability of certified coffee along the supply chain
- 4C enables additional certifications for coffee producer groups that reduce greenhouse gas emissions in cultivation as part of the 4C Carbon Footprint Add-On, or that are more deeply committed to equality and human rights with the 4C Gender Equality Add-On and 4C Food Security Add-On

## **Certified Organic**

### Certification

- The umbrella organisation for organic certification is the International Federation for Organic Agriculture Movements (IFOAM) – Organics International. IFOAM – Organics International has partnered with the United Nations Food and Agriculture Organization to improve the livelihoods of rural populations, with smallholder farmers being one focus
- There are many organic certification organisations, and many countries have their own certification standards. Although all organic standards are basically the same, the certification standards used will depend on which international market is being targeted for export. For example, the USA's National Organic Program, EU Organic and Japanese Organic have similar standards. Exported produce requires an organic seal that is relevant to the country to which it is being exported, to show that it has been certified according to that country's organic standards
- Auditors: ACO Certification Ltd, Aditi Organic Certifications Pty. Ltd., Sustainable Development Services (SDS), CERES GmbH and NASAA Certified Organic (excluding EU Organic)

## **Description**

- Organic certification is based on principles of sustainability. Its purpose is to sustain the health of soils, ecosystems and people
- Organic agriculture relies on good management of ecological processes, biodiversity and cycles adapted to local conditions. It prohibits the use of inputs that these certification organisations perceive to have a negative effect on the environment, such as inorganic fertilisers and pesticides, and genetically modified seed or crop protection products
- Organic certified produce is the most highly regulated of all produce



Naturland Association for Organic Agriculture



Japanese Agricultural Standard



EU Organic



USDA National Organic Program

- Organic certification is achieved when a farmer/farmer group can demonstrate that they have created a farming system that is compliant with the relevant organic standard
- Farmers who have started to use organic farming practices that align with organic certification standards can label their coffee as 'In Conversion to Organic'
- Full organic certification may be achieved only after there has been demonstrated compliance with the standard for a minimum of three years, and the first year 'In-Conversion to Organic' requirements have been fulfilled
- Farmers who are using traditional agriculture practices and can demonstrate
  that the organic standard has already been complied with for a minimum of
  three years may be able to achieve full certification without going through
  the 'In Conversion to Organic' phase. This may apply to many smallholder
  coffee farmers in PNG
- In addition to the general standards for crop production, most organic certification organisations also have standards that apply to individual crops.
   The following table lists some examples of the standards applicable to coffee

Organic certification: specific standards for coffee production				
Standard	Details			
Growing	Soil organic matter must be improved by available methods, such as compost, legumes and mulch			
	<ul> <li>Soil fertility must be maintained in the long term by replenishment with minerals, composts and other available techniques approved under the organic standard</li> </ul>			
	Waste recycling must be carried out			
	Burning must not lead to soil loss			
	<ul> <li>Mixing or blending of organic and conventional coffees is prohibited</li> </ul>			
	<ul> <li>Erosion must be prevented using effective soil conservation methods such as:</li> <li>Covering soil when not in use</li> <li>Terracing and contouring</li> <li>Using silt traps and arresting gully erosion with structures if necessary</li> </ul>			
	<ul> <li>Except in plantations, shade trees and shrubs must be maintained in the production area to provide nitrogen and shade, and help with pest control</li> </ul>			

Organic certif	fication: specific standards for coffee production
Standard	Details
Post-harvest	<ul> <li>Sun or artificial drying of beans, preferably using waste husks to fire the furnaces. No contamination from fuel drying of beans is allowed, meaning the fumes from the fuel or exhaust must not taint the beans</li> </ul>
	<ul> <li>Cleaning with water and physical brushing/vacuuming methods</li> </ul>
	<ul> <li>Clean, dedicated jute or poly sacks labelled with certification status for coffee shipping and storage</li> </ul>
	<ul> <li>Mixing or blending of organic and conventional coffees is prohibited</li> </ul>
	<ul> <li>Coffee purchase records that are sufficiently detailed to allow trace back to certified production areas</li> </ul>
	<ul> <li>Segregated storage areas for organic coffee that are clearly marked and separated physically from the other storage areas</li> </ul>
	<ul> <li>The use of synthetic fungicides or pesticides in the storage of organic coffee is strictly prohibited</li> </ul>

Source: NASAA Organic and Biodynamic Standard (2016)

## **Advantages**

 Organic certification addresses a growing worldwide demand for organic foods and, in most instances, attracts a price premium, although this is not guaranteed

## Disadvantages

- During the three-year transition period, producers may invest in compliance but not be permitted to sell their coffee as certified organic
- Although organic certification is the most highly regulated of all certified produce, few organic certification programs have paid attention to the economic and social welfare of participating farmers, although this is beginning to change with some organic programs now having an emphasis on social responsibility

## C.A.F.E. Practices

#### Certification

- Coffee and Farmer Equity (C.A.F.E.) Practices Standard
- Auditors: Sustainable Development Services (SDS), BIOCert Sustainability Assurances Services (SAS), Ceres GmbH

### **Description**

- C.A.F.E Practices is Starbucks' coffee-buying program that aims to ensure the supply of quality coffee while promoting social, economic and environmental standards for all participants in the supply chain
- The certification standard was developed in conjunction with SCS Global Services
- The program is designed to promote transparent, profitable and sustainable coffee growing practices, while also protecting the wellbeing of coffee farmers and workers, their families and their communities
- Product quality is essential for participation in C.A.F.E. Practices. Producers must have a sample of their coffee approved before they can apply to participate in the program

## **Advantages**

 Starbucks pays premiums above commercial market price according to quality. They also pay additional premiums to reward supply chains that reach the highest performance level in terms of quality and ethical standards, and show continuous improvement in C.A.F.E. Practices

#### **Disadvantages**

· The client base is exclusively Starbucks

## Nespresso AAA Sustainable Quality Program

### Certification

See 'Rainforest Alliance' above

## **Description**

- Nespresso is the brand name of Nestlé Nespresso, an operating unit of the Nestlé Group
- The program works in collaboration with Rainforest Alliance suppliers must comply with Rainforest Alliance's quality and sustainability guidelines
- Nespresso differs from Rainforest Alliance in that Rainforest Alliance focuses on protecting the environment while Nespresso's aim is to encourage farmers to improve coffee quality by paying price premiums in conjunction with improving sustainable agricultural practices

## **Advantages**

- The Nespresso AAA Sustainable Quality Program pays premiums for high quality coffee and sustainable farming practices
- It is a voluntary initiative there is no contractual obligation for the farmers to join and commercialise their coffee through Nespresso

## **Disadvantages**

• The client base for AAA certification is exclusively Nespresso

# 2.7 SUMMARY OF CERTIFICATION CRITERIA

The following tables summarise and compare the criteria of the main certification organisations.

Social standards for certification						
Criteria	Certification program					
	Rainforest Alliance	Fairtrade	4C	Certified Organic	C.A.F.É. Practices	
Hours of work, wages and benefits for employees	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Freedom of association, collective bargaining	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Child labour, non-discrimination, forced labour, gender equity	~	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
Access to housing, potable water and sanitary facilities	~	<b>~</b>	<b>~</b>		~	
Access to education	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Access to medical care	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Safe working environment	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Member health and safety training	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Member training	<b>~</b>	<b>~</b>	<b>V</b>		<b>~</b>	

Note: Although most organic certification programs focus mainly on economic and environmental standards, some, such as Naturland, have introduced social responsibility as a priority

Economic standards for certification						
Criteria	Certification program					
	Rainforest Alliance	Fairtrade	4C	Certified Organic	C.A.F.É. Practices	
Record-keeping system	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
Demonstration of financial transparency	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Traceability	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
Risk assessment and management plan	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Social management system	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Environmental management system	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
Group membership agreement	<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>	
Internal inspection and self-assessment system	<b>~</b>	~	<b>~</b>		~	
External audits	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
Separation of certified product from non- certified	~	~	<b>~</b>	~	~	
No parallel production (certified and non-certified)				~		

Criteria		Certification program					
		Rainforest Alliance	Fairtrade	4C	Certified Organic	C.A.F.É. Practices	
Coffee gro	wing						
Certified pr	opagation material				<b>~</b>		
Water body	protection and maintenance of buffer zones	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	~	
Sustainable	e water sources and use	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	~	
Soil conser	vation and maintenance of soil productivity	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	
Shade esta conservation	blishment and management, and	~			~	~	
Climate cha	ange mitigation and adaptation measures	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	~	
Protection of	of wildlife and native plant communities	<b>~</b>	<b>~</b>	<b>~</b>	~	~	
Protection (	of natural ecosystems and biodiversity	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	
Rehabilitati	on of areas unsuitable for agriculture	<b>~</b>			~		
New production no removal	ction areas on land suitable for agriculture – of forest	~	~	<b>~</b>	~	~	
No use of g	enetically modified organisms	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>		
Fertilisers	Appropriate choice, quantities, use, handling practices and storage	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
	Biological: organic only; mineral: naturally occurring only				<b>~</b>		
Weed, pest and	Integrated weed and pest management programs	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
disease control	Appropriate choice, quantities, use, handling practices and storage of agrochemicals	<b>/</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
	Organic only				<b>~</b>		
Waste man	agement	~	~	<b>~</b>	<b>~</b>	<b>~</b>	
Coffee pro	cessing						
Minimising	nising water consumption		<b>~</b>	<b>~</b>	<b>~</b>	~	
Waste man	/aste management, recycling		~	<b>V</b>	<b>~</b>	~	
Energy con	servation	<b>~</b>	~	<b>✓</b>	<b>~</b>	~	
Reduced de	ependency on non-renewable energy	~	~	<b>~</b>	~	~	

Note: Farmers with Nespresso certification are certified by Rainforest Alliance.

# 2.8 KEY MESSAGES

- Certification is a guarantee to consumers that coffee is being produced using practices that are socially, economically and environmentally sustainable
- For the farmer, certification means improved quality and production efficiencies, more sustainable production, increased access to markets and potentially better prices
- Farmers may become certified independently, as part of a farmer group or as an affiliate of a certified processor/exporter. An affiliation with a processor/ exporter is often the most time and cost-effective option for smallholders
- Prior to affiliation, the farmer group must develop a supply relationship with the processor/exporter to demonstrate that they have the capacity to reliably deliver adequate quantities of quality coffee
- The pathway to certification involves several steps including an initial application, self-assessment, independent audit, correction of noncompliances and a certificate of compliance
- Periodic audits of compliance are required to maintain certification status
- Sound record keeping and traceability are central to maintaining certification status
- Coffee smallholders in PNG are compliant with most environmental and social standards of the major certification entities – the greatest risk to compliance is internal control systems that are not reliable and not effective
- Although there is no uniform coffee certification system, all the major certifying bodies incorporate the fundamental principles of sustainability
- Farmers must consider very carefully what is involved in certification before embarking on the process

# **2.9 QUIZ**

## Place a 'v' in the correct box

Plac	ce a 💸 in the correct box.
1.	Certification:
	A Promotes practices that contribute to social, economic and environmental sustainability  B Represents a guarantee to consumers that the coffee was produced in an environmentally and socially responsible way  C Improves farmers' access to markets  D All the above
2.	The benefits of certification to farmers include:
	A Improved production efficiency and coffee quality, and potentially better prices  B Reduced record keeping  C Fewer inputs and higher coffee prices  D All the above
3.	The three principles of sustainability are:
	A Social responsibility, economic success and environmental protection  B Soil, water and energy conservation  C Improved working conditions, no child labour and right of access to education  Education, environmental protection and climate change resilience
4.	One of the most important requirements for compliance with certification is:
	A Good soil fertility and nutrient management  B Provision of good conditions for workers  C Good record keeping and traceability  D Good market access
5.	The easiest and most cost-effective way for a smallholder farmer to become certified is:
	A Independently  B As part of a farmer group  C As part of a farmer group affiliated with a certified processor/exporter  D Through CIC

6.	If farmers become certified as part of a farmer group, the group
	will be audited periodically by the certifying organisation.
	Auditors will inspect a selection of farms. To maintain
	certification, at other times regular self-assessments will be
	conducted on:

- A different selection of farms in the group
- B 50% of farms in the group
- Every individual farm in the group
- Only those farms in the group that have a history of non-compliance

# 7. Before selecting a certification program, the main factors to be considered by a farmer group are:

- A The status of the farmer group, its production methods, the cost of certification and market opportunities
- B The sustainability principles the program focuses on
- The location of the certifying organisation and its auditors
- Who will be responsible for record keeping

## 8. The purpose of an internal control system is to:

- A Provide a tool for auditors to monitor and assess compliance
- B Ensure that it is easy to detect non-compliances in the production system
- Include ways to prevent or correct issues before the external audit
- All the above

# 9. One important requirement of certification is that:

- A Farmers provide free accommodation for their workers
- B Workers complete a risk assessment before they start work each day
- School-aged children only do light work on the farm and outside school hours
- Workers do not have to work on public holidays and weekends

# 10. Compliance with environmental standards is required to conserve forests and natural resources. These standards include:

- A Soil and water conservation and removal of shade trees
- B Soil and water conservation, use of shade trees and nutrient management
- Use of shade trees and complete eradication of pests and diseases
- Soil conservation and removal of all weed and pruning debris from the coffee garden

11.	Reasonable incomes for farmers can be achieved if certain
	economic standards are met. These standards include:

A Farmers have access to roadside buyers for marketing of Y-grade coffee

B Farmers who produce poor quality coffee receive the same price as those producing superior quality coffee

Farmers are charged a high price for auditing, which guarantees they will be compliant

Farmers have access to markets and market information and are paid a premium price for quality

# 12. The pathway to certification involves the following steps (in order):

Application, audit, correction of non-compliances, self-assessment, certification

B Coffee harvest, inspection, quality standards met, certification

Self-assessment, application, corrections to non-conformities, audit, certification

Application, self-assessment, correction of critical non-compliances, audit, correction of non-compliances, certification

# 13. When auditors are checking for compliance, they must have access to records of:

A Yields, use of inputs, costs and prices received, risk assessments and training

B Yields, sales, bean and cup quality

Climate, harvest dates and yields

Yields, processing and transport costs, and income

# 14. During a periodic audit, the complete list of tasks the auditor will undertake is:

A Inspect the finances of the certified farmer or farmer group

B Check documents, inspect production sites/farms, processing facilities and storage areas, and meet with members of the group

Inspect farms to ensure they are compliant with environmental standards

Inspect production sites/farms, processing facilities and storage areas, and coffee sales figures

# 15. For certification status to be maintained by a farmer group:

A The group must reapply for certification every year

B The group must undergo periodic audits and maintain compliance with all certifying criteria

The group must sell their coffee using the label of the certifying organisation

At least half of the members of the group must maintain compliance with all certifying criteria

# True or false

Place a 'v' in the correct box.			False
a.	Farmers can only be certified with one certifying program.		
b.	Sustainable production maintains social, economic and environmental resources for future generations.		
c.	Compliant coffee must be kept separate from other sources of coffee.		
d.	Organic certification guarantees higher prices for coffee farmers.		
e.	The greatest risk to compliance is having internal control systems that are not reliable and not effective.		
f.	Improving coffee quality and having better access to markets are motivations for becoming a certified coffee farmer.		

## Answers to quiz questions

## **Multiple choice**

1. Certification:

**Answer = D.** All the above (Promotes practices that contribute to social, economic and environmental sustainability; Represents a guarantee to consumers that the coffee was produced in an environmentally and socially responsible way; Improves farmers' access to markets)

Section 2.1. The main purpose of certification is promotion of sustainability principles – social, economic and environmental. This benefits farmers by improving production efficiencies, providing long-term sustainability of their farms, improving coffee quality and prices (though not guaranteed) and access to markets. Consumers are guaranteed that the coffee is produced using sustainable practices and many are willing to pay a premium for this guarantee.

2. The benefits of certification to farmers include:

**Answer = A.** Improved production efficiency and coffee quality, and potentially better prices

Section 2.1. Potential benefits of certification include improved coffee quality, improved production efficiencies, sustainable production, increased access to markets, better prices for farmers, guaranteed minimum prices, and access to extension and other services.

3. The three principles of sustainability are:

**Answer = A.** Social responsibility, economic success and environmental protection

Section 2.1. The scope of all the major certification bodies covers three dimensions of sustainability, including social, economic and environmental.

4. One of the most important requirements for compliance with certification is:

**Answer = C.** Good record keeping and traceability

Section 2.4. The greatest risk to compliance is having internal control systems that are not reliable and not effective. Sound record keeping and traceability are central to maintaining certification status.

The easiest and most cost-effective way for a smallholder farmer to become certified is:

**Answer = C.** As part of a farmer group affiliated with a certified processor/ exporter

Sections 2.1 and 2.5. Farmers may become independently certified; however, this is not recommended in PNG due to the high cost and the amount of administration involved. It is more common for farmers to belong to an entity that manages certification, which may be a constituted farmer group or a processor/exporter.

- 6. If farmers become certified as part of a farmer group, the group will be audited periodically by the certifying organisation. Auditors will inspect a selection of farms. To maintain certification, at other times regular selfassessments will be conducted on:
  - **Answer = C.** Every individual farm in the group
  - Section 2.5. All certifying bodies hold periodic audits to check for compliance with the certifying criteria so that certification can be renewed for the group. An ongoing responsibility of the farmer group is to conduct regular self-assessments of all individuals in the group to ensure they are compliant and identify areas requiring improvement. Self-assessments reduce the risk, and substantial cost, of failing an external audit.
- **7.** Before selecting a certification program, the main factors to be considered by a farmer group are:
  - **Answer = A.** The status of the farmer group, its production methods, the cost of certification and market opportunities
  - Section 2.5. Farmer groups should consider their current production methods, and how they compare to a certification's required standards, the cost of certification and potential markets.
- 8. The purpose of an internal control system is to:
  - **Answer = D.** All the above (Provide a tool for auditors to monitor and assess compliance; Ensure that it is easy to detect non-compliances in the production system; Include ways to prevent or correct issues before the external audit)
  - Section 2.5. Internal controls are the rules, policies and procedures designed to help demonstrate that objectives related to operations, reporting and compliance have been met. They help guide administration and detection of non-compliances, which is beneficial for the farmer group and also for the auditors who are monitoring compliance.
- 9. One important requirement of certification is that:
  - **Answer = C.** School-aged children only do light work on the farm and outside school hours
  - Section 2.2. School-aged children must attend school. Child labour is only acceptable as part of light family work (meaning the work is appropriate for the child's age and physical ability) and must only be undertaken outside school hours.
- **10.** Compliance with environmental standards is required to conserve forests and natural resources. These standards include:
  - **Answer = B.** Soil and water conservation, use of shade trees and nutrient management
  - Section 2.3. Environmental standards include conservation of biodiversity, measures to minimise pests and diseases, minimal and safe handling and use of chemicals, suitable pruning, shade tree species diversity and suitable level of canopy cover, soil conservation, soil fertility and nutrient management, water conservation, waste management and efficient use of energy.

- 11. Reasonable incomes for farmers can be achieved if certain economic standards are met. These standards include:
  - **Answer = D.** Farmers have access to markets and market information and are paid a premium price for quality
  - Section 2.4. For farmers to receive a reasonable income, it is important they receive market information and market access. Quality must be monitored all along the supply chain to ensure farmers receive a reasonable price.
- **12.** The pathway to certification involves the following steps (in order):
  - **Answer = D.** Application, self-assessment, correction of critical non-compliances, audit, correction of non-compliances, certification
  - Section 2.5. The pathway to certification includes: an application request by the farmer group; receival of certification requirements, fee schedule and contract; self-assessment and gap analysis; the farmer group amends major non-compliances; visit from auditor; identify and address non-compliances; issue of certification certificate.
- **13.** When auditors are checking for compliance, they must have access to records of:
  - **Answer = A.** Yields, use of inputs, costs and prices received, risk assessments and training
  - Section 2.5. Documentation is required for almost all practices undertaken by the farmer group. These include technical and financial records on such things as yields, use of inputs, costs and prices received, risk assessments and training.
- **14.** During a periodic audit, the complete list of tasks the auditor will undertake is:
  - **Answer = B.** Check documents, inspect production sites/farms, processing facilities and storage areas, and meet with members of the group
  - Section 2.5. Audits comprise farm inspections including a physical tour, examination of records, and interviews with farmers. The purpose of the audit is to check for compliance with the certifying criteria so that certification can be renewed for the group with the issue of a new certificate.
- **15.** For certification status to be maintained by a farmer group:
  - **Answer = B.** The group must undergo periodic audits and maintain compliance with all certifying criteria
  - Section 2.5. The purpose of the periodic audit is to check for compliance with the certifying criteria so that certification can be renewed for the group with the issue of a new certificate.

## True or false

a. Farmers can only be certified with one certifying program.

Answer = FALSE

**b.** Sustainable production maintains social, economic and environmental resources for future generations.

Answer = TRUE

Compliant coffee must be kept separate from other sources of coffee.Answer = TRUE

d. Organic certification guarantees higher prices for coffee farmers.

Answer = FALSE

**e.** The greatest risk to compliance is having internal control systems that are not reliable and not effective.

Answer = TRUE

**f.** Improving coffee quality and having better access to markets are motivations for becoming a certified coffee farmer.

Answer = TRUE

# SOURCES OF FURTHER INFORMATION

CARE International (2023) *Organisational Strengthening Training and Family Money Management Training* Other resources – for working with wards, communities, CBOs, SMEs and families – PNG Community Development Worker National Standard (pngcdwstandard.com)

Coffee Industry Corporation (2016) The Papua New Guinea Coffee Handbook (2nd edition) https://www.cic.org.pg/wp-content/uploads/2021/08/52029\_CIC-Handbook.pdf

Curry GN, Webb M, Koczberski G, Pakatul J, Inu SM, Kiup E, Hamago MR, Aroga L, Kenny M, Kukhang T, Tilden G and Ryan S (2017) *improving livelihoods* of smallholder families through increased productivity of coffee-based farming systems in the highlands of PNG, ACIAR https://www.aciar.gov.au/publication/asem-2008-036-final-report

Tilden GM, Aranka JN and Curry GN (2024) 'Ecosystem services in coffee agroforestry: their potential to improve labour efficiency amongst smallholder coffee producers', *Agroforest Syst* 98: 383–400 https://doi.org/10.1007/s10457-023-00917-0

## Certification schemes

#### 4C

#### **Document library**

www.4c-services.org/process/document-library

### Code of conduct (Valid from 1 July 2024)

www.4c-services.org/wp-content/uploads/2024/01/4C-Code-of-Conduct\_v.4.1-3.pdf

## Preparation for certification

www.4c-services.org/wp-content/uploads/2021/04/210218\_4C-Unit-Certification\_Step-by-Step\_EN.pdf

#### How to obtain a 4C Certificate

www.4c-services.org/process/how-to-obtain-4c-certificate

## C.A.F.É. Practices

#### General information

www.scsglobalservices.com/services/starbucks-cafe-practices

## C.A.F.E. Practices Smallholder Scorecard

https://cdn.scsglobalservices.com/files/program\_documents/cafe\_scr\_smallholderv3.4\_011516.pdf

www.scsglobalservices.com/services/starbucks-cafe-practices (for any updates)

#### **Fairtrade**

General information www.fairtrade.net/about

## Fairtrade Standard for Small-scale Producer Organizations

www.fairtrade.net/en/why-fairtrade/how-we-do-it/standards/who-we-have-standards-for/standards-for-small-scale-producer-organisations/coffee.html

#### Fairtrade Climate Standard and Fairtrade carbon credits

www.fairtrade.net/en/why-fairtrade/how-we-do-it/standards/who-we-have-standards-for/climate-standard.html www.fairtrade.net/en/products/carbon-credits-.html

## **Organic**

#### European Commission: Becoming an organic farmer

https://agriculture.ec.europa.eu/farming/organic-farming/becoming-organic-farmer\_en

#### Japanese Agricultural Standard

www.maff.go.jp/e/policies/standard/specific/organic\_JAS.html

Naturland: Association for organic agriculture (Germany) www.naturland.de/en/

#### The National Association for Sustainable Agriculture Australia

https://nasaaorganic.org.au/

www.nasaaorganic.org.au/wp-content/uploads/2019/05/NASAA-Organic-Standard-Feb-2016.pdf

USDA Organic: Becoming a Certified Operation www.ams.usda.gov/services/organic-certification/becoming-certified

## **Rainforest Alliance**

See the Rainforest Alliance Knowledge Hub for Rainforest Alliance information and resources https://knowledge.rainforest-alliance.org/

## 2020 Certification Program

https://www.rainforest-alliance.org/for-business/2020-certification-program/

2020 Sustainable Agriculture Standard: Farm Requirements (Version 1.4) https://knowledge.rainforest-alliance.org/docs/rainforest-alliance-sustainable-agriculture-standard-farm-requirements

### How to become certified

https://www.rainforest-alliance.org/business/certification/how-to-get-rainforest-alliance-certified-a-guide-for-farmers/





