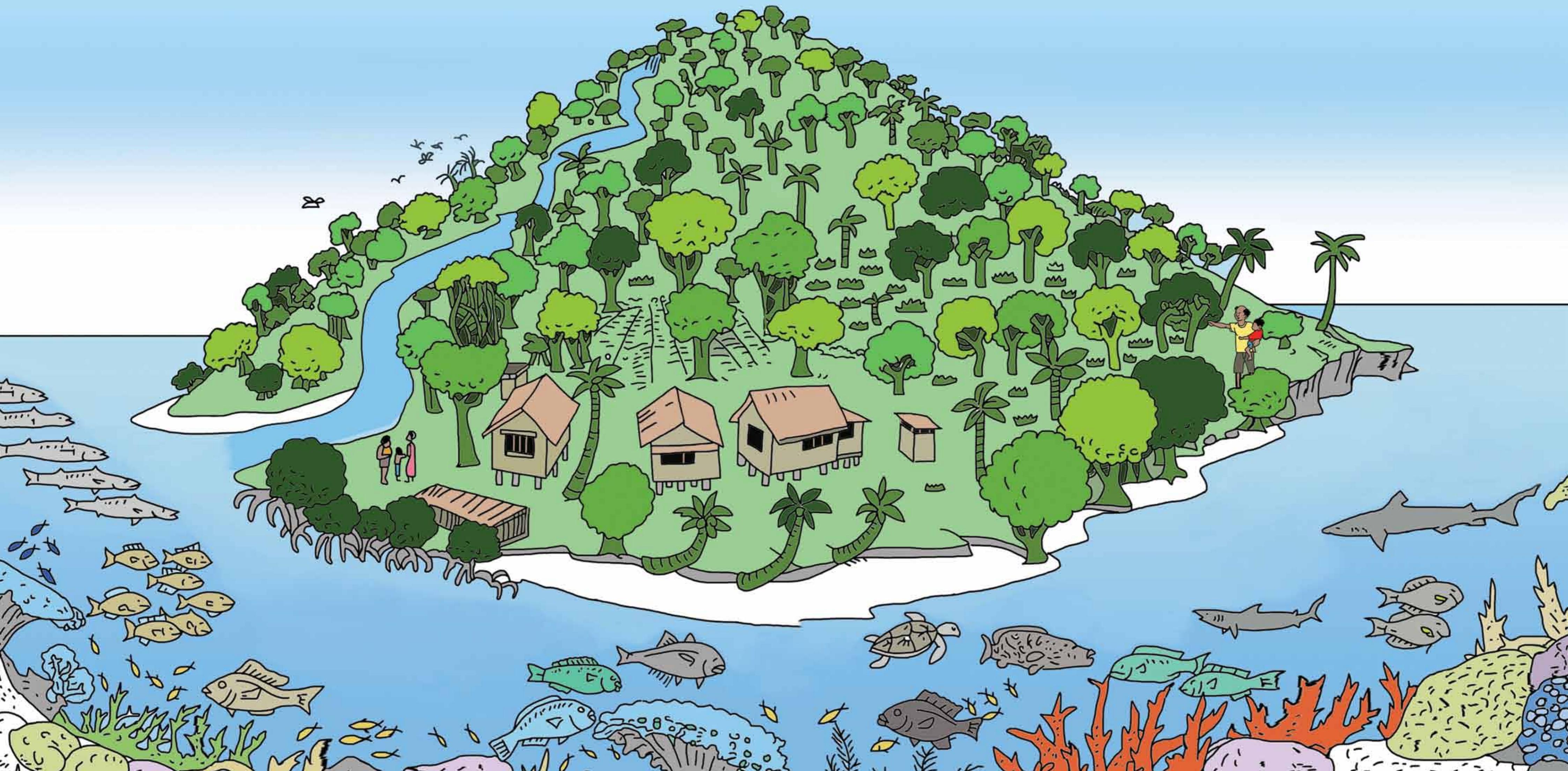


Our Resources, Our Future

Sustainable Natural Resource Management in Your Community



Guidelines for the facilitator



About this flipchart

Rural communities in Solomon Islands are increasingly under internal and external pressures to use natural resources in an unsustainable way. The establishment of sustainable use areas (SUAs) builds on traditional Solomon Islands' ways of managing natural resources in a sustainable way and helps communities to keep safe the natural resources that are vital to their livelihoods.

This flipchart is a tool to educate communities about the importance of trees and forests to their livelihoods and the environment, as well as sustainable management of natural resources. It teaches participants about different kinds of SUAs and supports them in working together and planning for the establishment of a SUA in their community.

This flipchart covers 10 sessions

	Session title	Description
1	The value of trees and forests	The importance of trees and forests to the environment and <u>livelihoods</u>
2	<u>Sustainable</u> resource management	How communities control, access and manage natural resources and how managing resources in a <u>sustainable</u> way can benefit the community in the <u>long term</u>
3	<u>Threats</u> and strengths	Identifying community strengths and how they can be used to deal with direct and indirect <u>threats</u> (dangers) to <u>sustainable</u> natural resource management
4	What are <u>sustainable</u> use areas and why are they important?	Defining a <u>sustainable</u> use area and describing how the establishment of SUAs help communities to protect resources for the future
5	<u>Conservation</u> areas	About <u>conservation</u> areas, including some different kinds of <u>conservation</u> areas and how they can help communities to manage resources in a <u>sustainable</u> way
6	<u>Sustainable</u> fishing	Some <u>sustainable</u> fishing methods and why <u>sustainable</u> fishing is important for <u>livelihoods</u> and the environment

7	<u>Sustainable</u> forestry	Defining sustainable forestry, and investigating the <u>consequences</u> of unsustainable forestry (logging) and why <u>sustainable</u> forestry is important for <u>livelihoods</u> and the environment
8	<u>Sustainable</u> farming and gardening	Describing some <u>sustainable</u> farming and gardening methods, and why they are important for <u>livelihoods</u>
9	Alternative <u>sustainable</u> livelihoods	Discussing ways to achieve a secure and <u>sustainable</u> livelihood
10	Establishing & strengthening community-based organisations to manage <u>sustainable</u> use areas	Steps to take to set up a community-based organisation (CBO) to manage a <u>sustainable</u> use area

How to use this flipchart

There are 10 sessions presented in this flipchart. You can work through the pages starting from Session 1, or just present the sessions relevant to your participants. You will need approximately one hour to work through each session.

On the front of each page there is a picture. The picture is intended as an introduction to the session and should help to start discussions. Position the flipchart so that the participants can see the picture clearly.

The back of each page contains background information for the facilitator to read before the workshop, or refer to during the workshop. It is not recommended you read out the background information during the workshop. The back of each page also provides activities and discussion points the facilitator should use to guide the sessions.

Running the sessions

'To facilitate' means 'to make things easy'. Your role as a facilitator is to create an environment in which people feel safe to share ideas and experiences and learn new things. You do not have to be an expert on the session topic, but it is good to read through and understand the flipchart materials before running a session.

Tips for good facilitation

- Read each lesson of the flipchart and make sure you understand it. Think about questions participants might ask and make sure you are ready to answer them. Ask others for help if you need it.
- When running a session, encourage participants to share their ideas and experiences.
- Be friendly and inclusive – make sure you encourage men, women and youth to participate in the sessions.
- Be gender sensitive – respect women's and men's different ways of learning and give them space to share their ideas and knowledge.
- Sometimes people will have strong ideas on a subject and might disagree. Relationships within the group will affect the way the group works. Be sensitive to possible tensions and encourage people to work through their differences.

Coping with difficult or dominant people

As a facilitator, you need to make sure that all participants have the opportunity to speak. If someone is dominating the discussion, try saying 'Those are interesting points. Let's see what others think.' One idea is to give each person the same number of stones and tell them they have to give one to you every time they speak. When they have no more stones they cannot speak again and must allow others in the group to contribute.

Including the whole community

The words 'participants' and 'community' are used throughout this flipchart. These words represent men, women, boys and girls. It is important that you encourage all members of the community to attend the sessions and that you run the session at a time of day when everyone can attend. When running the session you will sometimes be asked to split the participants into separate groups of only women, men, boys and girls. This is so participants have a chance to share their ideas in smaller groups.

Respecting traditional knowledge

Sustainable resource management has been practised throughout Solomon Islands for many years. In different places and for different resources there are different ways to make sure resources are used in a sustainable way, for example, *tabu* sites. It is important to remember that the information in this flipchart is meant to build on traditional sustainable practices, so showing respect for local knowledge of the land and other natural resources is very important.

At the start of each session

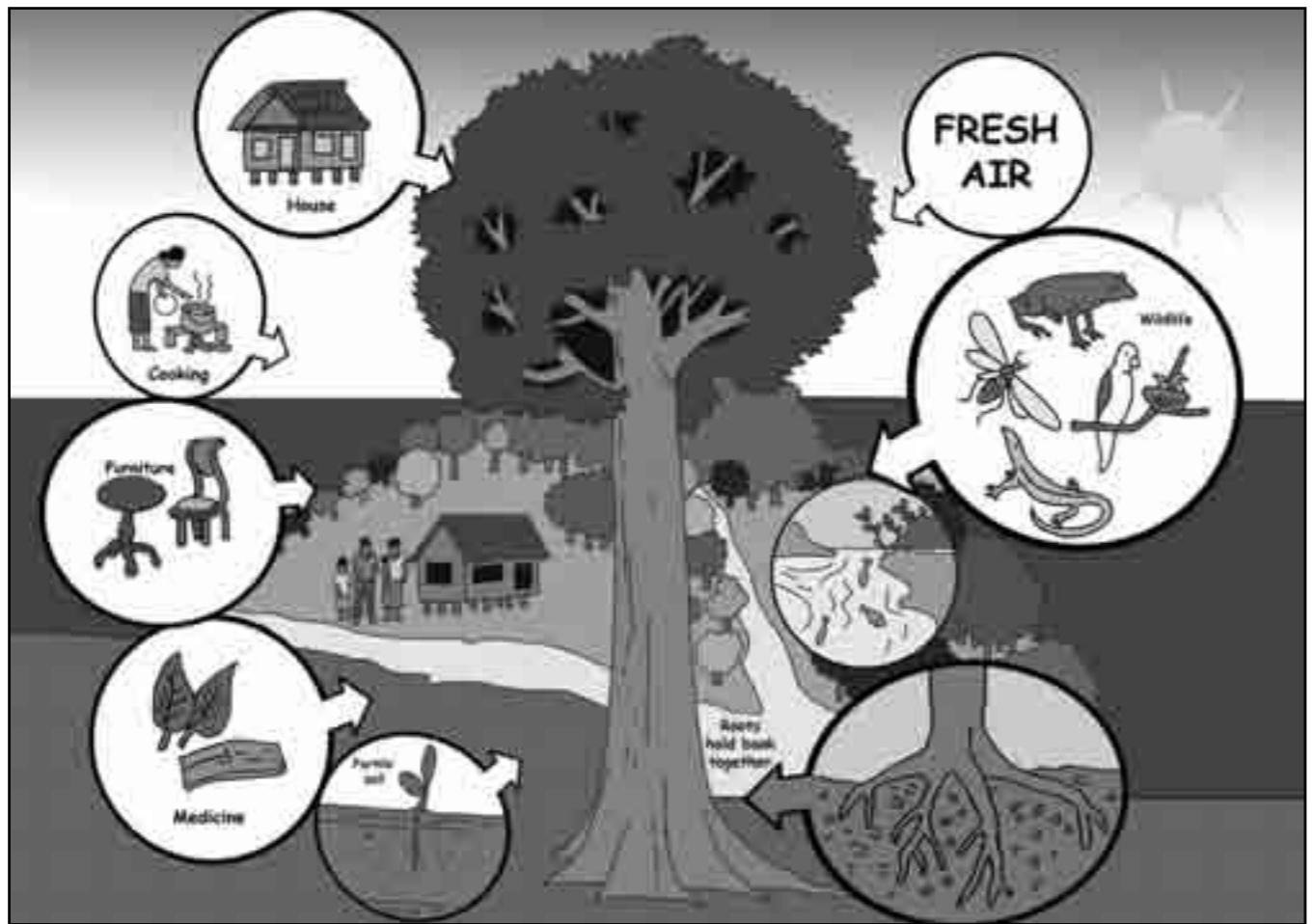
1. Welcome participants and thank them for coming.
2. Make sure the flipchart is positioned so that all participants can see the picture and hear you clearly. It is better to work in a small group of 10–20 people to make sure all participants can be involved.
3. Introduce yourself and the objectives of the session and the times you will take breaks and end the session.
4. Explain the flipchart to the participants (i.e., there is a large picture on the front facing them and discussion points and information on the back of each page).
5. Encourage the group to ask as many questions as they need. Highlight that in your role as facilitator you are there to help the learning process.
6. Work with the group to establish 'ground rules' before the discussion begins. Ground rules are about how the group will interact (for example, one person speaking at a time).

Throughout this flipchart you will see underlined words. Any word that is underlined is explained in the glossary on the last page of this flipchart.

Please look through the glossary before you start to use this flipchart so that you understand all of the words and can explain them to participants.



Session 1: The value of trees and forests



Learning outcomes

By the end of this session, participants should be able to:

- understand the importance of trees to a healthy environment
- understand the importance of trees to sustainable livelihoods
- recognise the ways good management of trees and forests can benefit the community.

Background information

When the last tree has been cut down, the last fish caught, the last river poisoned, only then will we realise that we cannot eat money.

Native American proverb

Trees and forests are important, valuable and necessary for our survival. Without trees, humans and other living things cannot survive.

Reasons trees and forests are good for the environment

Trees give us clean air

When we breathe air and burn fires we produce carbon dioxide. Carbon dioxide is an invisible gas, which looks, feels and smells like air. There are many gases found in the air. Some of the gases (carbon dioxide, methane and nitrous oxide) trap heat around the Earth's surface and affect the climate and weather on our planet. Too much carbon dioxide is bad for the environment and humans can't breathe it in. Plants and trees use carbon dioxide to grow. The green leaves of trees absorb carbon dioxide and break it up into carbon and oxygen. Oxygen is a gas that is good for the environment and humans need it to breathe. Trees hold the carbon inside them and release the oxygen, which makes the air clean and healthy for humans to breathe.

Trees give us clean water

Trees clean the water by trapping and absorbing pollutants. Trees are especially important beside rivers, streams and lakes. They are like a sponge between the waterway and the land, soaking in polluted water that runs down from the mountains. Deep roots help keep stream banks strong so they don't collapse. Trees next to streams also provide a home for wildlife and birds and create shade that helps keep water temperature cool, which keeps fish healthy. The air inside a forest is cooler than the air outside the forest and when the wind blows, that air travels to the village and keeps us cool.

Trees give us healthy soil

Trees can absorb dangerous pollutants that enter the soil. Trees then either store pollutants or change them into something less harmful. Nutrients (food for plants) are stored in the leaves of trees, which drop to the ground. These leaves are then broken down and the nutrients are released into the soil, where they are available for other trees and other plants to use. Forests also maintain a diversity of wild animals and plants, and we need them to make homes for wildlife. Tree roots hold the soil together and their branches and leaves block the force of wind and rain on topsoil so it stays healthy and can be used for gardening.

Trees protect us from wind and rain

When it is windy and wet, trees and forests protect us from the wind and rain. When there is heavy rain, the roots of trees act like a net and hold the soil together. Forests help to keep the flow of water steady because they absorb, hold and slowly release water, which helps to protect low-lying areas from landslides and floods. Trees protect villages and crops from high winds and help keep soil fertile.

Food chains

Feeding relationships or 'food chains' exist between species (different kinds) of animals and plants. A food chain is made up of living things that are linked together by what they eat, for example, birds eat frogs, frogs eat insects, and insects eat grass. All parts of nature depend on each other, for example, some types of plant depend on the shade provided by the other plants around them to survive. Just because we cannot see these links does not mean that they are not there. A tree that bears large fruits may depend on animals (such as bats or insects) to share out its seeds so it can reproduce. These special systems are another reason why protecting the forest and all the creatures that live inside it is so important.

Diversity

Forests are made up of many plants and animals, such as snails, flies, bees, beetles, mushrooms, trees, snakes, lizards, birds and larger animals. The diversity of a forest will never be the same once the forest is cut down, even if trees are replanted. The diversity of a forest can also be spoilt by pollution or soil changes because of agriculture, or because animals have become extinct. It is still good to plant trees to provide shelter and stop erosion, but they will never replace a natural forest. That is why it is important to protect the natural forest that still exists.

Reasons trees are good for livelihoods

In Solomon Islands, we cannot live without forests because we depend on trees and natural resources to survive and generate income. The way we use resources to meet our needs is sometimes called our livelihoods. Rural communities rely on trees and forests to meet their daily needs.

Trees and forests can provide or help produce:

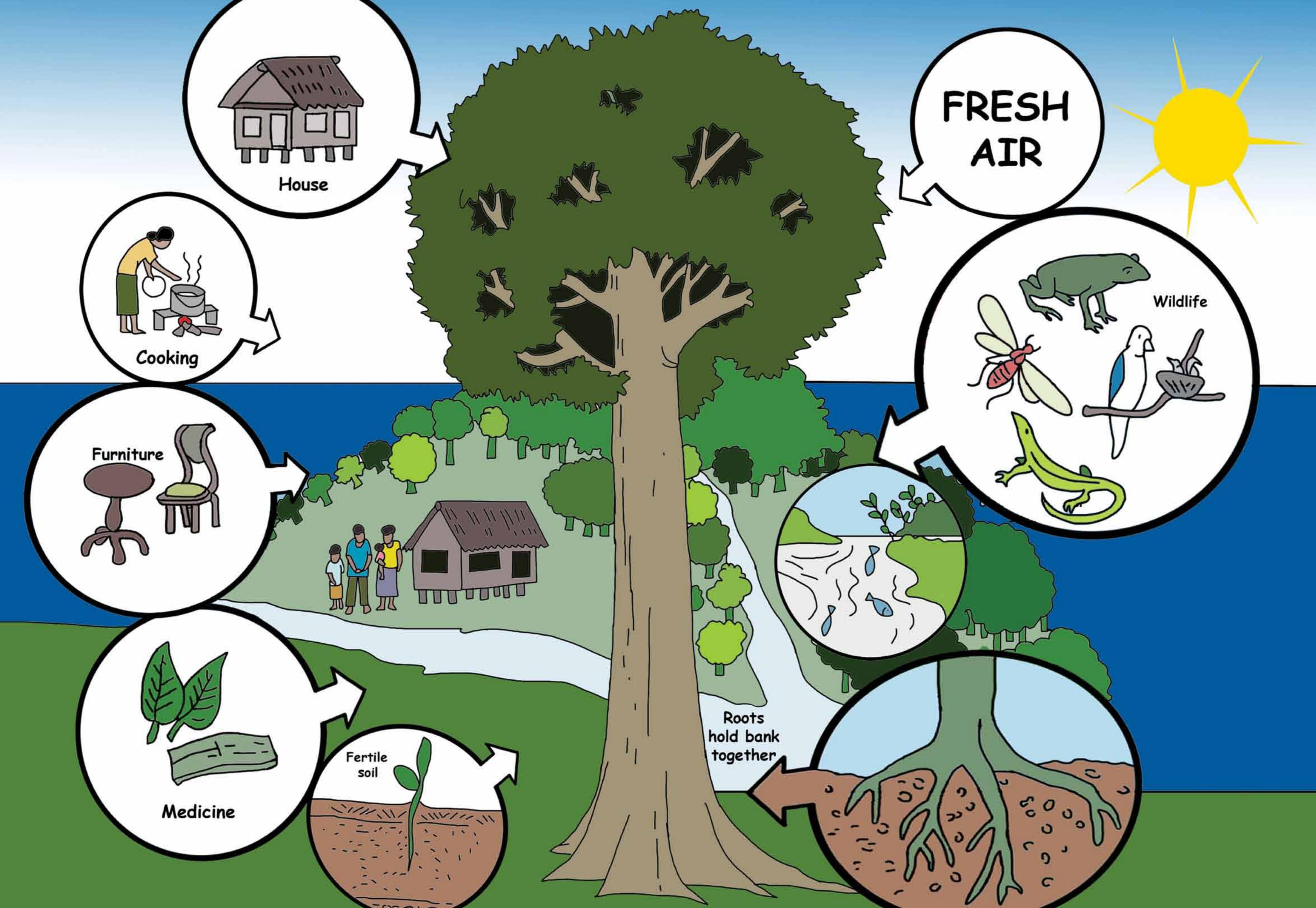
- farming materials
- materials for building houses and shelter, boats and furniture
- firewood
- fruits and vegetables
- materials for weaving, craft and carving
- healthy soil for gardening and farming
- shade
- fresh air
- natural beauty that attracts tourists.

All members of the community (women, men, girls and boys) must be included in decision making about land use, forest management and the conservation of natural resources.

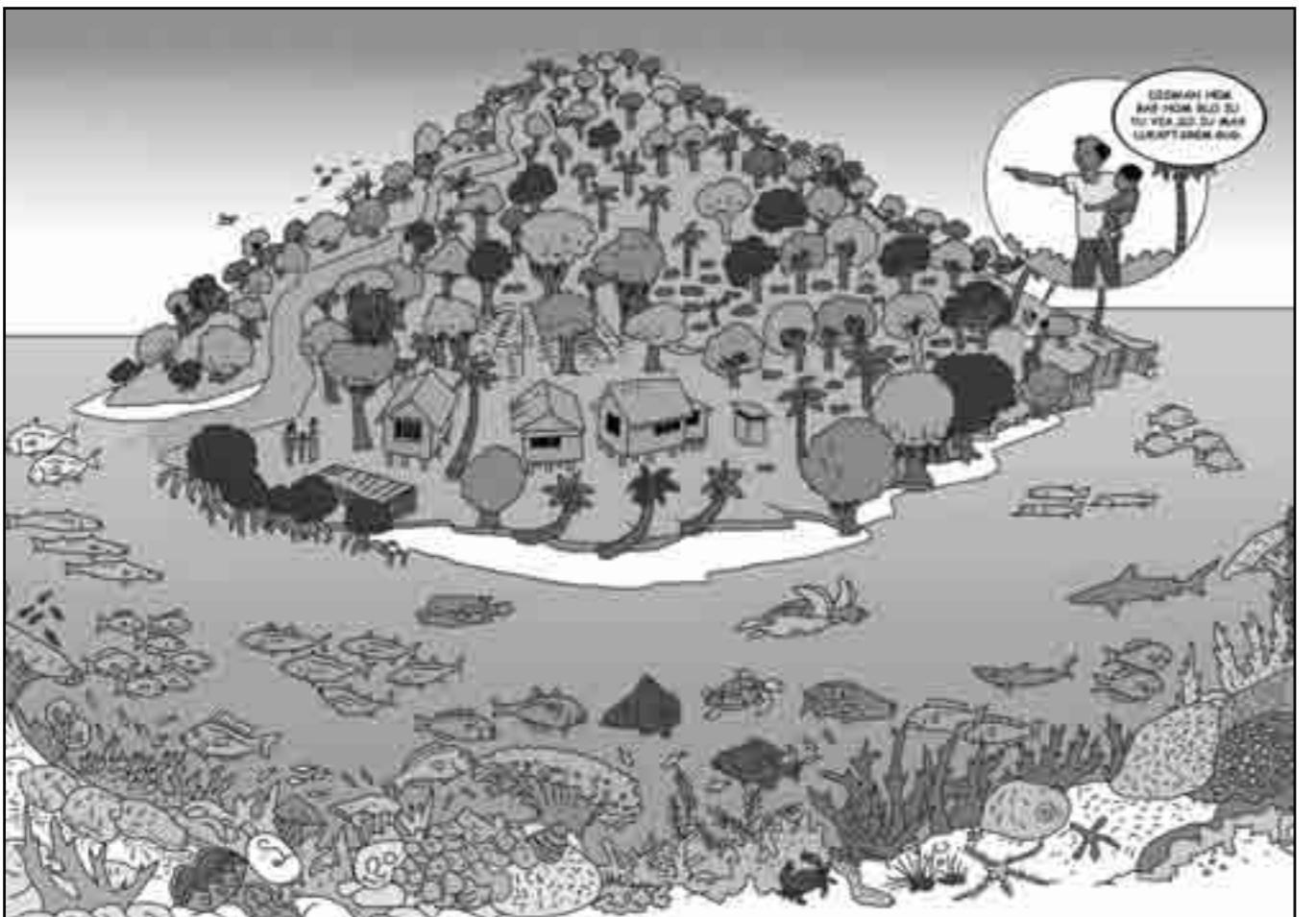
Activity and discussion

Materials: Butcher's paper, marker pens

Topic	Activity	Outcomes
The value of trees and forests	<p>Picture discovery Ask participants:</p> <ol style="list-style-type: none"> What can you see in the picture? <p>Go through each small picture and ask a volunteer to explain to the group what the picture shows and why it is important.</p>	Participants identify and discuss what is valuable about trees and forests.
The importance of trees and forests in your community	<p>Discussion Ask participants:</p> <ol style="list-style-type: none"> How can trees or forests benefit the environment and your community? <p>Encourage them to build on the information you have told them already, note their responses in a list at the front of the group.</p>	Participants identify how trees and forests benefit their community.
The consequences of not conserving trees and forests	<p>Discussion Split into smaller groups and ask participants to imagine there are no trees in their community.</p> <p>Ask them to think about what might happen and to consider the following questions.</p> <ol style="list-style-type: none"> How would your daily lives be affected by not managing forests in a <u>sustainable</u> way? <ul style="list-style-type: none"> What would you use to build houses? What would happen to your water supply? What would happen if you could not get food from the garden? What are some other environmental and social <u>consequences</u> of not conserving the forest and of logging it instead? <p>Ask the smaller groups to come together into a large group and share their thoughts on the questions and discuss.</p>	Participants identify and discuss the <u>consequences</u> of failing to conserve trees and forests.
Taking action	<p>Discussion Ask participants:</p> <ol style="list-style-type: none"> Do you think most people in your community know about the importance of trees or the <u>consequences</u> of not managing forests in a <u>sustainable</u> way? Is it important for people to know? Why or why not? Which individuals or groups do you think most need to know about the importance of trees and forests? How could you share what you have learnt about trees and forests? 	Participants discuss ideas about how to share what they have learnt with others.



Session 2: Sustainable resource management



Learning outcomes

By the end of this session, participants should be able to:

- understand what sustainable resource management is
- recognise why sustainable resource use is important
- name some common daily activities and decide if they are sustainable or unsustainable.

Background information

The natural environment gives us food, medicine, fuel, material for housing and more. It also provides us with the clean air and water that humans need to survive. Different people have different beliefs and values about the environment, which may be based on how they use natural resources and how the environment is linked to their livelihood. In Solomon Islands, many people also have a strong cultural, spiritual and traditional link to the environment. Conservation is important so that we can protect the environment and our way of life by making sure we use natural resources in a way that is sustainable.

What is sustainable resource management?

'To sustain' means 'to carry on' or 'keep going'. Practising sustainable resource management means using our resources in a way that will allow the next generation to still access the same resources, both in terms of quantity and quality, as we do today.

Steps of sustainable resource management

1. Organise and plan

- Work together with all members of the community (women, men and youth) in organising and planning how to manage the resources we use.

2. Agree on rules

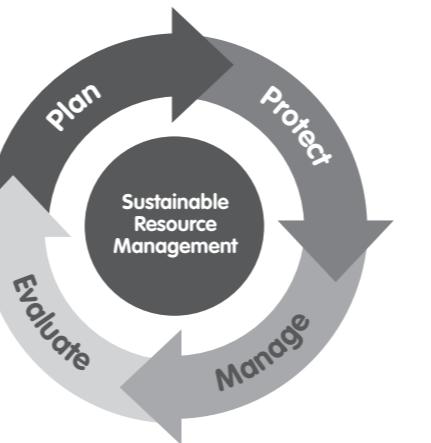
- Agree on rules to use natural resources in a sustainable way.
- Consider ways to make sure everyone respects these rules and knows why they exist.
- Make sure there are consequences for those who break the rules.

3. Manage

- Continue to manage resource use following the agreed rules and dealing with any issues that come up in the right way.

4. Evaluate and plan

- Look at how well we are able to manage the use of our resources, discuss challenges and find ways to meet these challenges.
- Plan ways to maintain or improve sustainable resource management in the future.



Why is sustainable resource management important?

If we do not look after the environment there will not be enough resources left in the future. Solomon Islanders have strong cultural, spiritual and traditional links to the environment, so conservation is an important part of preserving Solomon Island culture. If there are not enough natural resources to share there will be many problems in the community including a lack of food, shelter, land, fresh water and money. This has the potential to create many more problems because people may fight over the resources that are left.

Sustainable resource management is not new in Solomon Islands. Many communities practised sustainable resource management in the past and some still do today. Unfortunately there are a lot of new demands and pressures on communities and individuals (for example, the need to pay for school and travel), and many communities are using resources in a way that means there will not be enough left for their children.

Activity and discussion

Materials: Butcher's paper, marker pens, sticky notes

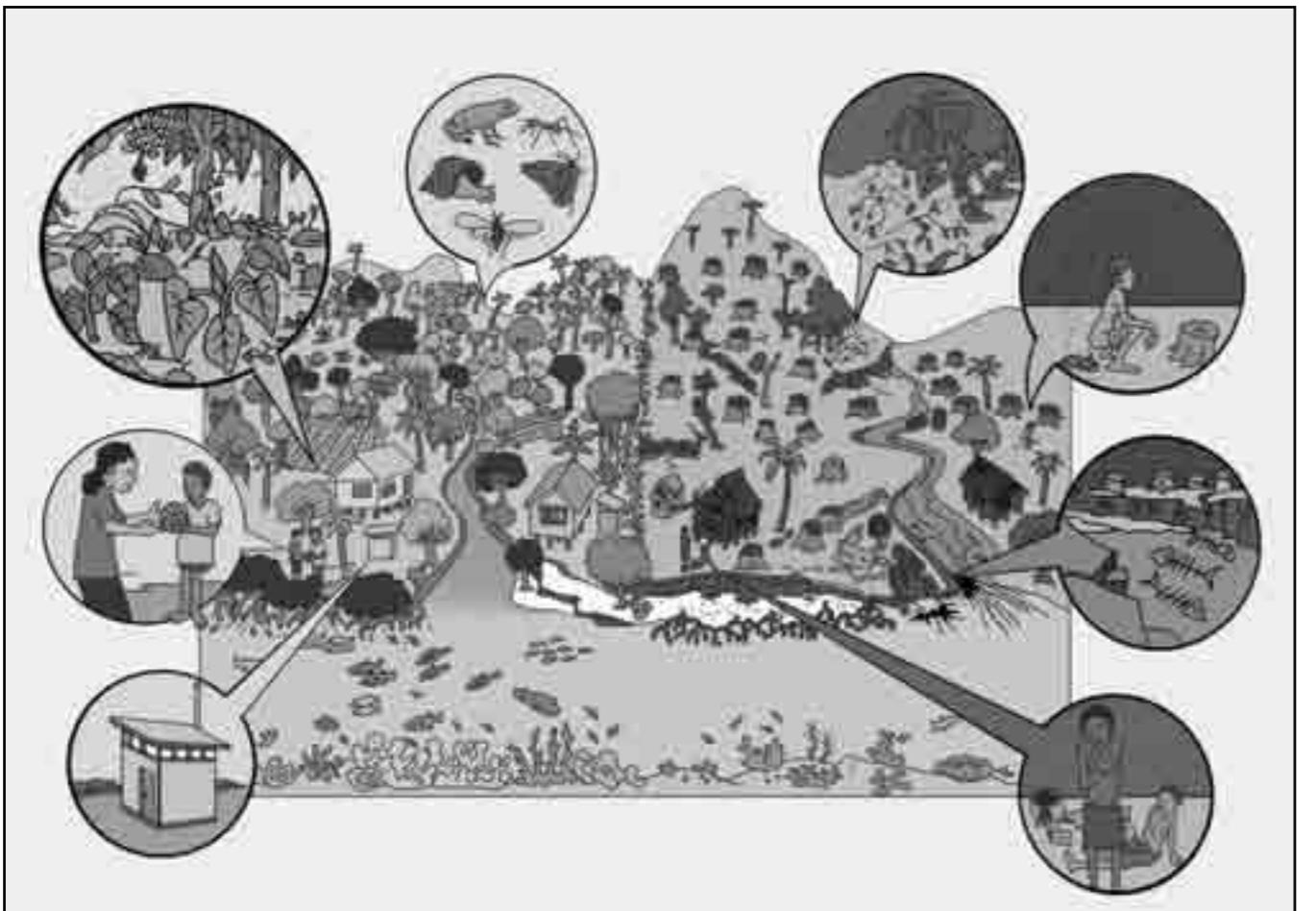
Topic	Activity	Outcomes
Resource management in your community	<p>Picture discovery</p> <p>Ask participants to split into small groups. If there are enough people, have separate groups for men, women, boys and girls. If not, mixed groups are okay.</p> <p>Ask each group to look at the picture and discuss the following:</p> <ol style="list-style-type: none"> Does your community look like the picture? What is similar and what is different? <p>Ask each group to share with the whole group what they discussed. Compare how different groups see their community.</p> <p>Facilitate discussion between the different groups by asking:</p> <ol style="list-style-type: none"> How does your group see the community? Do groups see the community in the same way? Does each group use the resources in the same way? Why might groups see the community in the same or a different way? 	<p>Participants discuss how their community and different groups within their community use natural resources.</p> <p>Participants recognise that men, women and youth often use resources in different ways.</p>

Recognising sustainable and unsustainable activities	<p>Explain to the group that individuals and groups take part in daily activities to meet their needs. Some activities are <u>sustainable</u> and some are unsustainable (not <u>sustainable</u>).</p> <p>Sustainable activities: Activities that can be maintained at a certain rate or level in the <u>long term</u> and conserve the environment by making sure natural resources are not permanently depleted (used up).</p> <p>Unsustainable activities: Activities that cannot be maintained at a certain rate or level in the <u>long term</u> and that destroy the environment by permanently depleting (using up) natural resources.</p>					
Taking action	<p>Split participants into small groups and give each group some sticky notes.</p> <p>Ask each group to discuss the following:</p> <ol style="list-style-type: none"> Which daily activities happen in your village? <p>Ask groups to write each of these activities on a separate sticky note. Each activity needs to be specific (e.g. line fishing, sup sup gardening, timber milling, dynamite fishing, cutting down trees, etc.)</p> <p>Draw two columns on a piece of butcher's paper and write these headings:</p> <table border="1"> <tr> <td>Sustainable activities</td> <td>Unsustainable activities</td> </tr> <tr> <td></td> <td></td> </tr> </table> <p>Ask one group at a time to come up and put their sticky notes in the category they think is most appropriate. Encourage them to work together to decide which column to choose. Once everyone has stuck their sticky notes up, ask participants to look at the daily activities under each heading.</p> <p>Pick some example activities under each column and ask the whole group:</p> <ol style="list-style-type: none"> Why do you think this activity is <u>sustainable</u> or unsustainable? Do you all agree? Are there any differences or similarities between what groups wrote? Why do you think this is? Which of the <u>sustainable</u> and unsustainable activities are most common in your community? Why? 	Sustainable activities	Unsustainable activities			<p>Participants understand the difference between <u>sustainable</u> and <u>unsustainable</u> activities and identify examples in their daily lives.</p> <p>Participants recognise that men, women and youth often use resources in different ways.</p>
Sustainable activities	Unsustainable activities					
	<p>Continue the discussion by asking:</p> <ol style="list-style-type: none"> What are some of the effects (<u>consequences</u>) of unsustainable activities in your community? Are there some unsustainable activities that could stop or be replaced with <u>sustainable</u> activities? What could you do as individuals or as a group to help practise more <u>sustainable</u> daily activities? 	<p>Participants discuss <u>consequences</u> of unsustainable daily activities and identify alternative ways to meet their needs.</p> <p>Participants recognise that men, women and youth often use resources in different ways.</p>				



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Session 3: Threats and strengths



Learning outcomes

By the end of this session, participants should be able to:

- identify some direct and indirect threats to sustainable resource management and sustainable livelihoods
- identify different strengths in the community and discuss how they can be used to practise sustainable resource management to improve livelihoods.

Background information

Threats to sustainable resource management and sustainable livelihoods

In Solomon Islands people's livelihoods are vulnerable to many direct and indirect threats (dangers). Direct threats are dangers that have a clear and immediate effect on the environment and livelihoods. Indirect threats are dangers that do not directly affect the environment and livelihoods, but have an impact on the community's ability and willingness to use resources sustainably. It is important to be aware of both direct and indirect threats to sustainable resource use so you can plan to avoid or deal with them. Indirect threats are just as important as direct threats and they can cause just as much damage to the community, but sometimes they are harder to recognise.

Examples of threats

Direct threats	Indirect threats
<ul style="list-style-type: none"> natural disasters climate change deforestation (logging activities) coast and mangrove degradation fresh water being polluted decline in soil <u>quality</u> and <u>erosion</u> unsustainable use of plant and animal resources unsustainable use of marine resources pollution waste disposal extractive industries (mining and logging) 	<ul style="list-style-type: none"> men and women not having an equal say in the control, use and management of natural resources political instability lack of political will (lack of concern and financial support for <u>conservation</u> by leaders) increasing population loss of traditional knowledge lack of scientific knowledge lack of legal protection for the environment rapid urbanisation poverty

Community strengths

To deal with potential threats to the environment and livelihoods, it is important to recognise the strengths that exist in the community. There are many different types of strengths.

Human: People strengths – skills and knowledge, e.g. how to write, read, work in the garden, build and dive.

Social: Formal and informal networks of support – relationships between families, tribes, communities or outside groups that encourage working together, e.g. helping other community members to build a house, gardening, fundraising and paying a bride price.

Physical: Physical resources and infrastructure, e.g. housing, clothing, transport and communication, sanitation infrastructure and water supply.

Natural: Natural resources and the environment – natural resources that rural people entirely depend on for their livelihoods, such as the land and forest, a place to make a garden, rivers, seas, fish, birds and other animals.

Financial: Traditional and modern money which people use as a medium to exchange goods and services.

Activity and discussion

Materials: Butcher's paper, marker pens

Topic	Activity	Outcomes
Using strengths to deal with danger and vulnerability	<p>Read the story below to participants. Once you have finished, facilitate a discussion by asking:</p> <ol style="list-style-type: none"> How did the group of women in Baolo community use their strengths to build the house? How will they benefit from it? In your community do you know any examples of people using their strengths in a similar way? <p>Susan's story: Building a women's house</p> <p><i>The women of Baolo Savings Club in Isabel decided they wanted to build a meeting house for meetings and community gatherings. They agreed on a plan for building the meeting house and organised a 'bring and buy' fundraiser with the support of their husbands. Each woman also contributed \$100, which they earned at the markets and then saved. The products they sell at the market come from the land and sea resources in their community, for example, vegetables and root crops from the garden and fish and shells from the reef. Most of the materials they will use to build the house will come from their land and forest, for example, timber from the forest and sand and gravel for concrete from the land. The labour skills to build the house will come from local men and youths who are happy to help because they know that when the meeting house is complete, the whole community will benefit.</i></p>	Participants understand different kinds of strengths and recognise strengths in their own community.

Identifying community threats	Picture discovery	Participants identify <u>threats</u> to <u>sustainable</u> resource management.
	<p>Picture discovery</p> <p>Separate participants into small groups of women, men, girls and boys. Ask them to look at the picture and discuss what they see. Ask them:</p> <ol style="list-style-type: none"> What are some reasons people don't or can't practise <u>sustainable</u> resource management? <p>Explain that these reasons are <u>threats</u> to <u>sustainable</u> resource management and <u>sustainable</u> <u>livelihoods</u>.</p> <p>Tip: think back to Session 2 activities.</p>	

Encourage groups to consider environmental threats as well as social threats (e.g. theft, growing population, physical and sexual violence) and threats that come from people's attitudes or beliefs (e.g. not willing to change, greedy, undisciplined).

Facilitate discussion between the groups by asking:

2. What threats did your group identify?

3. What are the similarities and differences between threats identified by the women, men and youth?

You can list the threats on butcher's paper so that everyone can see. Or, you can draw a problem tree and write the threats on branches to help communities see how threats are connected and the causes.

Identifying community strengths

Write the headings below on a piece of butcher's paper at the front of the group and explain each different strength.

Community strengths				
Human	Social	Physical	Natural	Financial

In small groups, ask participants to brainstorm their community's strengths.

Ask groups to share the strengths they recognised with the whole group and identify what kind of strengths they are. Note the strengths on the poster at the front of the group. Ask participants:

1. What are the similarities and differences between strengths identified by the women, men and youth?

Using community strengths to deal with threats

Ask participants to stay in the small groups. Explain the need to focus on community strengths, and how these strengths can be used to help overcome threats to livelihoods and sustainable resource management. If we can understand what is working, we can build on it and create better outcomes for the community.

Ask the small groups to discuss the following:

1. How can your community's strengths be used to make your community stronger?

2. How can these strengths be used to help reduce or overcome threats to sustainability?

3. Which groups could support your community to deal with threats, for example, non-government organisations (NGOs) or government ministries?

Ask the small groups to share their responses and discuss.

Taking action

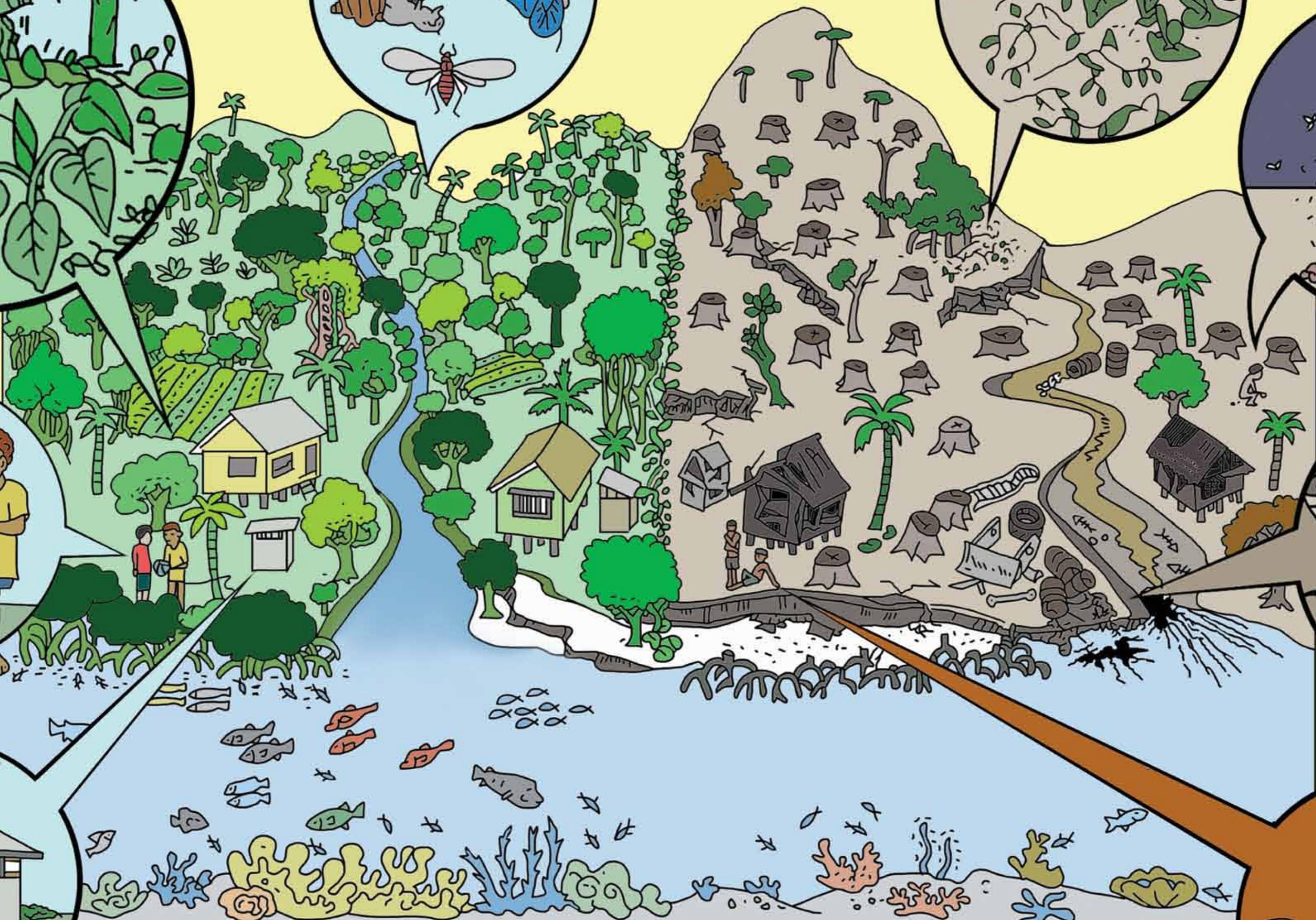
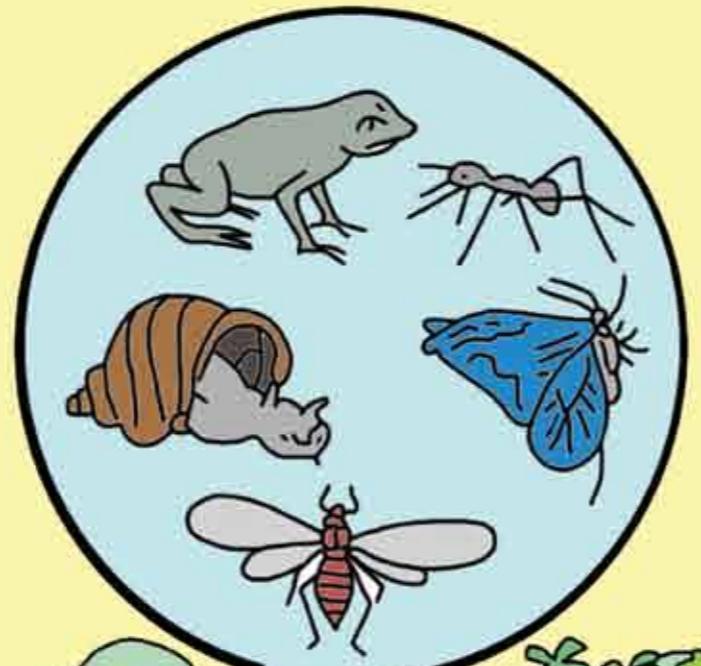
Continue the discussion by asking:

1. What could you do as individuals or as a group to help deal with potential threats?

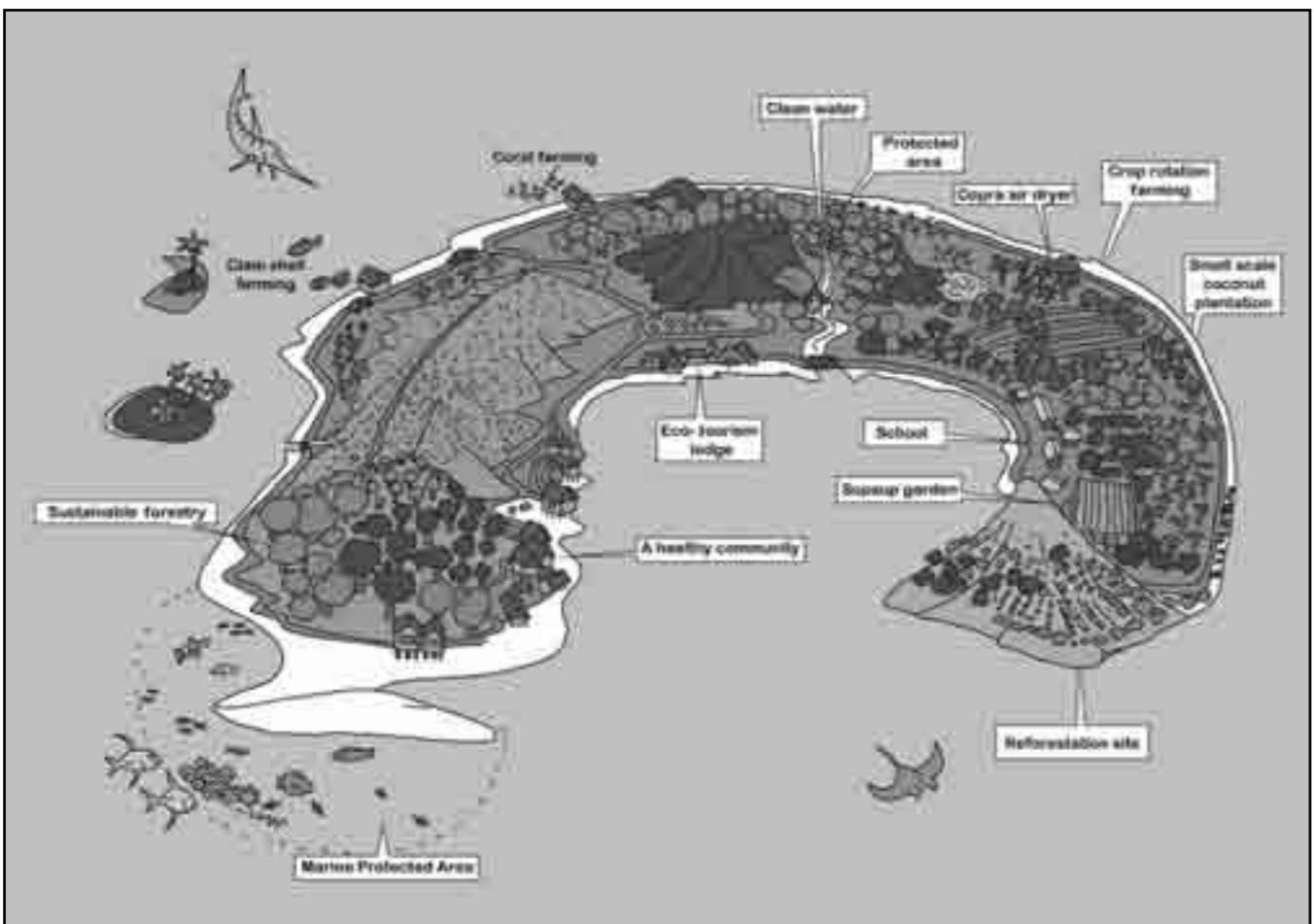
Participants understand different kinds of strengths and recognise strengths in their own community.

Participants discuss how community strengths can be used to deal with potential threats and identify the support they might need to overcome threats.

Participants identify ways they can contribute towards strengthening the community and dealing with threats.



Session 4: What are sustainable use areas and why are they important?*



Examples of sustainable use areas

- Conservation areas (e.g. marine protected area, conservation area)
- Sustainable fishing (e.g. using sustainable fishing methods, restricting size of fish)
- Sustainable farming and gardening (e.g. organic farming, agro-forestry)
- Sustainable forestry (e.g. selective tree harvesting, small scale timber milling, reforestation and tree planting)
- Alternative sustainable livelihood activities (e.g. rural savings clubs, floral and arts, fundraising, trade store)

Sustainable use areas and livelihoods

When setting up a sustainable use area it is important to think about the way the community uses the resources in that area.

If there is a big demand (need) for the resources in that area, then it may be difficult for some people to respect the rules that will be put in place to manage resources in a sustainable way. Thinking about other places people can find resources and other ways they can meet their needs is one way to help people respect the rules of the sustainable use area.

Even if the area is managed by one group or family, it is important that the whole community take part in discussions about the resources that they share. It is also important that the group managing the sustainable use area talks to community members about why they think it is necessary to use natural resources in a sustainable way and about the importance of protecting the environment. If people understand why you want to take action, they are much more likely to support you.

Activity and discussion

Materials: Paper and pencils for keeping score, a large number of counting materials (e.g. small stones, seeds or sticks)

Topic	Activity	Outcomes
Different kinds of SUAs	<p>Picture discovery Ask participants to look at the picture and discuss what they see. Ask them:</p> <ol style="list-style-type: none"> 1. What different areas are represented? 2. Do you think these areas are good for the community? Why or why not? 	Participants identify different kinds of SUAs and discuss which ones might be appropriate for their community.
Why do we need to manage resources sustainably?	<p>Game - Stayin' alive! Explain to the group that they are going to play a game of survival. Split participants into groups of four people and put 16 stones in the centre of each group. Have a reserve of stones for you to hand out after each round. Explain that these stones represent valuable renewable resources (e.g. fish, trees, pawpaw, crabs). Read out the rules to the group:</p> <ol style="list-style-type: none"> 1. This game has four rounds. In each round, players take turns to take stones from the pile in the centre. 2. Each group member can take as many stones as they like when it is their turn. 3. Each group member must take at least one stone in each round to survive. If there are no stones left, that member is out of the game. 4. At the end of each round, the resource pile will be doubled. 	<p>Participants think about how the way one person uses resources can affect others in the community.</p> <p>Participants recognise the need to plan and work together to make sure there are enough resources for everyone, now and in the future.</p>

Lead the group through the game by following these steps:

Step 1: Start round 1 and tell each person in the group to take as many stones as they like. Ask someone in each group to record the number of stones taken by each person.

Step 2: After each round, count the number of stones left in each group's resource pile. Give them double the amount of stones they have left. (e.g. if there are 6 stones left, give them 6 more).

Step 3: After each round, check to see if anyone did not survive and ask them to sit out.

Step 4: After playing another four rounds, invite everyone to make one big circle and ask each person in the group to tell everyone how many stones they have.

Lead a discussion by asking these questions:

1. Out of everyone, who has the most stones? How did he or she achieve this?
2. Did this prevent others from surviving?
3. Can the group think of examples like this in their community?
4. Were there any groups where everyone survived? What did they do to make sure there would be enough for everyone?
5. Was there a leader in the groups or did everyone decide together? If there was a leader, why did the group listen to that person?
6. Could everyone have survived without communication and planning?

Taking action	<p>Discuss with participants how this activity relates to resources in their community.</p> <p>Ask the group:</p> <ol style="list-style-type: none"> 1. What information is necessary to know how to manage a resource sustainably (e.g. community size, resource renewal rate, environmental carrying capacity)? 2. What is needed to put this information into practice (e.g. leadership, communication, trust)? 3. Is your community ready to manage resources sustainably? If so, why? If not, what steps need to be taken so that it is ready? 	<p>Participants identify what information they need to plan for resource use and what skills or qualities they need to manage resources sustainably.</p> <p>Participants identify steps to take to make sure their community is ready to manage resources sustainably.</p>
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* This activity was adapted from 'Drain or Sustain' from the Education for Sustainable Development Toolkit by Rosalyn McKeown, Ph.D (Available at www.esdtoolkit.org)

Learning outcomes

By the end of this session, participants should be able to:

- understand what a sustainable use area (SUA) is
- identify different kinds of SUAs
- identify ways SUAs can benefit the community
- understand the importance of planning in conserving natural resources.

Background information

The natural resources that people need to survive must be used in a sustainable way so that there will be enough for everyone in the future. Establishing a sustainable use area (SUA) is one way people can protect the environment and still meet their economic, social and cultural needs and improve their livelihoods. SUAs help communities manage the way they use natural resources by providing rules and guidelines that everyone agrees to follow.

Planning for the future

Planning and working together is essential for sustainable resource management because natural resources are shared within and between communities. To manage resources we need to consider all the different people that use a resource and what they use it for. We also need to make sure that the whole community (women, men, girls and boys) is involved in planning to manage resources in a sustainable way so that they can help create, share and apply rules about resource use.

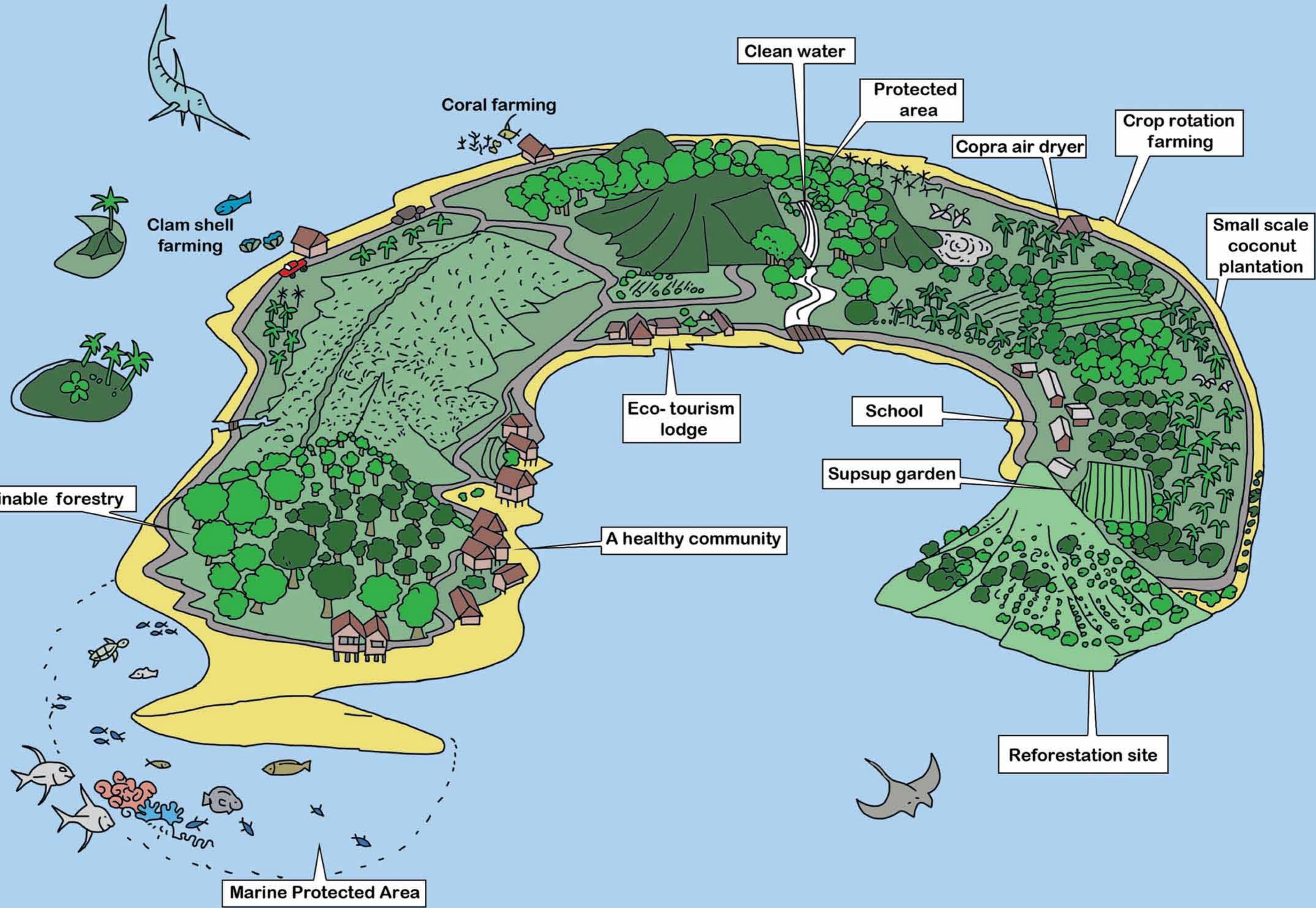
What is a sustainable use area?

Sustainable: If a resource is used in a sustainable way it means it is used in a way that makes sure the next generation can still access the same resources as we do today, in terms of both quantity and quality.

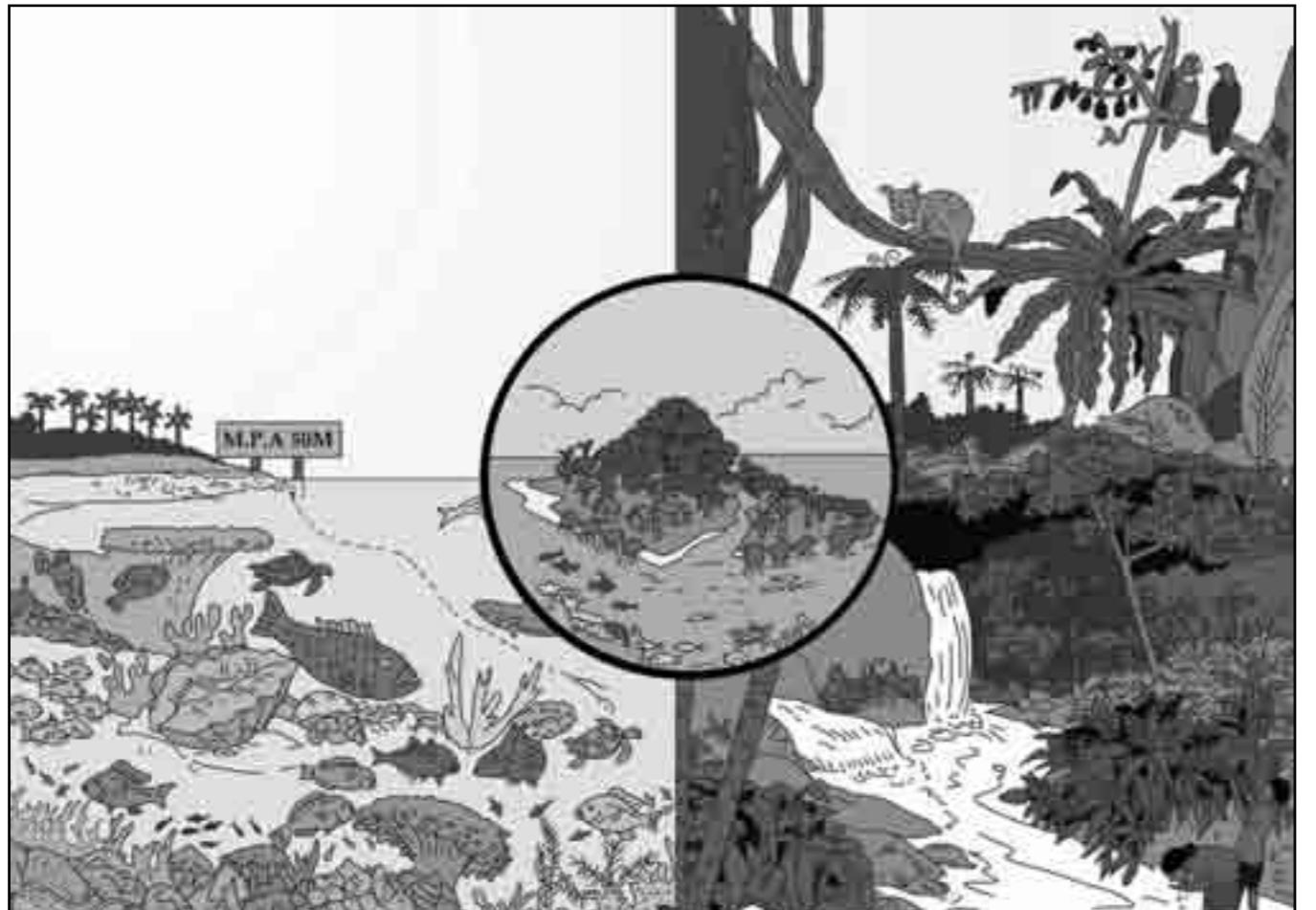
Use: This is the use of natural resources to support people's livelihoods or fulfil an economic, social or cultural need.

Area: This is the location where activities are taking place. It can be a big or small area, such as a region, district, community or village.

Sustainable use area: An SUA is an area where the environment and resources are used, accessed and controlled in a way, and at a rate, that maintains their biodiversity, productivity, health and their capacity to reproduce. It is also an area where the potential of the environment to fulfil economic, cultural and social functions is protected and where resource use does not cause damage to ecosystems and people's livelihoods now and in the future.



Session 5: Conservation areas



Learning outcomes

By the end of this session participants should be able to:

- understand what a conservation area is and identify types of conservation areas
- understand why conservation areas are important
- identify people to consult with before establishing a conservation area and the process involved in setting up a conservation area
- identify which kind of conservation area, if any, would help them protect their resources and what existing strengths they have to support its establishment.

Background information

Every community is different and has different conservation needs. Geography, culture, the availability of natural resources and direct and indirect threats to sustainable resource use will determine which type of sustainable use area communities decide to establish. One option is to create a conservation area in order to protect valuable resources and spaces that are under threat.

What is a conservation area?

A conservation area is an area that landowners have decided to protect in order to make sure that natural resources and features, or cultural heritage, are preserved for the future. In conservation areas, human activity is restricted in the interest of conserving the natural environment, ecosystems and any cultural or historical resources that may require preservation or management. Conservation areas can be:

- agricultural plots or fields
- forests
- marine protected areas
- steep slopes
- mangroves and wetlands
- places where native animals live
- scenic views
- archaeological sites.

Examples of conservation areas in Solomon Islands

- Arnavon Community Marine Conservation Area, Choiseul and Isabel Provinces
- Babau Marine Protected Area, Marau Sound, Guadalcanal (managed by Vungana Tribal Land Association)
- Kolombangara Island, Western Province (managed by Kolombangara Island Biodiversity Conservation Association [KIBCA])
- Tetepare Island, Western Province (managed by Tetepare Descendants Association)

Conservation areas and livelihoods

It is important to consider the effect that setting up a conservation area will have on the livelihoods of community members. If community members regularly take natural resources from that area for personal use or to generate income then it is important to think about alternative livelihoods (other ways of providing for personal and family needs and for generating income). It is also important to include the people affected by this decision in the planning of the conservation area.

Benefits of a conservation area

Establishing a conservation area can benefit the ecosystem by protecting water resources, helping to keep soil fertile for planting, creating and storing nutrients (food for plants), breaking down and absorbing pollution, and helping keep the climate stable (steady). Establishing a conservation area can also help to preserve biodiversity, make sure healthy foods, medicine, fuel and housing materials are available, and maintain important research, education and recreation spaces.

Conservation areas can also provide an opportunity for income generation through ecotourism and can help to protect communities from logging and other extractive industries if the area is legally recognised.

Establishing a conservation area

Before establishing a conservation area it is important to think about community strengths and the natural resources that need to be protected. It is important that you take time to talk with many different groups to make sure everyone in the community understands the need for conservation, has a chance to share their knowledge, opinions and skills, and will support the conservation area when it is established.

Before setting up a conservation area, it is wise to seek advice from

- community leaders and elders, as they can advise about good ways to manage the area and about traditional ways of managing the natural resources that are native to the area
- environmental NGOs or organisations with knowledge and skills about conservation
- Local or Provincial and National Government (Ministry of Environment and Conservation)
- Land Owners Advocacy and Legal Support Unit (LALSU)
- communities that have already established a similar conservation area ('look and learn' trips)
- all community members (men, women, boys and girls), especially those who use the resources most.

Once a site is identified, boundaries need to be agreed on by landowners, and everyone who uses the area and its resources must agree to establish the conservation area. Communities need to consider what rules (or by-laws) are needed to protect the area, who will create and enforce these rules; and what penalties will apply for those who do not follow these rules.

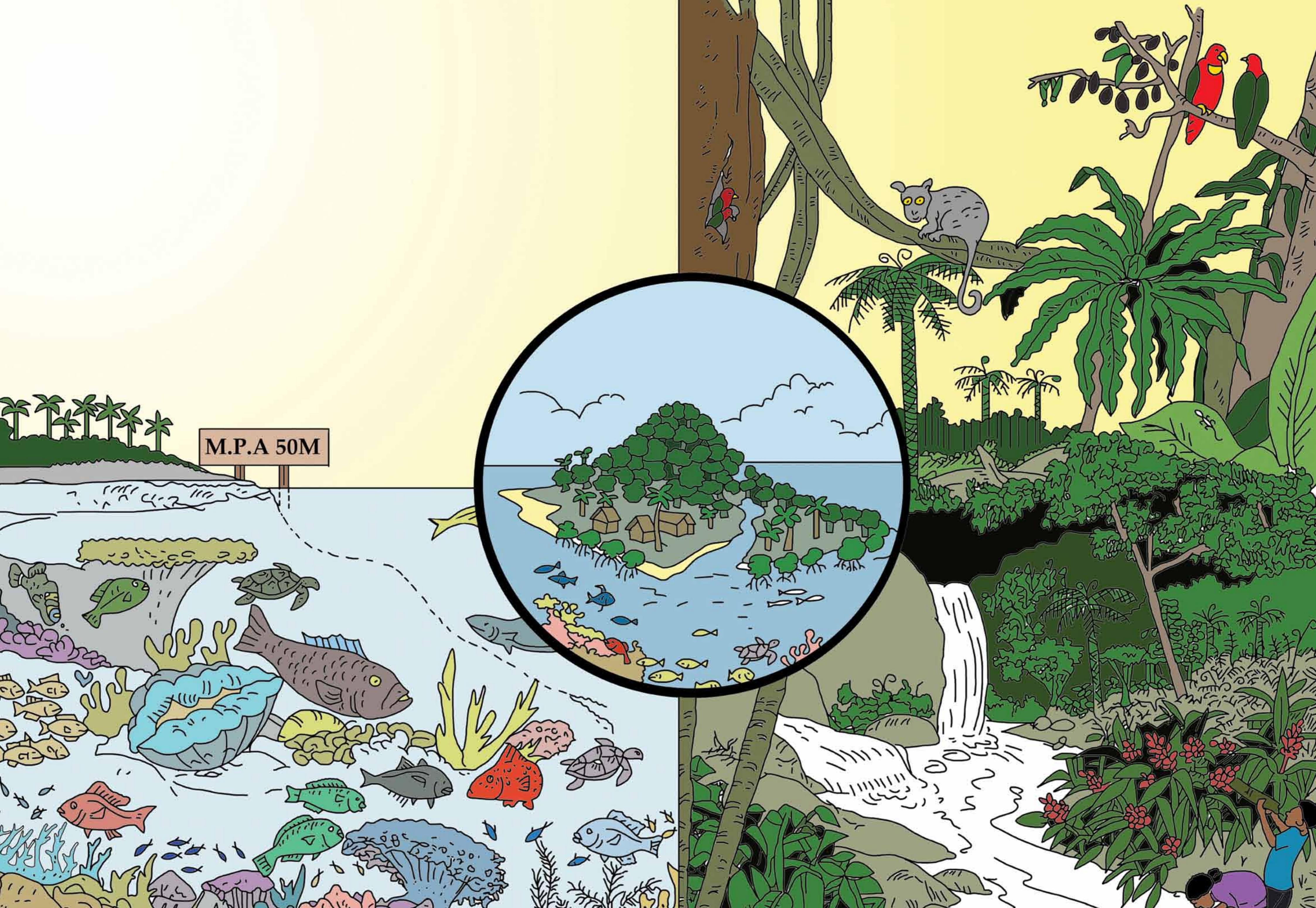
The final step in creating a conservation area is to make sure that you educate everyone who uses the area and its resources about:

- why protecting natural resources is important for the environment and for livelihoods
- why you have chosen to establish a conservation area; what the rules are for the area; and what will happen to those who break the rules.

Activity and discussion

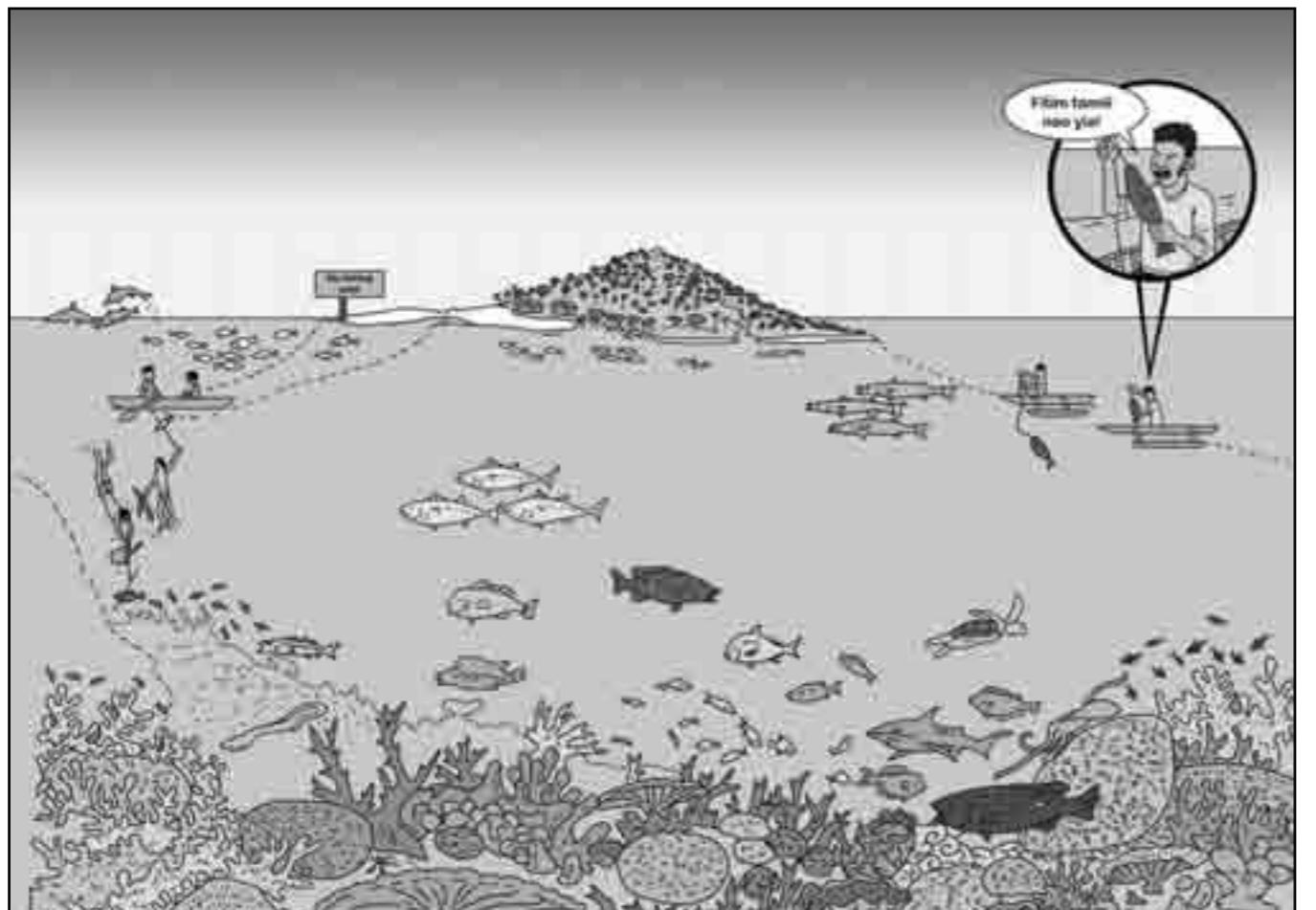
Materials: Butcher's paper, marker pens

Topic	Activity	Outcomes
What is <u>conservation</u>?	<p>Picture discovery Ask participants to discuss what they see in the picture and then ask them:</p> <ol style="list-style-type: none"> 1. What is <u>conservation</u>? 2. What is a <u>conservation</u> area? 3. What are some examples of different <u>conservation</u> areas? 4. What are some examples of <u>conservation</u> areas in or near your community? 	Participants identify and discuss different kinds of <u>conservation</u> areas and identify examples from their community.
The impact of <u>conservation</u>	<p>Discussion Ask participants to discuss the following questions in small groups before sharing their responses with the whole group.</p> <ol style="list-style-type: none"> 1. How will establishing a <u>conservation</u> area affect the environment in the <u>short term</u> and <u>long term</u>? 2. How will establishing a <u>conservation</u> area affect <u>livelihoods</u> in the <u>short term</u> and <u>long term</u>? 	Participants identify short- and <u>long-term</u> impacts of <u>conservation</u> on the environment and their <u>livelihoods</u> .
Conservation in your community	<p>Discussion Facilitate a discussion with the whole group by asking them to list the natural resources in their community. Write these up as a list on butcher's paper.</p> <p>Split into small groups and ask the groups to discuss which resources most need to be protected. Ask them to consider:</p> <ol style="list-style-type: none"> 1. Is a <u>conservation</u> area a good way to help protect these resources? Why or why not? 2. If you establish a <u>conservation</u> area, what alternative (other) resources would the community be able to use to meet their needs? <p>Ask each group to share their thoughts and discuss with the whole group.</p>	Participants identify the resources in their community that most need to be protected. Participants discuss alternative ways to meet their needs if they establish a <u>conservation</u> area.
Taking action	<p>Discussion Ask the group to think back to Session 3 (Threats and strengths) and list the community strengths they identified. Ask them:</p> <ol style="list-style-type: none"> 1. How can you use these strengths to help set up a <u>conservation</u> area? 2. What are some other skills or strengths that you need to set up a <u>conservation</u> area? 3. Where can you find these skills or strengths? 	Participants identify ways they can use individual and community strengths to promote or establish a <u>conservation</u> area.



M.P.A 50M

Session 6: Sustainable fishing



Learning outcomes

By the end of this session, participants should be able to:

- understand sustainable fishing and its importance to their livelihood
- identify types of sustainable fishing
- be aware of the benefits of sustainable fishing and the consequences of unsustainable fishing.

Background information

The majority of Solomon Islanders live on the coast and along major rivers, and they depend heavily on marine and freshwater resources for food and income generation. Traditional community-based management of resources has a long history. However, traditional management has been weakened or has disappeared because of changes in technology, population growth, the shift toward a cash economy, and power and wealth not being shared equally. The effects of climate change are also starting to be seen and changes in sea surface temperatures are affecting marine life.

Marine and freshwater resources need to be managed to make sure they are not overharvested. Practising sustainable fishing is one way that communities can make sure there are enough marine and freshwater resources for everyone, now and in the future.

Sustainable fishing includes all activities that avoid overfishing. To make sure fishing is sustainable a community can:

- limit how many fish one person can catch per day or per week (make quotas)
- make rules about what type of fishing gear can be used
- ban destructive and illegal fishing practices by enforcing by-laws or lobbying for law and policy change
- set up protected areas with seasonal harvesting (marine protection areas, or MPAs)
- make some species banned (*tabu*) at particular times (e.g. not allowing fishing during breeding season so that fish are able to reproduce)
- set a minimum size for fish
- restore collapsed fisheries
- educate the community and government about the importance of conservation.

The value of marine and freshwater resources

Marine resources (fish, coral, shells, shellfish, squid, seaweed, etc.) and freshwater resources (prawns, shellfish, fish, etc.) are an important part of Solomon Islanders' livelihoods. They provide us with food as well as ways of generating income. Just like different animals and plants in the forest are connected through food chains, so are the living things in seas and rivers. In the sea, small fish, crabs and starfish need seaweed and shells to survive. Big fish, crayfish and squid need small fish, crabs and starfish to survive, and dolphins, sharks and some big birds need big fish, crayfish and squid to survive. The overfishing of one species (kind) does not just effect the population of that fish alone. It can have serious effects both up and down the food chain, which puts all marine and freshwater resources in danger. Everything is connected and all marine and freshwater life needs clean water to survive.

Conserving marine and freshwater life is also important because there are many species of fish that are endangered. Being endangered means being in danger of dying out – once they all die, the species cannot reproduce and they will never come back.

Possible benefits of sustainable fishing

- It can help to keep the marine and freshwater food chain stable to make sure future generations have access to marine and freshwater resources like we do today.
- It can reduce (lower) the negative environmental impacts already caused by overfishing.
- It can increase sustainable tourism opportunities.
- It can maintain sustainable livelihood activities that directly or indirectly depend on these natural resources, such as selling fish at the market.

Possible consequences of unsustainable fishing

- The environment (habitat) that fish need to be healthy and reproduce can be spoiled, so the number of fish in the sea goes down. This means there are less fish to eat and less fish to sell at the market.
- If there are no rules in the community about fishing, it is easier for one person or family to take a big share of the fish for themselves and not leave enough for anyone else.
- The number of fish will go down and some species might die out forever.
- Coral will die, which affects the food chain and lowers the chance of tourists coming to visit.

Practising sustainable fishing

In order to make decisions about sustainable fishing, community members need to be educated about the importance of marine and freshwater life (fish, shellfish, coral, shells and other living things). If the community members agree to practise sustainable fishing then they need to work together to establish and enforce common rules to preserve their interests. A group will need to be identified or set up to make sure that the rules the community agree upon are followed. It is important that all community members (women, men, boys and girls) are included in decisions about marine resource management because all community members share these resources.

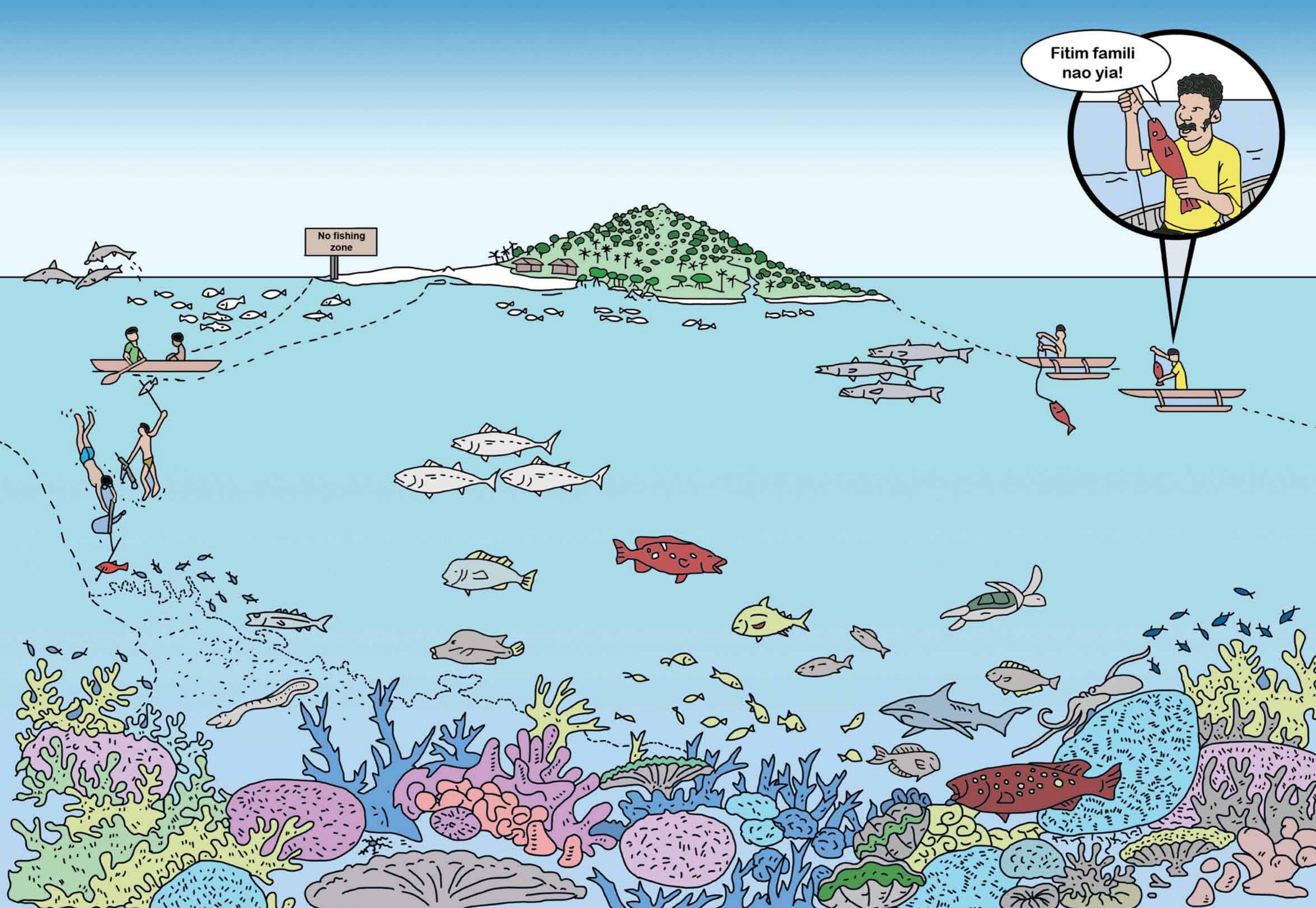
Challenges

There can be some challenges to practising sustainable fishing; however, if communities recognise their strengths and work together most can be overcome. Some examples of challenges to sustainable fishing are:

- not enough scientific information and research
- community members are unwilling to respect the established rules
- there is trouble enforcing the agreed rules
- political will is weak and there is a lack of support
- community members depend on sea resources to generate income.

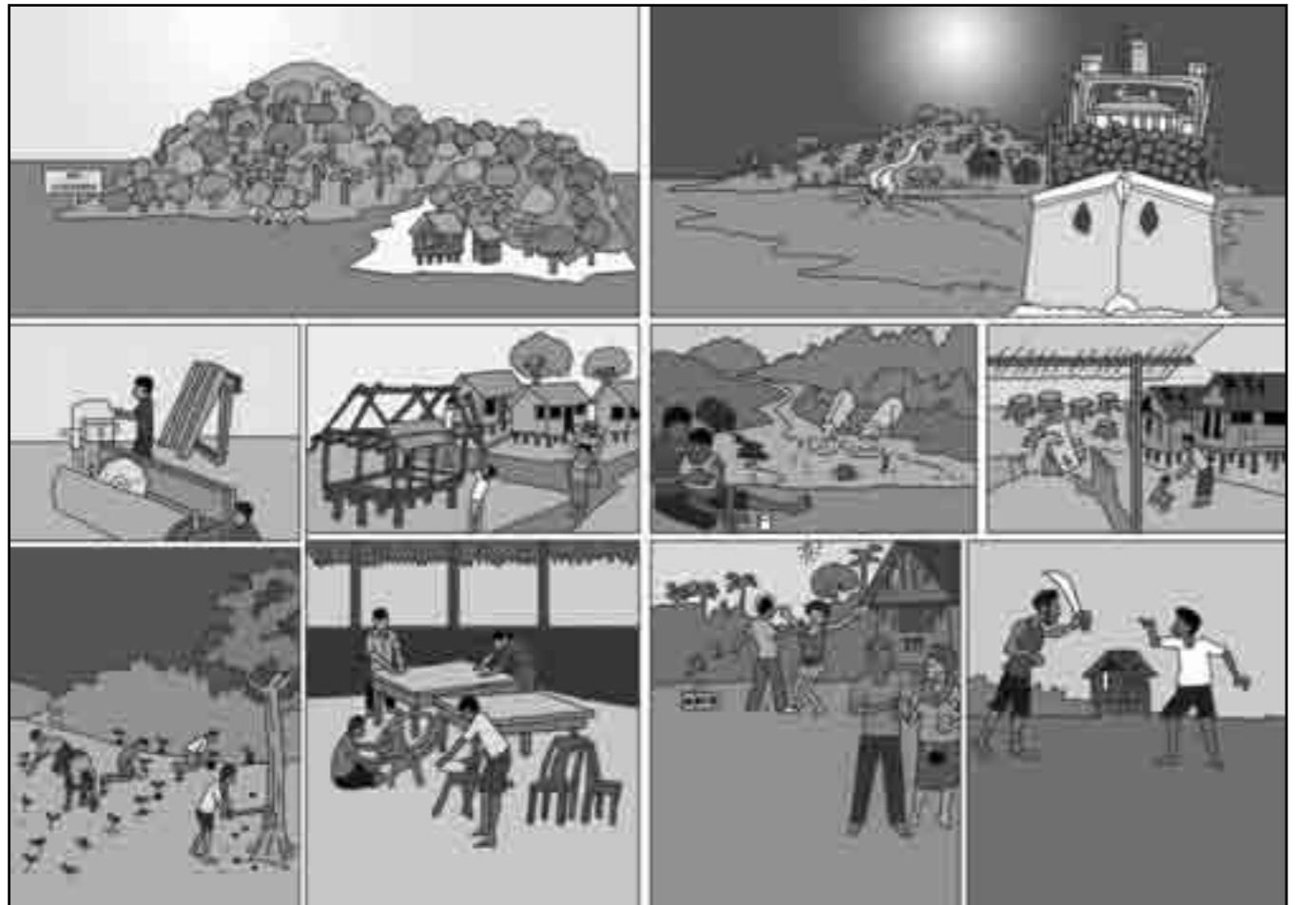
Activity and discussion

Topic	Activity	Outcomes
What is sustainable fishing?	<p>Picture discovery Divide the participants into small groups of men, women, boys and girls to discuss what they see in the picture. Ask them:</p> <ol style="list-style-type: none"> 1. What do you think <u>sustainable</u> fishing is? 2. What are some of the traditional ways our ancestors used to fish? Do we still use those practices now? Why or why not? 3. What are some introduced fishing practices? Are these methods beneficial? Why or why not? 4. What are some <u>sustainable</u> and unsustainable fishing practices that happen in your community? 	Participants identify and discuss traditional and modern fishing practices and identify <u>sustainable</u> methods.
Sustainable fishing in your community	<p>Discussion Still in small groups, ask them:</p> <ol style="list-style-type: none"> 1. What types of fishing techniques are most common in your community? 2. Are they <u>sustainable</u> or unsustainable? 3. How can more <u>sustainable</u> fishing affect <u>livelihoods</u> (income and resources) and the environment in the short and long term? 	Participants identify short- and long-term impacts of <u>sustainable</u> fishing on the environment and their <u>livelihoods</u> .
Identifying challenges and strengths: sustainable fishing	<p>Drama and discussion Tip: Think back to Session 3 (Threats and strengths) Ask the small groups:</p> <ol style="list-style-type: none"> 1. What are some of the challenges to <u>sustainable</u> fishing? 2. How can we use the strengths we have in the community to meet these challenges? <p>For a fun activity, ask small groups to act out each <u>threat</u> and strength and have the rest of the group guess what they are trying to act out. Once they guess correctly, the participants can explain what their group discussed about this <u>threat</u> or strength.</p>	Participants recognise <u>threats</u> to <u>sustainable</u> fishing and identify ways to overcome these challenges.
Taking action	<p>Discussion Ask participants to think about what was presented. Ask them:</p> <ol style="list-style-type: none"> 1. Do you think fishing methods could be more <u>sustainable</u> in your community? 2. What are some alternative fishing techniques or methods that you think could work in your community? 3. What can you do as an individual and as a community to help promote <u>sustainable</u> fishing? 	Participants identify ways they can contribute to more <u>sustainable</u> fishing practices in the community.



Fitim famili
nao yia!

Session 7: Sustainable forestry



Learning outcomes

By the end of this session, participants should be able to:

- understand what sustainable forestry is and identify some sustainable forest management techniques
- understand the importance of sustainable forest management to their livelihoods.

Tip: To make sure the participants are aware of the importance of trees and forests, please make sure you complete Session 1 before running this session.

Background information

Forests play a vital role in maintaining the health of the environment and supporting other living things. They provide us with fertile land for farming and clean air to breathe, and they are home to many species (kinds) of plants and animals. They also help to keep temperatures stable (steady) and to give us clean water. When the forest is managed in an unsustainable way, we risk losing an important source of food, medicine and materials, and we risk polluting the air and water, destroying the home of plant and animal species, and spoiling fertile land.

With logging and mining activities, there is also a high risk of causing serious social issues in the community because there can be conflict over land ownership, there are less resources for the community to share, and royalties are often not shared equally between community members.

Some of the most common unsustainable forestry practices are:

- commercial logging (legal and illegal)
- unregulated commercial plantations (e.g. cash cropping for coconut, cocoa and oil palm, and plantation forestry)
- shifting cultivation (e.g. slash and burn)
- over-exploitation of natural resources.

Unsustainable forest management

Our forests are being logged at an unsustainable rate but there is still time to save them. The sustainable management of forests is not new in Solomon Islands; our ancestors have practised sustainable forest management for many years. However, economic, social and political changes have led to new challenges and some communities and landowners are exploiting forests for short-term profit.

There are a number of factors that contribute to the destruction of the forests, including:

- overharvesting of trees for timber, firewood and charcoal production
- clearing for agriculture (farming and gardening methods)

- infrastructure and housing development (road and house building)
- watershed degradation (clearing out trees or forest along rivers and streams)
- lack of understanding of the importance of forest resources
- weak laws and law enforcement.

Sustainable forest management

A range of communities now practise sustainable forest management and many different methods and tools are available.

Some kinds of sustainable forest management are:

- selective cutting
- replanting after harvesting
- planning how to use land for farming (e.g. cash crop, subsistence farming), settlement, forest preservation, etc. to control deforestation
- setting up a conservation area.

Opportunities

In most communities in Solomon Islands the right to access, use and manage the forest is held by communities, not by the government or businesses. This means that communities can decide for themselves how forests are used. This gives community members the power to say no to unsustainable use of the forest and its resources.

Sam's story: Sustainable forestry in Marovo

In Kone and Ngaringari we have over 11,000 hectares of land and approximately half of it has already been logged. Fortunately, a decision was made to reserve a small area of this land so now we are trying to sustainably harvest our forest. We realise that if we want to make a profit from sustainable harvesting we must have a market, so we are working towards getting certified through the Forest Stewardship Certification program that the government supports. If you are certified it means that when your timber is sold overseas people can see where it came from and they know it was harvested in a sustainable way. We work very closely with a business where we send containers of timber from our area. After we send the timber, it is then certified and the business sells it overseas.

Forestry and livelihoods

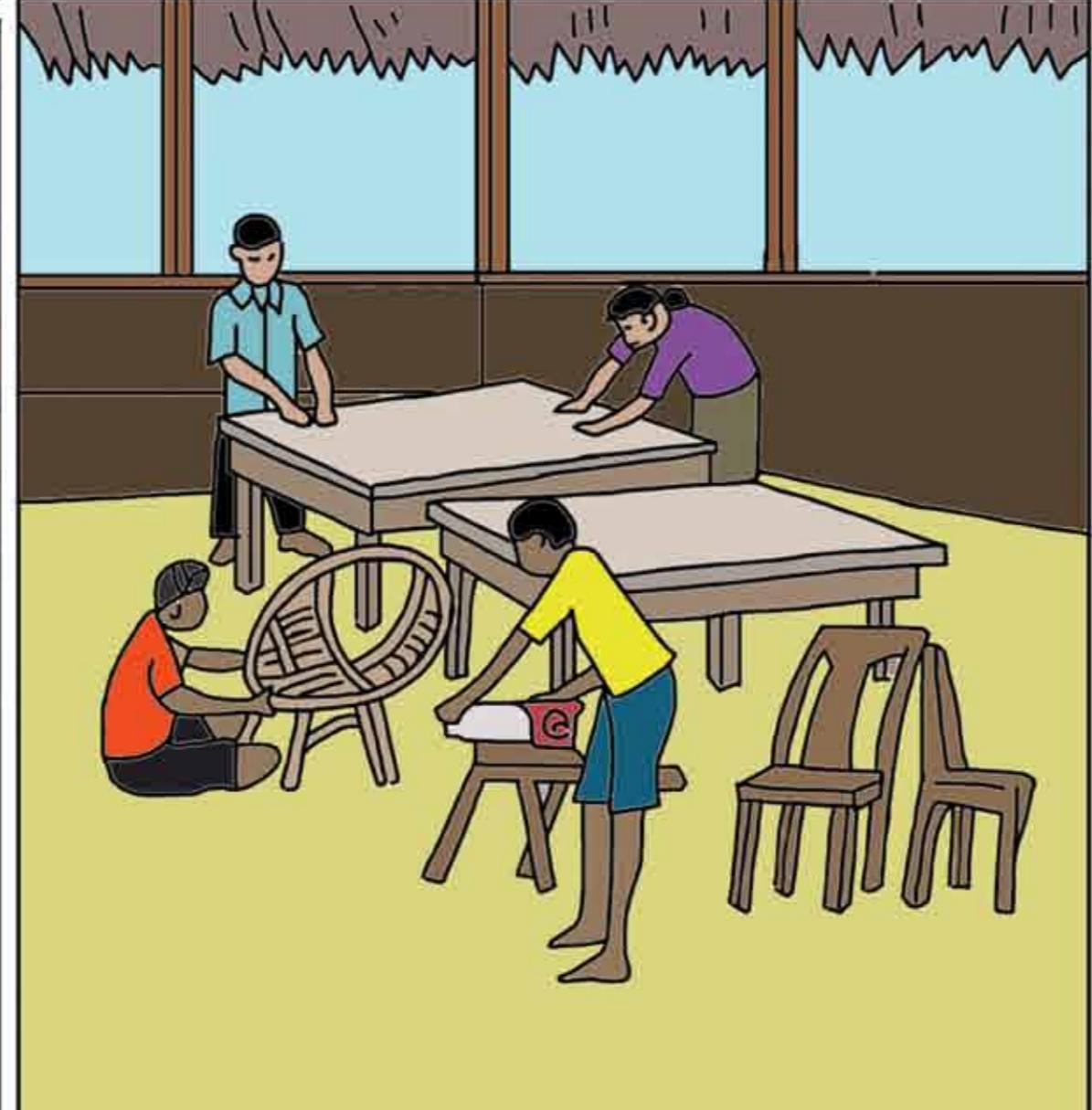
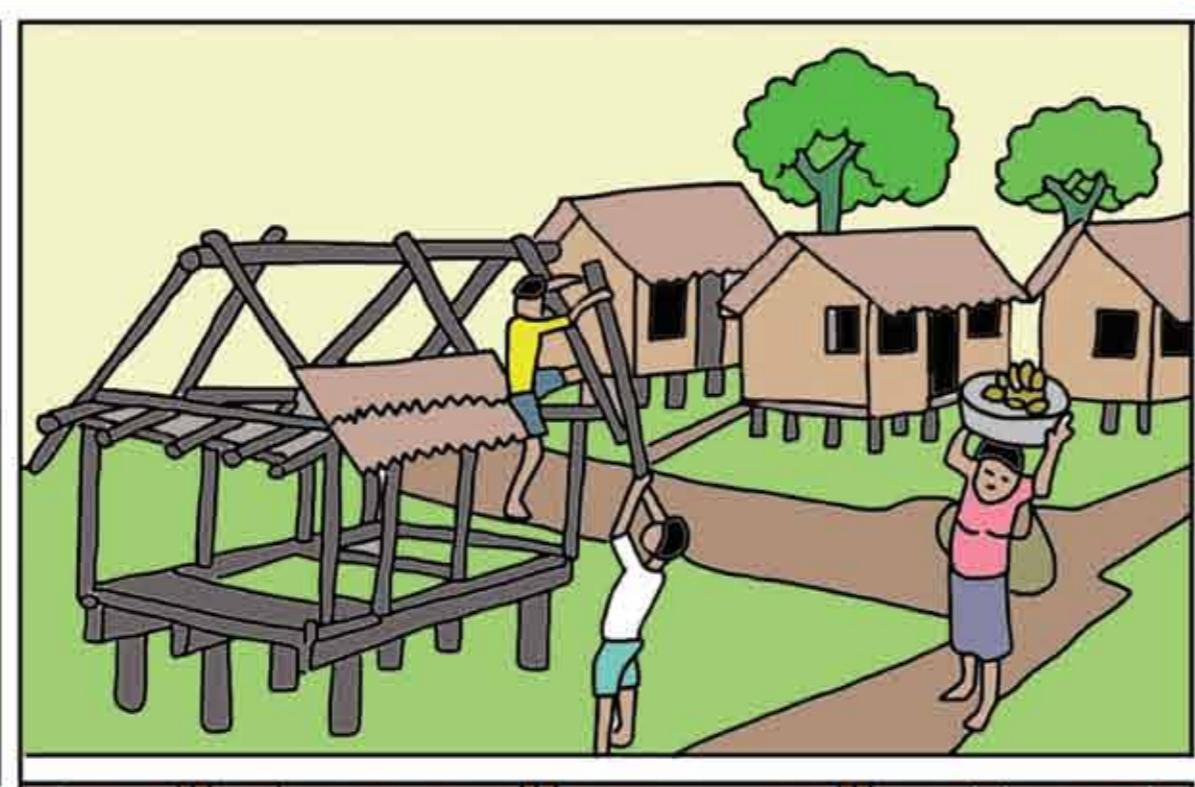
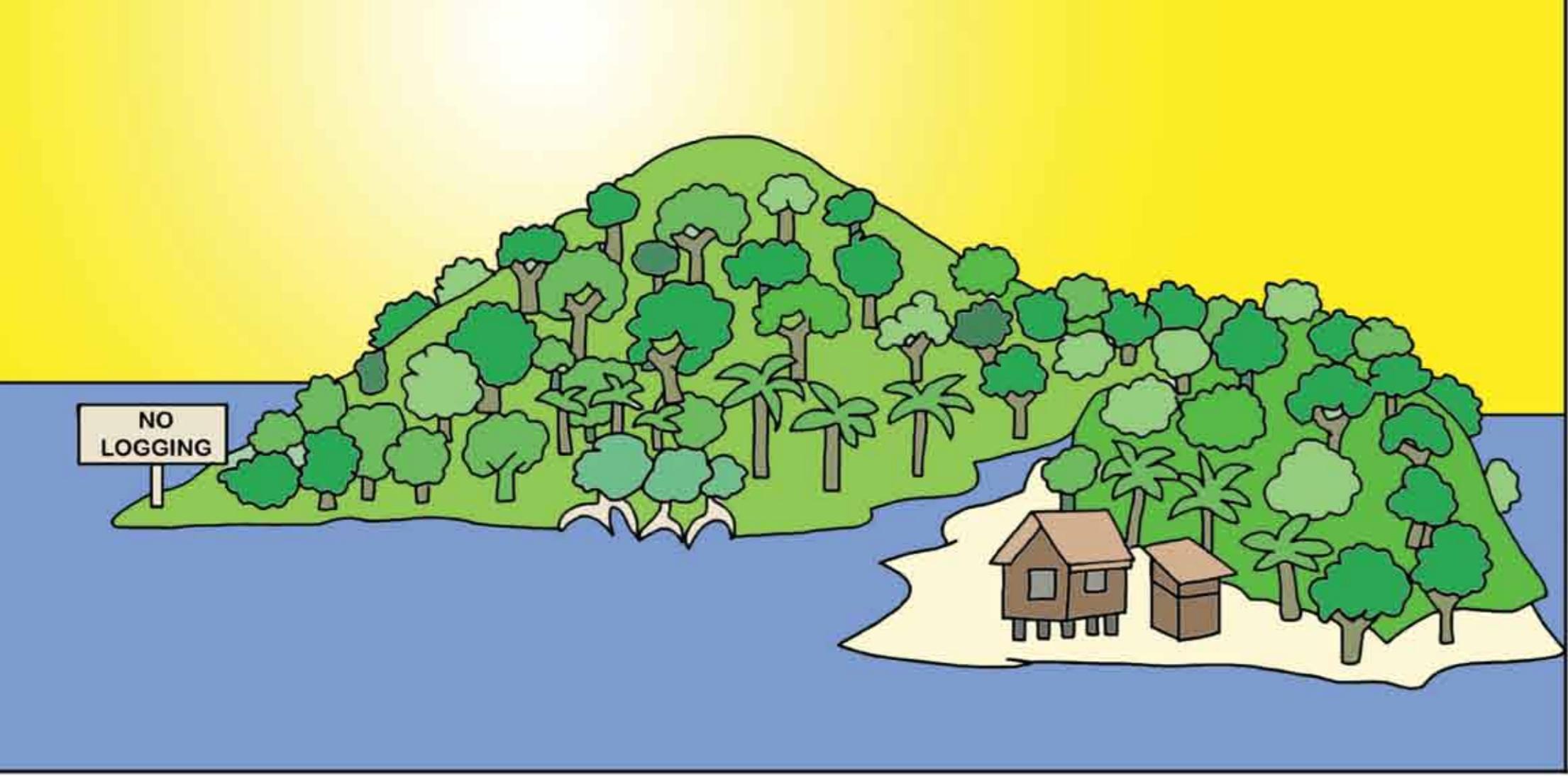
It is important to be realistic about the link between forestry and livelihoods. Many individuals will prioritise making money in the short term over protecting natural resources in the long term, especially when they are struggling to find enough money to meet their daily needs. Many people do not understand the importance of protecting the forest and do not realise that once a forest is destroyed it will never be the same, even if trees are replanted. They also do not understand ways that destroying a forest can impact on other parts of the environment and the community. Lack of education about the environment and the need for income mean that many people engage in practices that are harmful to the forest. For sustainable forest management to be successful, communities need to think about alternative livelihoods and other ways to generate income.

Activity and discussion

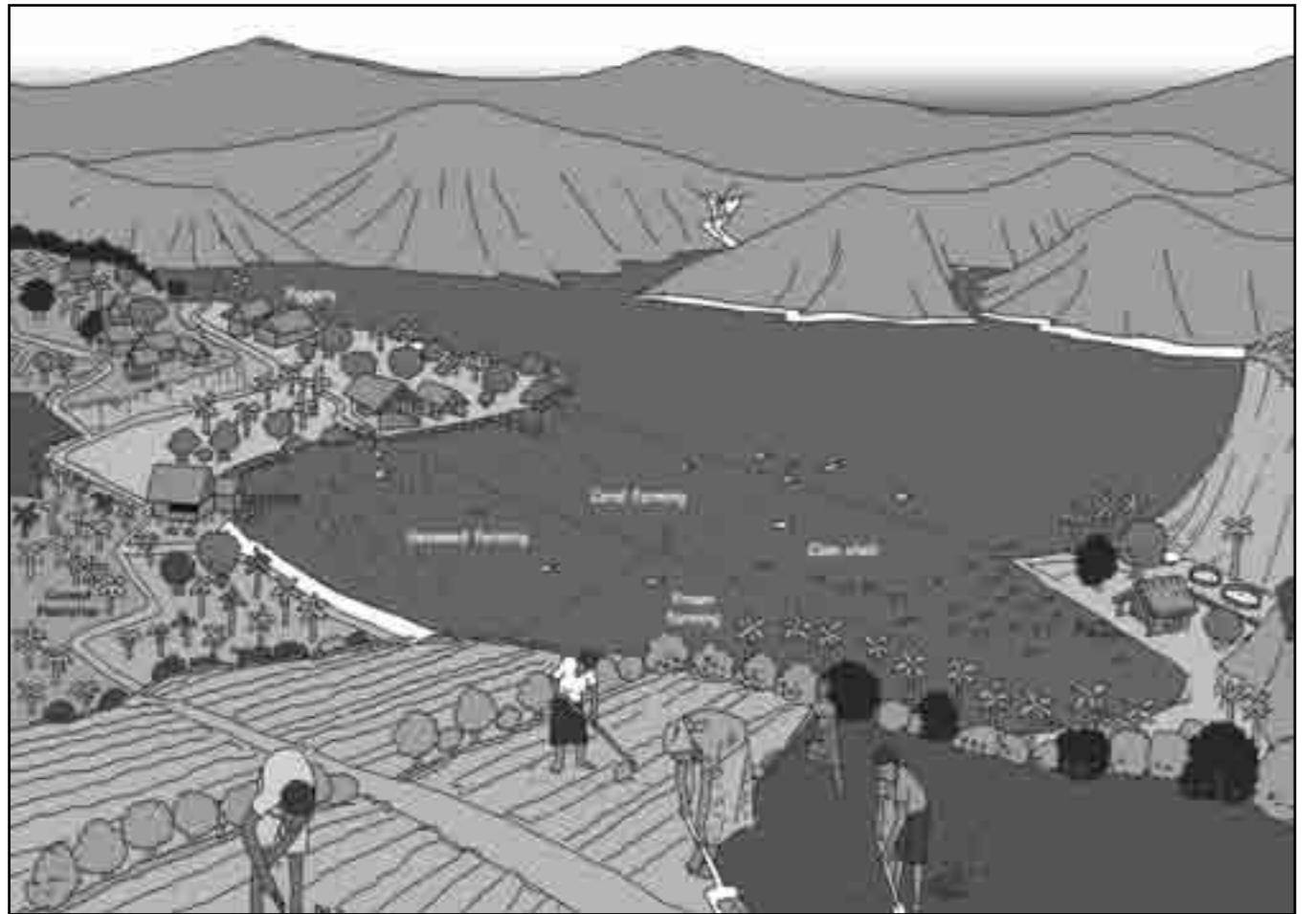
Materials: Butcher's paper, marker pens

Topic	Activity	Outcomes
What is sustainable forestry?	Picture discovery Ask participants:	Participants identify examples of <u>sustainable</u> forest management and discuss why they are or are not practised today.

Decision-making about forest resources	Discussion In small groups ask participants to discuss: 1. Who uses trees and forests in your community? 2. Who is responsible for looking after the forest? 3. Who makes decisions about natural resource management? - Is this fair? - Do they make good decisions? Why or why not? - What do you think needs to be considered to make good decisions about forest management? In a large group, compare and discuss each group's responses.	Participants identify who uses and makes decisions about forest resources. Participants think about what needs to be considered to make good decisions about forest management.												
The impacts of unsustainable forest management	Discussion (small or large groups) 1. What are the impacts of unsustainable forestry that you experience in your community? 2. Who is most affected by unsustainable forestry? 3. How are men, women, boys and girls affected in different ways by unsustainable forestry?	Participants identify the impacts of logging and other unsustainable forest management on different groups within the community.												
The impacts of forest management on livelihoods	Comparing positive and negative impacts On butcher's paper, draw a table like the example below and place it at the front of the group. Some example impacts are already listed if you need help. Lead the group in a brainstorming session to fill in the <u>short-term</u> and <u>long-term</u> negative impacts of <u>sustainable</u> and unsustainable forest management. Discuss each one and place a cross next to it.	Participants identify the impacts of <u>sustainable</u> and unsustainable forest management.												
	<table border="1"> <thead> <tr> <th colspan="3">Impacts of forest management</th> </tr> <tr> <th></th><th>Unsustainable</th><th>Sustainable</th></tr> </thead> <tbody> <tr> <td>Short term</td><td> <ul style="list-style-type: none"> More cash More violence </td><td> <ul style="list-style-type: none"> Not a lot of cash in the community Less alcohol in the community </td></tr> <tr> <td>Long term</td><td> <ul style="list-style-type: none"> Water supply spoilt No bush materials for building </td><td> <ul style="list-style-type: none"> Clean water Enough resources for everyone </td></tr> </tbody> </table> Lead the group in brainstorming again looking at the <u>short-term</u> and <u>long-term</u> positive impacts of <u>sustainable</u> and unsustainable forest management. Discuss each one and circle it. Count how many positive and negative impacts there are in each box and discuss the results with the group.	Impacts of forest management				Unsustainable	Sustainable	Short term	<ul style="list-style-type: none"> More cash More violence 	<ul style="list-style-type: none"> Not a lot of cash in the community Less alcohol in the community 	Long term	<ul style="list-style-type: none"> Water supply spoilt No bush materials for building 	<ul style="list-style-type: none"> Clean water Enough resources for everyone 	
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Taking action	Ask the group to discuss: 1. Do you think forest management could be more <u>sustainable</u> in your community? 2. What are some alternative methods of managing forests that could work in your community? 3. How can you contribute to more <u>sustainable</u> forestry practices in your community?	Participants identify ways they can contribute to more <u>sustainable</u> forestry practices in the community.												



Session 8: Sustainable farming and gardening



Learning outcomes

By the end of this session, participants should be able to:

- understand the importance of sustainable farming and gardening towards their livelihood and the environment
- identify types of sustainable farming and gardening and consider how they can be applied in their community.

Background information

Farming and gardening are vital to Solomon Islanders' survival. Through farming and gardening, individuals, families and communities can feed themselves, earn an income, and support social and cultural activities such as feasting, weddings, and church and community activities.

Sustainable farming and gardening

Sustainable farming and gardening means farming and gardening marine and land resources in a way that makes sure the next generation can still access the same resources that we do today. It is important because it means people can rely on farming and gardening products for their daily needs, so they will not need to overharvest and exploit natural resources.

Which farming and gardening methods people use depends on geography, natural and human resources, climate and tradition. This means that there is not one answer to how to farm and garden in a sustainable way. Every community must consider their environment and resources to decide what is best for them.

Some examples of sustainable farming and gardening practices are:

- organic farming
- keeping local poultry (*kokorako*) or pigs
- seasonal crop rotation
- farming of clam shells, coral, fish, etc.

Shifting cultivation

Many farmers in rural areas of Solomon Islands follow the traditional method of shifting cultivation, also known as 'slash and burn'. In this method, an area of bush is cleared, burned and then cultivated to make food gardens. When all the crops have been harvested the area should be left to grow back into bush over a period of seven or more years while the farmers move on to clearing another area for planting. This allows natural bush to grow back, which makes the soil more fertile and ready to be planted again.

Unfortunately, as the population grows there is more demand for land, so the period (time) when the area is left to grow back into bush is often only two or three years. During this time, only weeds grow back, so there is little soil improvement and soil fertility does not increase. Shifting cultivation requires a lot of land; it can spoil large areas of forest (which will never grow back the same), lower the quality of the soil and create a lot of carbon dioxide through burning plants and grass. This means that this method is no longer sustainable in Solomon Islands.

Alternatives to shifting cultivation

There are many alternatives to shifting cultivation that can help to keep soil healthy and crop yields steady.

Some of these alternatives are:

- nursery management
- mulching
- crop rotation
- seed saving
- organic farming
- agro-forestry.

Brush and hoe method

Another alternative is the brush and hoe method. Areas are cleared by cutting away vegetation to just above ground level using a bush knife. Slashed organic matter (weeds, shrubs and young trees) is left to cover the ground or used as mulch and compost. The soil is then cultivated with a hoe into mounds for planting. Sometimes the organic matter is heaped into rows between the mounds. Once the garden is growing, it is weeded as normal, but weeds are laid on the ground as mulch instead of burning them.

Improved traditional tree planting

Improved traditional tree planting is a system of planting the forest with many different types of food plants: large trees, medium-size trees, shrubs and then root crops that grow in the shade. In this method, two different farming or gardening systems are combined: the mixed food forests of traditional and improved tree crops, and the modern gardens of annual crops that use alley cropping to keep the soil fertile. Some people have been chopping down their fruit and nut trees to plant new gardens. With this method the two systems should work together, and fruit and nut trees are not cleared. This system has been developed and tested in the Reef Islands in Temotu Province in the Improved Temotu Traditional Agriculture (ITTA) project.

Contour farming

Contour farming is a practice used to control soil erosion on sloping land, allowing farmers to continue using the same area of land for cropping. This method is very useful for low-quality sloping land as it will improve the land over time. An A-frame is used to mark contour rows, which are then planted with vetiver grass and *Gliricidia*. Crops are planted between these contour rows.

Erythrina for improved fallows

Planting legume trees (*Gliricidia* or *Erythrina*) after crop harvesting is a proven method for increasing soil fertility. The legume trees are planted rather than just leaving the bush to regrow on its own, which is the traditional way. This method can be used in small areas of land, such as backyard farming, or in larger farming areas.

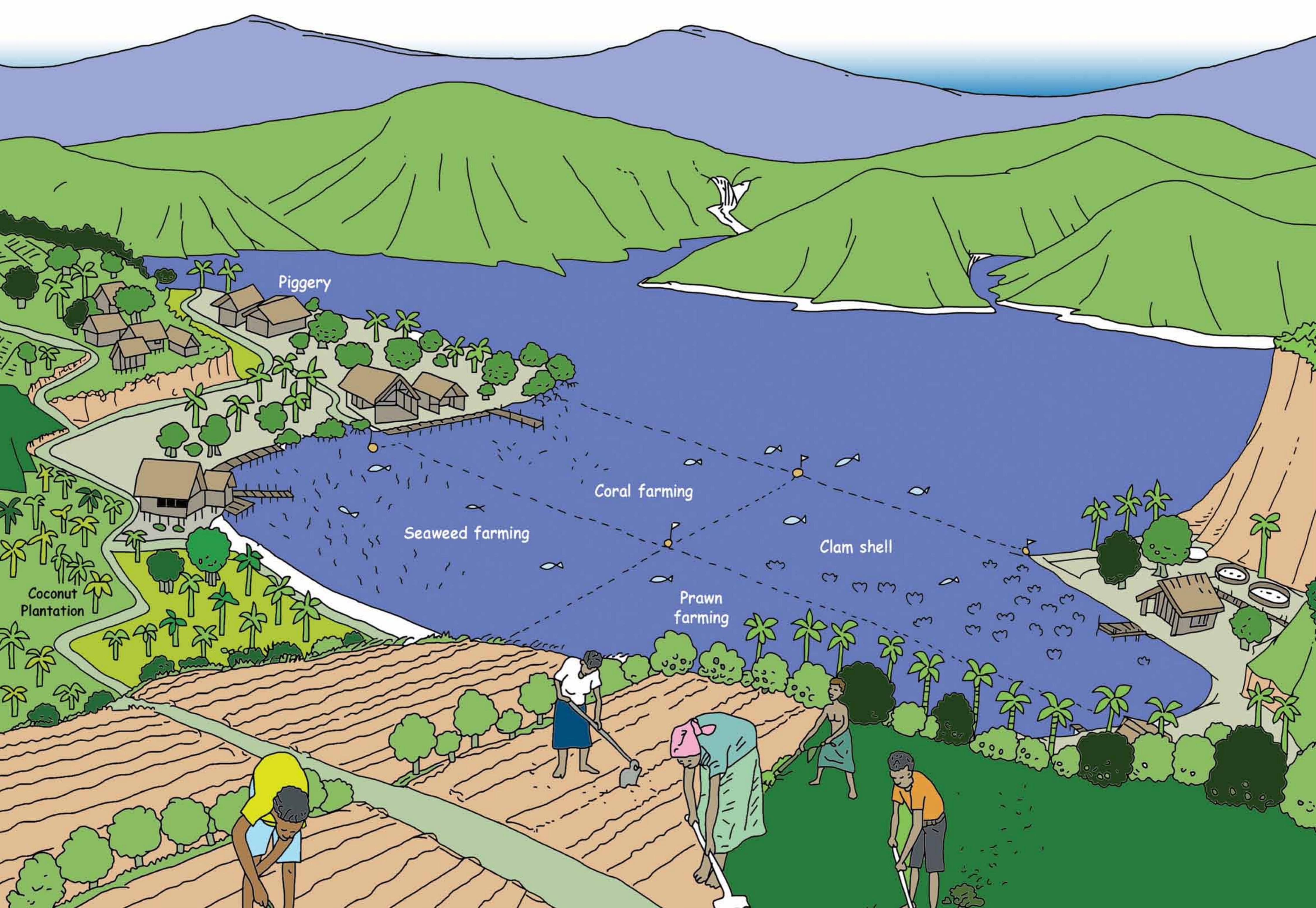
Benefits of practising sustainable farming and gardening

- Land is more fertile
- Land can be used for many crop cycles
- Improved soil due to the organic matter
- Steady and reliable supply of food for subsistence and income-generation
- Reducing deforestation (i.e. the forest being cut down)
- Not producing as much carbon dioxide
- Preservation of plant and animal species

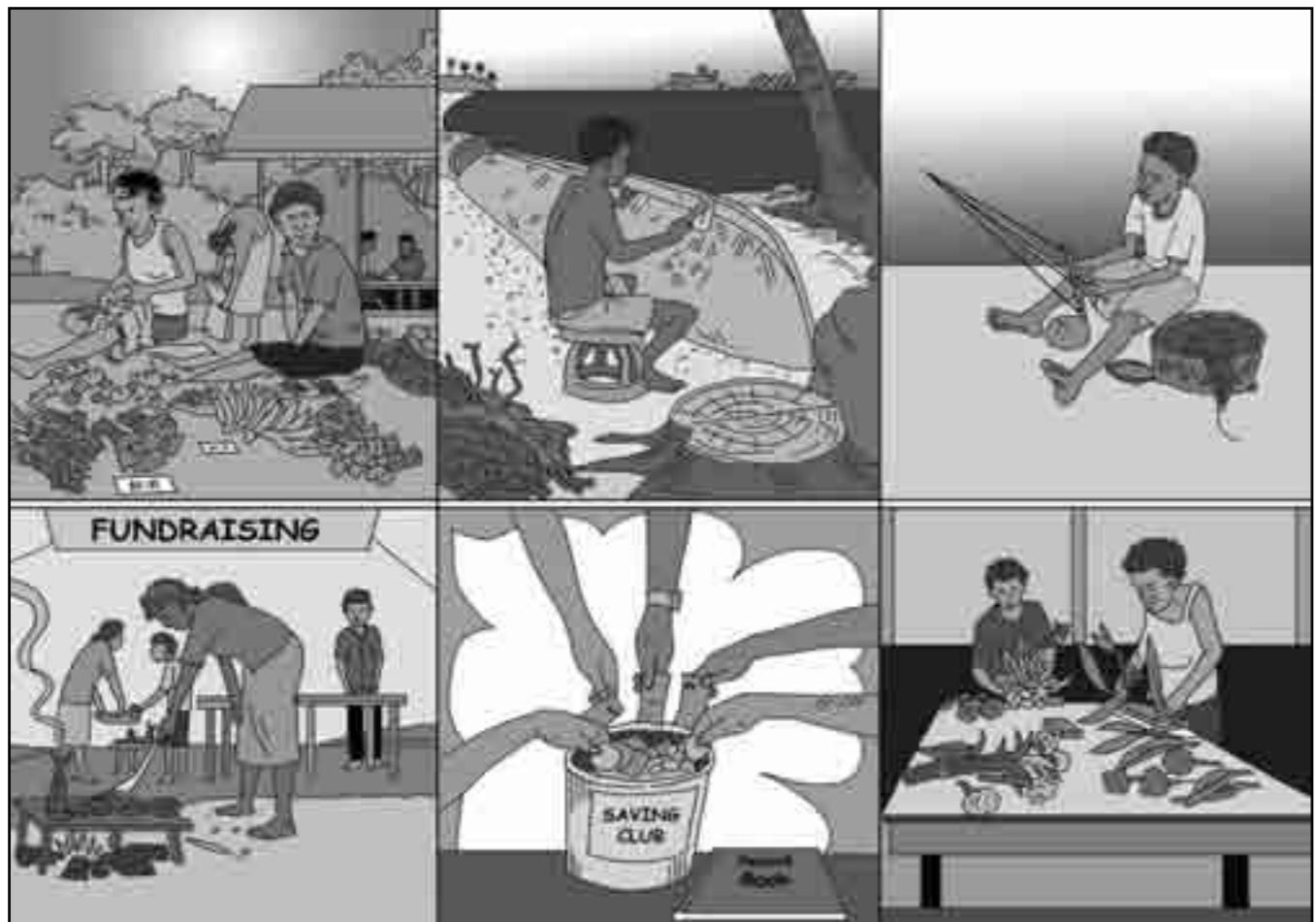
Activity and discussion

Materials: Butcher's paper, marker pens

Topic	Activity	Outcomes
What is sustainable farming and gardening?	<p>Picture discovery Ask participants to look at the picture and ask them:</p> <ol style="list-style-type: none"> What do you think <u>sustainable</u> farming and gardening is? What examples do you see in the picture? What are some of the ways our ancestors practised <u>sustainable</u> farming? Do we still use those practices now? Why or why not? 	Participants identify examples of <u>sustainable</u> farming and gardening.
Decision-making about farming and gardening practices	<p>Discussion In small groups ask participants the following questions:</p> <ol style="list-style-type: none"> Who does most of the farming and gardening work in your community? Who is most affected by unsustainable farming and gardening: men, women, boys or girls? Who makes decisions about farming and gardening practices in your community? <ul style="list-style-type: none"> Is this fair? Do they make good decisions? Why or why not? What do you think needs to be considered to make good decisions about farming and gardening? <p>Compare and discuss each group's responses with the whole group.</p>	Participants identify who uses and makes decisions about farming and gardening practices. Participants think about what needs to be considered to make good decisions about farming and gardening practices.
Comparing sustainable and unsustainable farming and gardening practices	<p>Discussion (small or large group) Ask the group to discuss:</p> <ol style="list-style-type: none"> What are the farming and gardening techniques practised in your community? <p>Ask each group to share their answers and make a list on butcher's paper at the front of the group. Go through the list and ask for each practice:</p> <ol style="list-style-type: none"> Is this practice <u>sustainable</u> or unsustainable? Why or why not? <p>Place a cross next to the practices in the list that the group decides are unsustainable.</p> <p>Split into small groups and give each group one or two unsustainable practices from the list. Ask them to discuss more <u>sustainable</u> alternatives to these methods. Ask each group to share what they discussed with the larger group.</p>	Participants discuss sustainable and unsustainable farming and gardening practices in their community.
Taking action	<p>Ask the group:</p> <ol style="list-style-type: none"> What can you do as an individual and as a community to help promote more <u>sustainable</u> farming and gardening? 	Participants identify ways they can contribute to more <u>sustainable</u> farming and gardening.



Session 9: Alternative sustainable livelihoods



Learning outcomes

By the end of this session, participants should be able to:

- understand what alternative sustainable livelihood activities are
- understand how unsustainable livelihood activities affect their future
- recognise which sustainable daily activities they can practise to benefit their community.

Background information

Farming and gardening are vital to Solomon Islanders' survival. Through farming and gardening, individuals, families and communities can feed themselves, earn an income, and support social and cultural activities such as feasting, weddings, and church and community activities.

What is a livelihood?

The way we use our skills and resources to meet our needs (e.g. shelter, food, water) and wants (e.g. mobile phones, radios, boats) is called our livelihood. Having a secure livelihood is not just about having money – it is also about having access to natural resources and using our skills, knowledge and other strengths.

What is a sustainable livelihood?

"Samfala, olketa tingting dat laevlhid hem minim seleni nomoa, bat mifala save dat yumi nidim moa dan jas seleni fo garem helti laef – yumi mas lukaotem gud enviromen blong yumi bekos hemi givim kam staka samting fo sapotim helti laef lo komiuniti."

Making sure our livelihoods are secure involves building up individual and community strengths and reducing vulnerability (risks and dangers).



A sustainable livelihood is a way of meeting our needs that can deal with and recover from stresses and shocks (unexpected changes) and can build up our individual and community strengths, now and in the future. For example, planting a food garden is sustainable as a livelihood because it helps to make sure that even when you don't have money, you can still have food for your family.

Commercial logging is unsustainable, because even though it increases income today, it decreases environmental and social strength, and once the forest is destroyed, it will never be the same, even if it regrows.

It is important to recognise the strengths that exist in every community. There are many different types of strengths:

- people's skills and knowledge
- social networks of support and relationships between families, tribes and communities
- physical resources such as housing, clothing, transport and communication
- natural resources and the environment
- traditional and modern money that people exchange for goods and services.

By recognising the different strengths that individuals, families and tribes have and by working together to share these strengths, the community becomes stronger. Sharing strengths also means that communities will be ready to deal with threats and vulnerability so that they can sustain or protect their livelihood.

Unsustainable livelihoods

For many people, the temptation to take part in unsustainable livelihoods is strong because they need money to meet their needs. The long-term social, economic and environmental costs of these livelihoods is often not clear. Logging and mining are good examples of this.

The real costs of logging and mining

- Royalties are not often shared evenly in the community and the amount is sometimes much lower than promised. The amount that reaches the community is also much less than what the land is really worth.
- Money is often spent quickly on cigarettes, betelnut and beer. This can cause many social problems, such as violence in the community and in the home and disputes (raoa) over money. It also means that people still do not have money to meet their needs.
- The environment is destroyed forever. Even if the forest is replanted or the companies leave, the environment is never the same.
- Water supplies are often spoiled, which leads to sickness in the community. Families then need to buy water tanks, which are expensive. They also need to pay for trips to the hospital and for medicine.
- Soil is not as fertile so crop yields are lower, and there is less to sell at the market so family income goes down.
- There are fewer materials available for housing so people have to pay for expensive milled timber to build with.
- Landowners no longer have control over their land and decisions are made by companies.

Max's story

When loggers came to our village we were worried it would be bad. We heard stories that in other communities, one man got rich but everyone else, they got nothing. It ruined the water and gardens and there was a lot of fighting because of conflict over land and because royalties from logging were not shared fairly. When the loggers left our village, the fighting still went ahead. Today, the people in our village are divided – they do not come together to talk. The Chief tries to talk to them, but only a few people listen to him. This situation is a big challenge for our children and grandchildren because these differences will continue to bring about bad things in the future. It is like now we are different people, but before the logging we saw ourselves as one people and, just like our forefathers, we worked together.

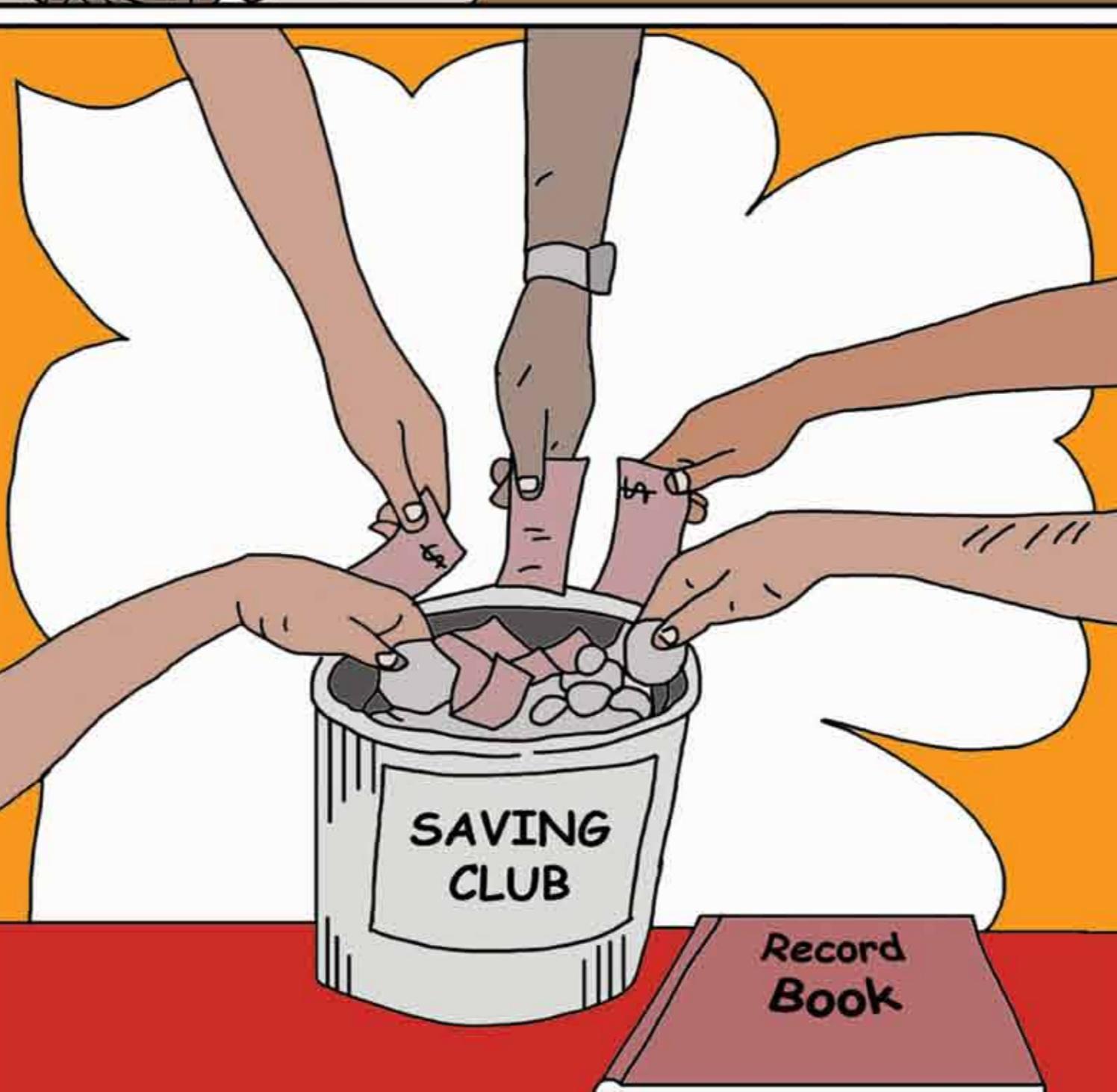
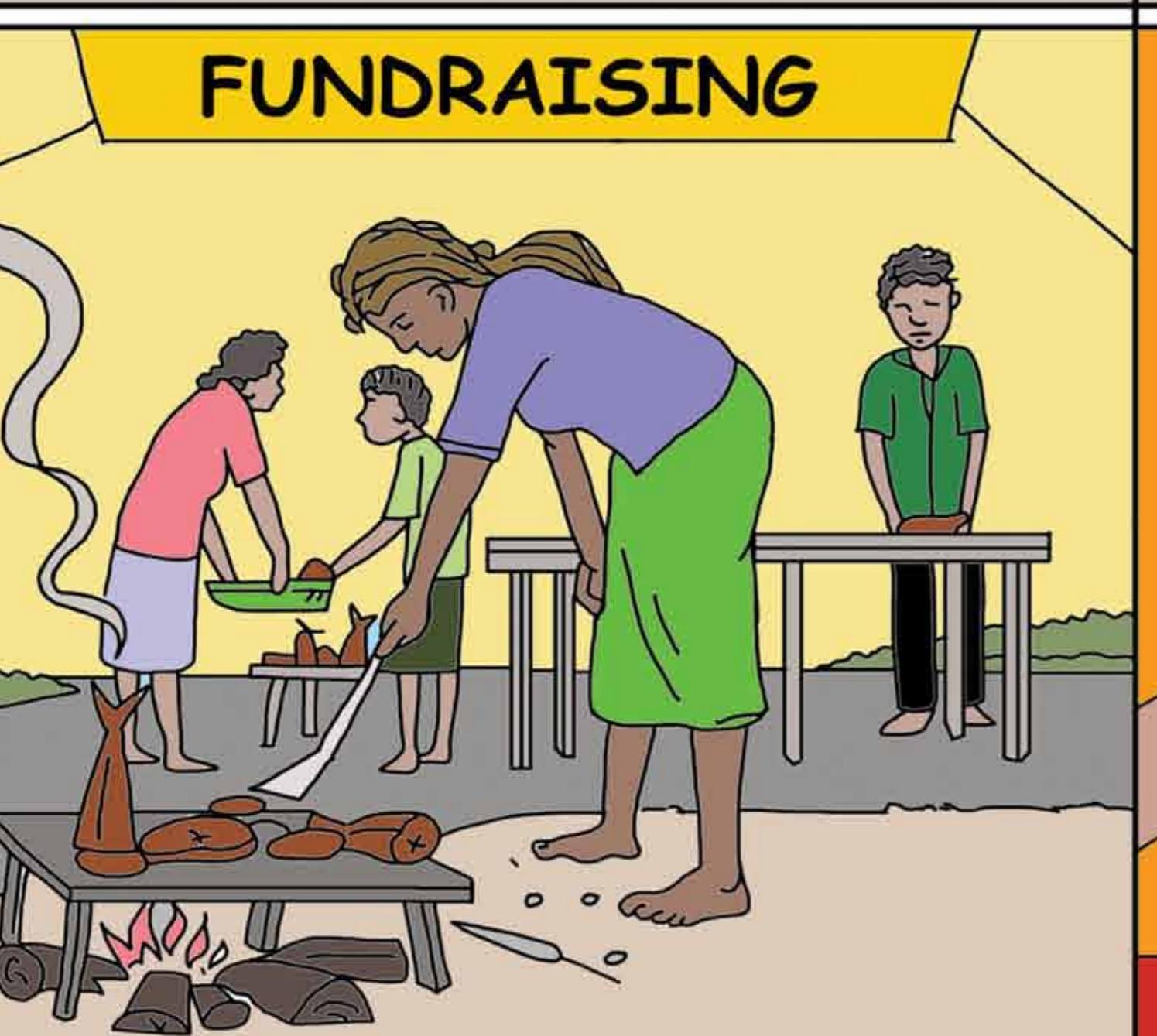
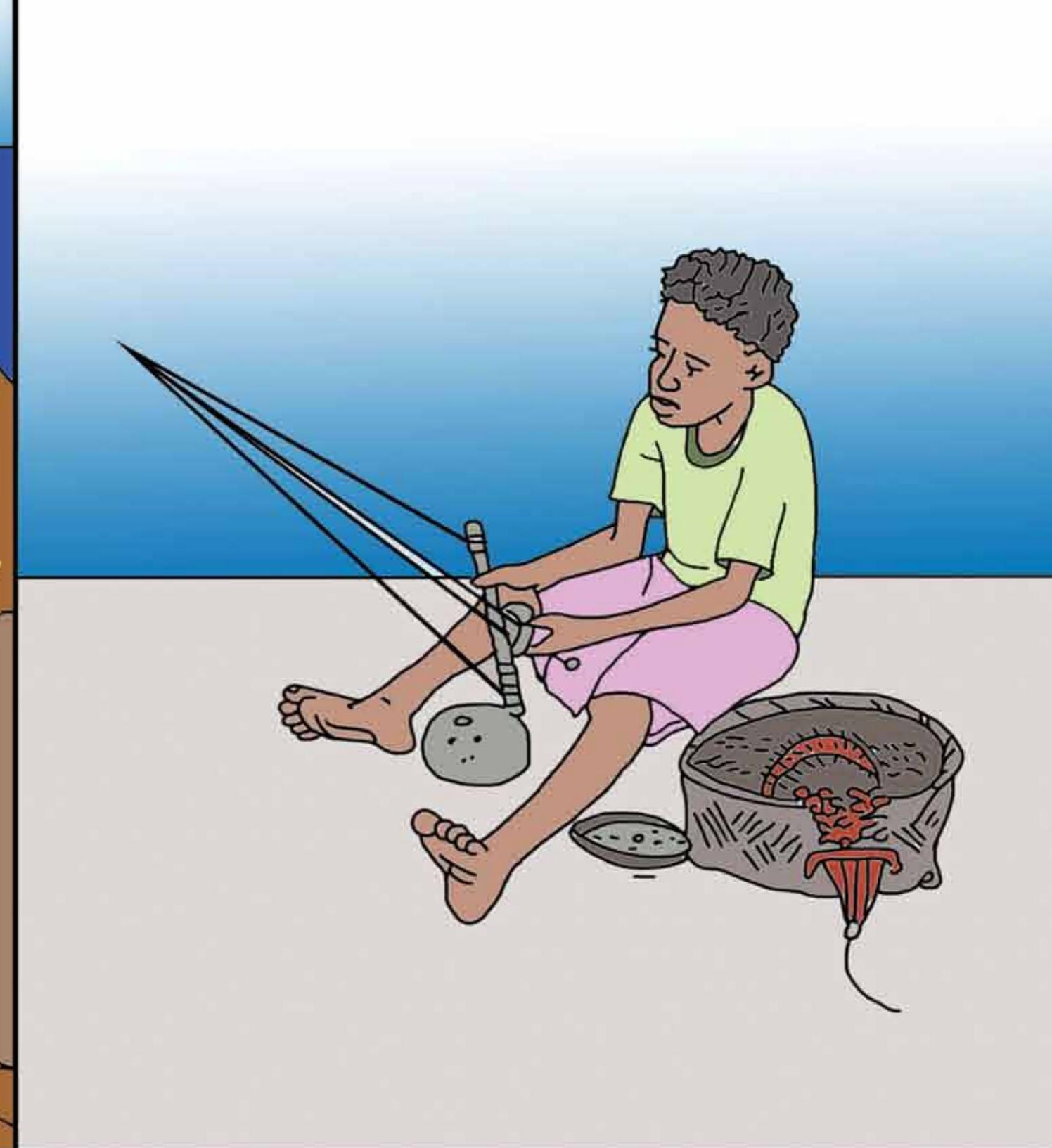
Mary's story

When loggers came to our village we were all glad. I talked with my sisters about the new clinic they said they would build, and we were very excited ... but we did not receive very much money at all. I was sad because my husband took the money and went out drinking – I tried to stop him but he said, 'It's my money anyway, you be quiet' and he got very cross. The loggers never built the clinic – they made many promises but it never happened. The water in the river was dirty and we couldn't drink it anymore so I had to walk very far every day to get clean water. Many people in the village got sick, but we could not afford a water tank.

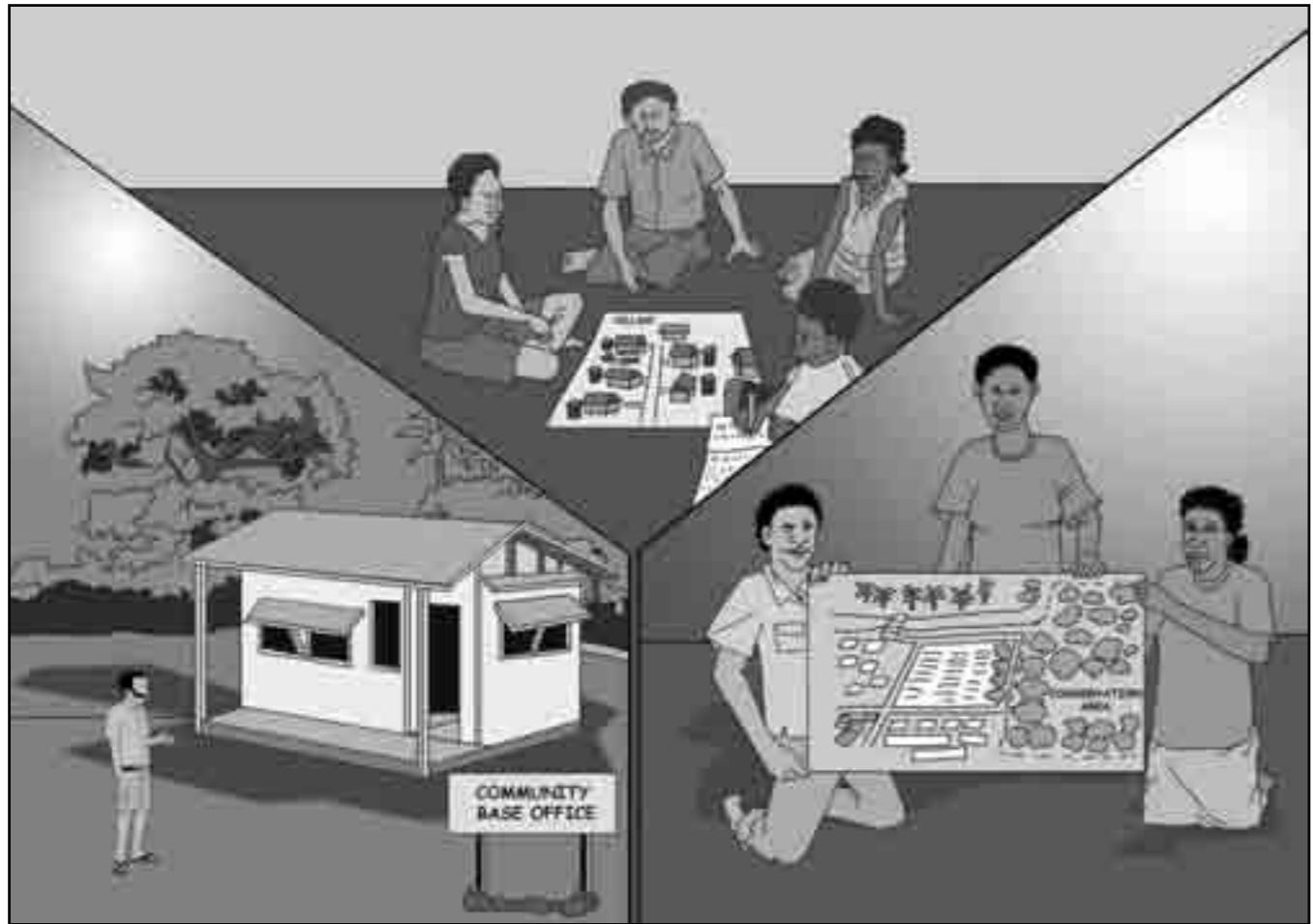
Activity and discussion

Materials: Butcher's paper, marker pens

Topic	Activity	Outcomes
What are sustainable livelihoods?	<p>Picture discovery Ask participants:</p> <ol style="list-style-type: none"> What does '<u>livelihood</u>' mean to you? Discuss the idea of <u>livelihoods</u> being more than just cash or income-generation. What do people in your community do to meet their needs? What examples can you see in the picture? Are these practised in your community? 	Participants understand what ' <u>livelihood</u> ' means and identify <u>livelihood</u> activities in their community.
The link between livelihoods and natural resources	<p>In small groups, ask participants to list common <u>livelihood</u> activities practised in their community. Ask each group to discuss each activity and talk about all the natural resources they use for this activity. Ask each small group to share their responses with the whole group.</p> <p>Ask the whole group:</p> <ol style="list-style-type: none"> What is a <u>sustainable livelihood</u> activity? Which of the activities you listed are <u>sustainable</u> or unsustainable? Why do you think it is important to practise <u>sustainable livelihoods</u>? 	Participants see the link between <u>livelihood</u> activities and natural resources and think about why <u>sustainable livelihoods</u> are important.
The consequences of unsustainable livelihood activities	<p>Tip: Think back to Sessions 1, 2 and 3</p> <p>Ask the whole group to choose one common unsustainable <u>livelihood</u> activity (e.g. logging). Split participants into two groups and give each group a piece of butcher's paper. Ask one group to list positive benefits of this activity and the other to list negative <u>consequences</u>. Once they have listed them, ask them to share with each other and discuss whether this is a good activity for the community and why or why not.</p> <p>Ask the whole group:</p> <ol style="list-style-type: none"> Do you think people in your community understand the <u>consequences</u> of unsustainable <u>livelihoods</u>? Why or why not? What are some of the strengths in your community that could be used to support more <u>sustainable livelihoods</u>? 	Participants consider the <u>consequences</u> of unsustainable <u>livelihood</u> activities.
Taking action	<p>Ask the whole group:</p> <ol style="list-style-type: none"> Do you think <u>livelihood</u> activities could be more <u>sustainable</u> in your community? What are some alternative <u>sustainable livelihood</u> activities that you think could work in your community? What support do you need to practise more <u>sustainable livelihoods</u>? Which stakeholders might be able to support you? 	Participants identify ways they can contribute to more <u>sustainable livelihoods</u> .



Session 10: Establishing & strengthening community-based organisations to manage sustainable use areas



Learning outcomes

By the end of this session participants should be able to:

- identify the importance of community-based organisations in managing natural resources and supporting alternative livelihoods
- identify community and individual strengths that can benefit a community-based organisation.

Background information

When setting up a sustainable use area (SUA) it is important that a group takes responsibility for looking after the area. Even when there is support from outside the community (such as from government, NGOs and business) the establishment of a successful sustainable use area depends on the involvement, participation and leadership of communities.

Community-based organisations

Community-based organisations (CBOs) are groups created by communities to promote working together in order to address local needs. There are many variations in the size and structure of community organisations. Some are formally incorporated, with a written constitution and a Board or Committee of Management, while others are much smaller and more informal.

Here is how a CBO can help with each step of sustainable resource management.

Tip: See Session 2: Sustainable resource management

1. Organise and plan

It is very important that any community wanting to set up a sustainable use area takes time to organise and plan and learns as much as they can about the environment and the natural resources they want to protect. A CBO can talk to all people within the community (women, men and youth) about how they use resources and what they think about starting a sustainable use area. They can also speak to other individuals and groups who know about sustainable natural resource management, such as government staff, NGOs and community elders.

2. Agree on rules

Members of the CBO can work together to discuss the views of the community and agree on rules to manage natural resources in a sustainable way. The CBO will also be responsible for making sure everyone knows about the rules, and they can think about ways to make sure everyone respects the rules.

3. Manage

The CBO should meet regularly to monitor and manage resource use, following the agreed rules. They can share tasks between different members to make sure the sustainable use area is protected and the CBO is operating successfully. They can also deal with any issues that come up.

4. Evaluate and plan

It is important that the CBO meets at least once a year to look back at what they planned and see if they are making progress towards their goals. They should think about how well their SUA is operating and identify ways they can improve their work. They can then use this information to make plans to improve their work in the next year.

Starting a CBO

Setting up a new community-based organisation takes planning and time. There are many things to think about.

Getting support

Start by talking to the community about what you want to do and why it is important, and you will find out who is interested and who can help you. You will also need to talk to elders, chiefs and church leaders to gain their support; this will help to make your organisation much stronger. Talking to other groups (for example, NGOs, government workers, scientists and other CBOs) outside your community who are practising natural resource management is important. Working in partnerships, sharing information and making links with other groups gives you the extra support, advice and information that you need.

Think about leadership and how you will work

If you are going to set up a new group, then you will need to write and agree on a set of rules outlining exactly what you aim to do and how you plan to do it. This is sometimes called a constitution. There is usually a group of people who will be responsible for the day-to-day running of the organisation. They are sometimes called the Committee of Management, or Board. They are the people who make sure that the organisation does what it plans to do. It is important to make sure that everyone in the community (men, women and youth) is represented in the leadership of the organisation.

Developing an action plan

It is important for your organisation to identify what needs to be done and to share out the important jobs. Doing this will make sure that everyone gets a job, everyone knows what they're working towards, and no one person gets overloaded with work. It will also make it easier to get support if you have a clear plan of what you want to do and when and where you want to do it.

Work towards the registration of your CBO

Once your CBO is established it is a good idea to make sure it is officially registered so that it will be legally recognised. This will mean creating a constitution so that rules about decision-making and leadership are clear. For natural resource management CBOs, the Landowners' Advocacy and Legal Support Unit at the Public Solicitor's Office can give advice on registering your CBO.

Benefits of a CBO

The benefits of having a CBO include:

- working together to educate the community about the benefits of sustainable resource management
- making it clear to the community who is responsible for managing the SUA
- helping to maintain community, tribe or family ownership of resources
- creating opportunities for individuals, families and the community to work together to define common and individual needs and problems, and plan for action to solve problems
- community participation and empowerment
- creating an avenue for outside groups, such as government and NGOs, to support the work of the community.

Activity and discussion

Tip: Think back to Session 2 (Sustainable resource management) and Session 3 (Threats and strengths).

Topic	Activity	Outcomes
What is a CBO?	Picture discovery Ask the participants: <ol style="list-style-type: none">1. What is a CBO?2. What are some different types of CBOs in or around your community?<ul style="list-style-type: none">- What do they do? (Look at the picture for some ideas.)- Who are the members?- Who are the leaders?	Participants identify different CBOs and see that they each have different goals and operate in different ways.
How CBOs can support sustainable natural resource management	Discussion (small groups) <ol style="list-style-type: none">1. How would your community benefit from the CBO being established or strengthened?2. How can establishing or strengthening a CBO support your community to practise <u>sustainable</u> natural resource management? (Think about the steps of <u>sustainable</u> resource management.)	Participants identify how establishing or strengthening a CBO can support them to practise <u>sustainable</u> natural resource management.
Meeting the challenges of running a CBO	Discussion (small groups) <ol style="list-style-type: none">1. What do you think are some of the challenges of running a CBO in your community?2. What are some of the strengths in your community that could be used to establish or support a CBO? <p>Ask each group to share their ideas with the other groups.</p>	Participants identify some of the challenges involved in running a CBO and discuss ways to overcome these challenges.
Taking action	Identifying first steps Ask the group to imagine they are starting a CBO or to think of an existing CBO in their community and then answer the following questions in small groups: <ol style="list-style-type: none">1. What information would the CBO need before they started an SUA?2. Who could a CBO talk with to find out this information?3. How would a CBO make decisions (e.g. voting, all agreeing, one person decides)?4. What would be the first five actions this CBO would need to take to set up an SUA in your community?	Participants identify the steps they need to take to establish or strengthen a CBO.



Glossary

Some new words you will find in this flipchart

Absorb/absorbing:

To soak up

Example: *The soil absorbs the water when it rains.*

Biodiversity: (baeodversiti)

The relationship between living things and how they relate to one another in the environment

Example: *We must preserve biodiversity so that we do not disturb the food chain.*

Consequence: (konsekuens)

The result or effect of something that happened earlier; something that happened because of something else

Example: *The consequence of logging was that the water in the river was dirty.*

Conservation: (konservaesun/tabu)

The preservation (keeping), protection or restoration of the natural environment

Example: *Conserving the environment is very important if we want our children to live in a healthy community.*

Ecosystem: (ekosistem)

The arrangement of all living things (e.g. people, animals, plants) and non-living things (e.g. air, soil, water and sunlight) in a particular area and the way in which these things interact

Enforce: (enfos)

To make someone follow or obey rules and laws

Example: *The police enforce the law by warning rascals that they will go to jail if they commit crime.*

Erosion: (erosun)

The process of the earth (i.e. land, soil) being worn away by water or wind

Example: *There was a lot of erosion so the river bank collapsed.*

Exploit/exploiting:

To use selfishly, especially for profit or to benefit yourself

Example: *The man exploited the natural resources to make money for himself.*

Livelihood(s): (laevihud)

The way we use our skills and resources to meet our needs (e.g. shelter, food, water)

Example: *My family's livelihood is fishing and selling vegetables.*

Long term

A long period of time: more than 1 year

Pollutant: (polutan)

Anything that makes the air, soil, water or other natural resource harmful or not fit for a specific purpose

Example: *Pollutants from the soil entered the water, so it was not safe for the people to drink.*

Quality: (kualiti)

The condition of a thing or person.

Example: *The roofing iron was not good quality because it was old and rusted.*

Quantity: (kuantiti)

An amount of things or people.

Example: *There was a large quantity of fish in the sea.*

Short term:

A short period of time: 1 day to 1 year

Sustainable: (sustainabol)

Able to carry on or keep going

Example: *Sustainable resource management helps us to use resources in such a way that the next generation will still be able to access the same resources that we do today.*

Threat: (tret)

A danger or a warning of trouble

Example: *The cyclone was a threat to the community.*

The rascals made a threat that they would come back and start a fight.

Vulnerable: (volnerabol)

Open to being hurt or attacked physically or emotionally (e.g. open to criticism, open to temptation)

Example: *The houses on the seaside were vulnerable to being destroyed by the cyclone.*

For more information

Read:

'Farm Technology- Protecting food security through adaptation to climate change in Melanesia' from Live & Learn Environmental Education

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Ministry of Forests, Forestry Division

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The WorldFish Center

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The Nature Conservancy

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Phone: 20940

World Wide Fund for Nature (WWF)

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Feedback on this resource

Please help us improve this flipchart. You can provide feedback via email: resources@livelearn.org or contact Live & Learn Environmental Education (Solomon Islands) T: +677 23697.

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