

THE LOCAL GUIDE TO BIGGER, BETTER CATCHES

FLIPCHART



ABOUT THE SINGAUT BLO SOLWARA FLIPCHART

Singaut Blo Solwara is a grassroots campaign to encourage communities to come together through community dialogue to revive our traditional ways of managing the sea.

The campaign also shares new research and information to support practical local actions to help increase what we catch and collect from the sea. Marrying the old with new ways of fishing can help.

Communities can do many things to help bring back bigger, better catches. But we can't wait for someone from the outside to solve these problems. We need to sit down together and discuss local solutions.

For that to happen, we need people like you to host community dialogues. The flipchart can help you start these discussions.

WHO CAN USE THE FLIPCHART?

This flipchart is for anyone who is concerned about the decline of fishing grounds and who wants to start a community dialogue to help revive them. Delivering the flipchart will require you to memorise key messages and deliver the scripts to small groups. But it does not require a technical background in marine science.

Successful use of this flipchart does require:

- passion and commitment to supporting discussions over time
- time to thoroughly read the guide and supporting information.

HOW TO USE THE FLIPCHART

The flipchart presents a series of illustrations in three sections: (1) What's the problem with fishing today? (2) How do you know if you have an overfishing problem? (3) What can you do about overfishing?

Each flipchart illustration page comes with a facilitator's guide page that includes:

1. Background information and key messages to help you ensure your presentation stays focused.

2. Scripts to help you prepare. The script should be used to memorise the key messages, not read aloud during your presentation. Practice with your family first, and get comfortable explaining the material so you don't need to read it during a presentation.

3. Discussion questions to ensure your talk is interactive. People learn better when they get to talk through their issues and hear other people's stories. This also helps you learn about their knowledge and perceptions about the issues. Then we share materials and suggestions so you can report back what was said to larger groups, to the community and to campaign partners.

When using the flipchart, only show the group the illustration. The facilitator's page is just for you. Because of its size, the flipchart is best used with small groups of 4 to 6 people.

We recommend to start with your family or friends. Once you are confident with the content, you can present to community groups and then present the results of all the small discussions at the community level. At that point, the group will be too large to use the flipchart. So use the flipchart as a guide for your speech, but avoid showing the illustrations.

FACILITATOR'S ROLE

It's important to always remember that your primary role is to create discussion. This is called a facilitator. As a facilitator, your goal is to help people understand the changes they may experience everyday, to share information that can help address their concerns.

- As a facilitator, your role is to provide information, and not to be an expert in all the areas and issues. To do that well, here are some tips.
- Make sure you are familiar with the material. This means reading all the materials beforehand to a level where you can easily share the core content during talks and presentations.
- Involve your audience in your presentations. This means listening and encouraging people to share their ideas and experiences through sharing stories as much as possible.
- Be friendly, and inclusive. This includes not arguing with people who disagree. Your role as a facilitator is to listen

and encourage discussion.

- Admit when you don't know an answer. Explain that your role is to give access to information, and at times, you may need to get back to them after consulting experts.

STORYTELLING

As you become more comfortable with the material, you should personalise it as much as possible, and introduce local stories and examples to illustrate the key points. Then you can ask people for their stories, to create lots of discussion and ensure your visits are interactive. People learn/engage better when they participate and interact with you and other people in the audience.

VILLAGE PROTOCOLS

When working in community settings, its important to follow community protocols. If permission is required from village elders or ward officials, for example, it should be sought prior to presenting to any small groups. The same rules apply for any community groups or networks. Ensure you follow local protocols to ensure these new ideas and discussions are welcome. If you don't know how to do that, seek guidance from an elder.

GETTING STARTED WITH THE FLIPCHART

To begin your presentation, introduce yourself and the campaign. The campaign is about helping people get bigger, better catches, and doing that through making local rules for fishing. This is sometimes called community-based fisheries management.

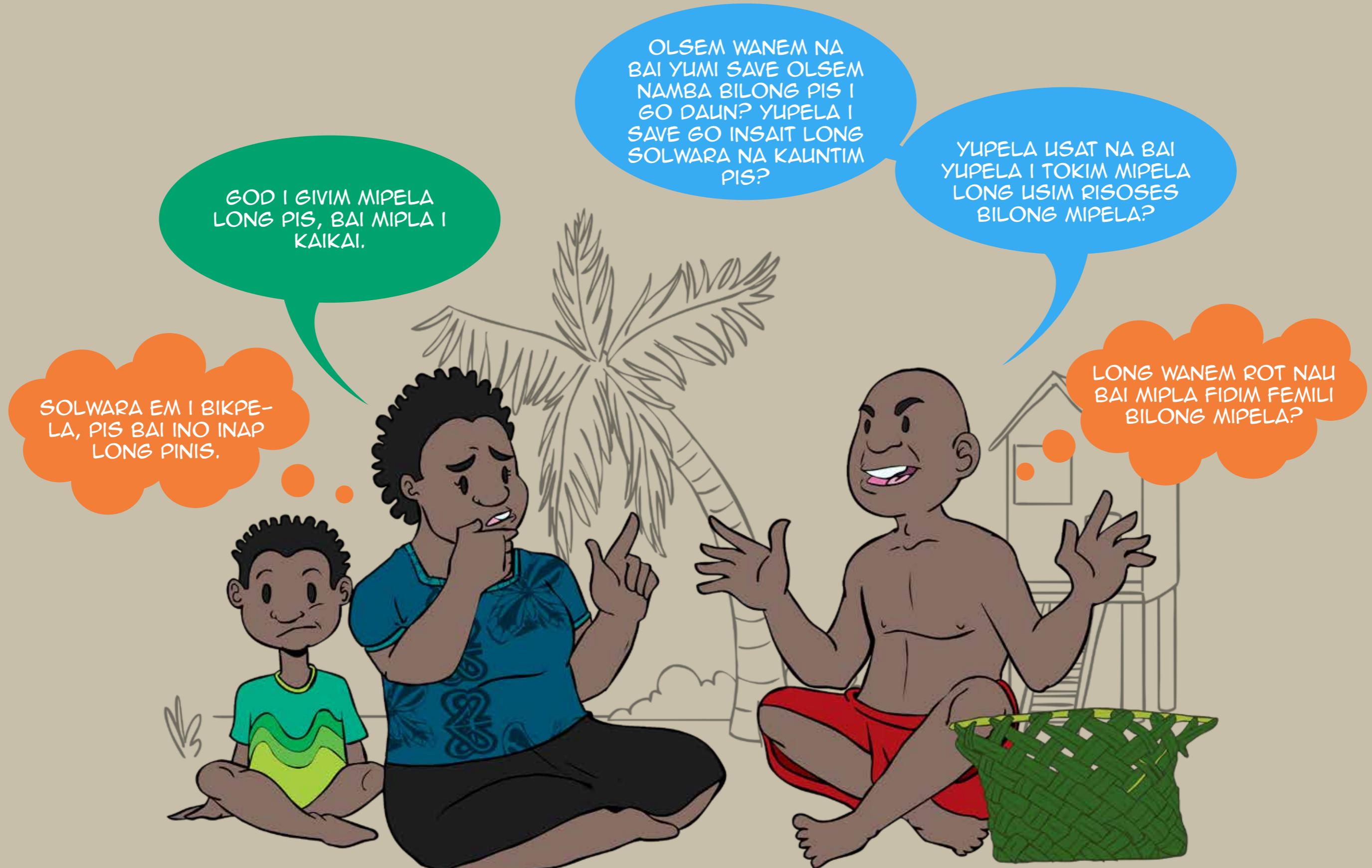
Explain to the group your role a facilitator, to give access to information and get more information when you don't know an answer.

Explain that the flipchart is a tool to help start that discussion.

Encourage the group to ask questions and have open discussions during the presentation.

SEKSEN 1

Wanem samting em rong?



BACKGROUND

Even in remote areas, it's rare to find anyone that has never heard of efforts to promote community-based fisheries management (CBFM) and does not already have opinions.

CBFM is often perceived as outsiders trying to prevent them from using their resources, rather than more tangible benefits such as food security and livelihoods. You can't really start a dialogue if you don't acknowledge the negative opinions that exist.

This illustration is intended to ensure we acknowledge from the start that people might have negative views of CBFM, so people are more open to share their concerns and more open to listening.

KEY MESSAGE

It's our community that suffers when catches decline, so it's our community that needs to start talking about what we can do about it – to find ways to increase catches. This is not about outsiders telling us what to do.

SCRIPT

As we start talking about overfishing and fisheries management, I want to recognize for a lot of people, this is not a new subject and for some, not a welcome subject.

Community-based fisheries management is often viewed as

outsiders telling us how to use our resources. Sometimes it feels like an NGO comes in and asks us to set aside parts of our fishing grounds for no take zones. We have heard that right? That's the NGO's tambu, not ours.

This illustration shares some of the

common responses that people give when they hear about someone promoting fisheries management. So we can be honest from the start about what everyone is thinking.

Read the quotes out loud to group.

SEKSEN 1 Wanem samting em rong?



DISCUSSION

Ask:

- Does anyone here have similar responses? Which ones have you thought or heard?
- Are there any other missing?

Close with this key message: We get that most people think fisheries management is about stopping people from fishing. But that's not what we're doing here. We want to help people get more fish, and that means fishing smart. So with your permission, I would like to talk a bit about what the problem with overfishing is.

MATERIALS NEEDED

Pen and notebook.

If possible, you can record the perceptions from the group in a notebook so you can review them later and compare them with other groups.

You can also review the notes from all the groups to present back at the village level later on, to share the most common perceptions of fisheries management.

Wanem samting em rong?

1980

2000

2020

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MOA



BACKGROUND

The illustrations in this section are intended to help people reflect on how fishing has changed, why it has changed, and the impacts of those changes.

These illustrations are important to discuss because catch declines happen over time, sometimes over generations. Fishers may not notice the change immediately as they usually deal with fishing day to day. So maybe they just travelled a little further today. But if they reflect on how fishing has changed over years, or generations, they can see how different fishing has become.

By taking time to reflect on the longer term changes, can often help to shift attitudes about urgency of the problem. This approach also allows people more easily to share their stories and interact with each other.

KEY MESSAGE

Overfishing happens over years, and so it's important to reflect on how fishing has changed – changes in what we catch and collect from the sea – to begin to understand if we have an overfishing problem or not.

SCRIPT

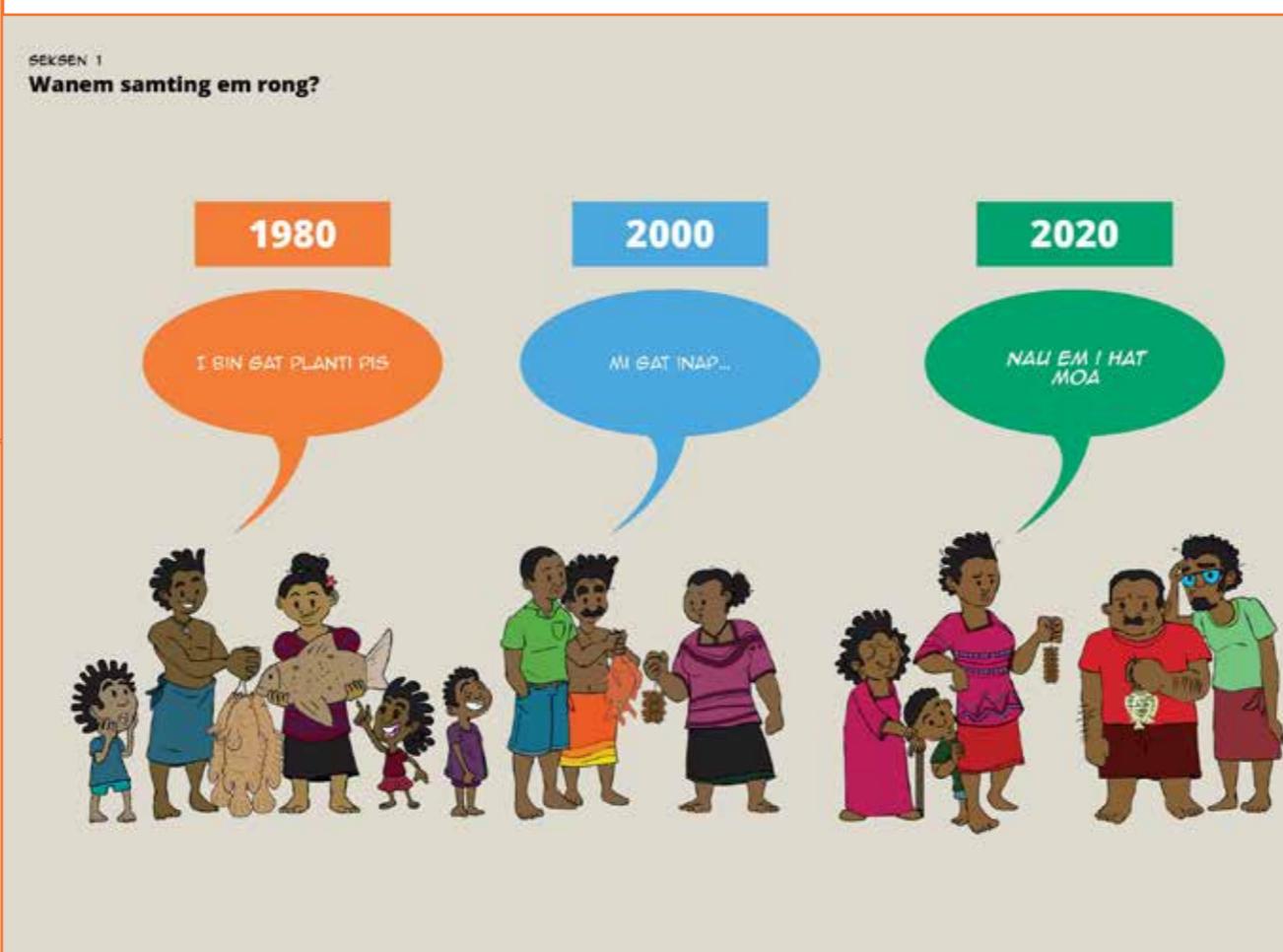
Because we are fishing every week, we don't always realise how much fishing has changed over time, and over generations.

Fishers usually deal with fishing day to day. But if they reflect on how fishing has changed over years, or generations,

they can see how different fishing is today.

This illustration shows some of the stories we have been hearing, from some communities in New Ireland.

They are catching fish that are smaller than their parent's did. And far smaller than their grand parent's did.



DISCUSSION

Ask:

- Are our catches declining over time?
- Are they getting smaller in size over time?
- Are you catching less fish than before?

TIP:

Asking different members of the community about how fishing was in the past can provide different answers depending on how old they are. Be sure to encourage older fishers to share their experiences with younger ones.

As you do more group discussions, you can also share stories you heard from other groups.

MATERIALS NEEDED

Pen and notebook.

If possible, you could record the feedback from the group in a notebook so you can review them later and compare them with other groups. You can also use the notes from all the groups to present back later on at the village level, to share the most common perceptions of fisheries management. Ideally, try to record basic information on fish sizes and catch sizes over time.

You will discuss a lot more about fishing throughout the flipchart.

Wanem samting em rong?



1980

2000

2020

BACKGROUND

As with the previous illustration, you want people to reflect on if/how fishing has changed.

Another common change is having to go further to catch fish. If you are using traditional canoe to fish, this means more paddling. But if you are using petrol, this can also mean spending more on fuel to catch fish. In other words, you are spending more time and money to catch fish.

You can tailor the script to fit with the local experience. For instance, if they don't use petrol, ask only if they are travelling farther.

KEY MESSAGE

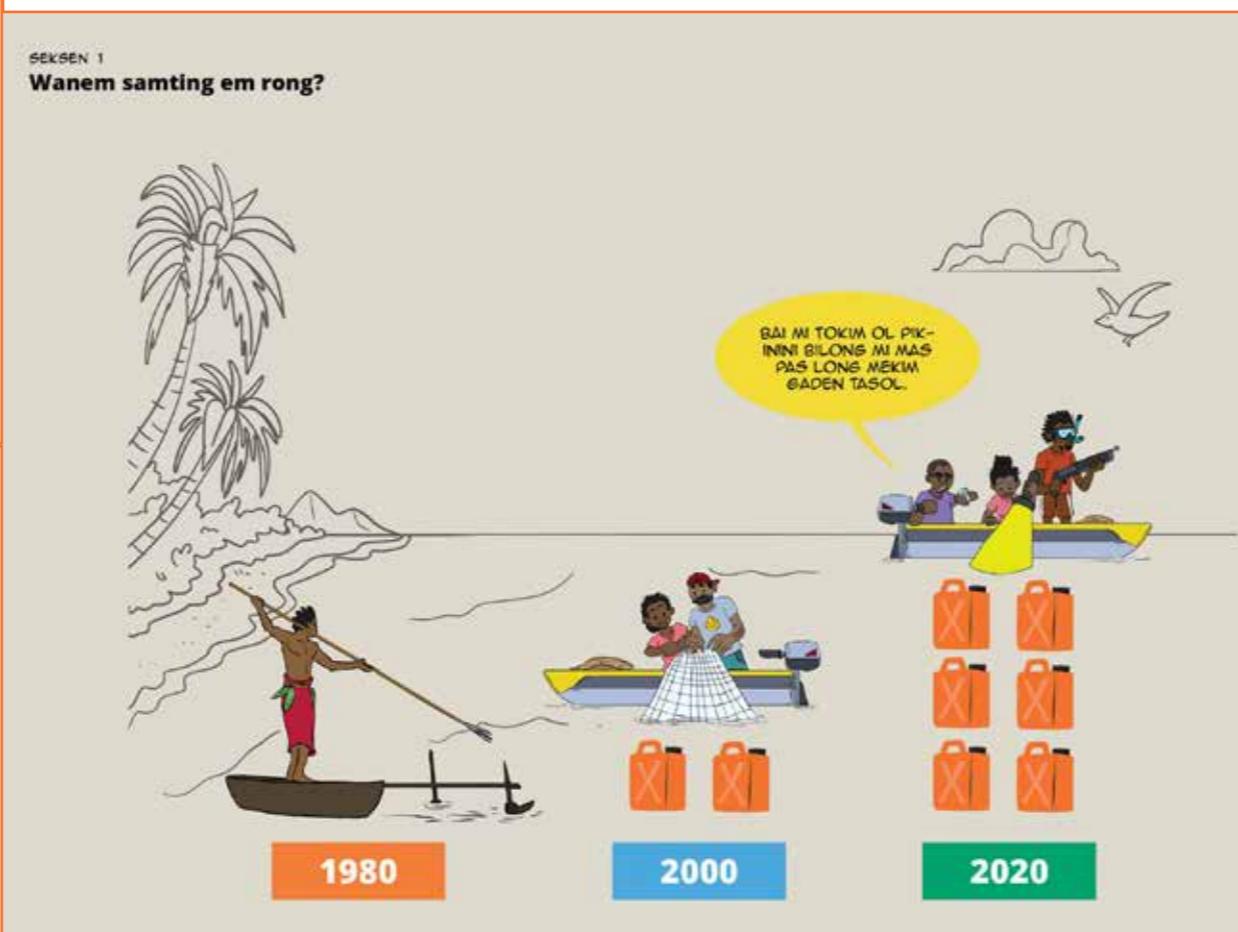
Overfishing makes it take longer to catch fish, with people travelling further, spending more time on the water to catch fish.

SCRIPT

It's taking many of us more time to catch fish today: we have to travel further and spend more time on the water.

For many, it's also costing us more money to catch fish today than it did in the past, as we buy petrol to travel further out. Not too long ago, we could catch fish just off our shores, without the need for a fiber or engine.

This is because the fish near our shore are being overfished to the point they are no longer enough breeding stock to replenish the area. So, we are moving to further and further out to find areas that are still healthy and where there are fish to catch.



DISCUSSION

Ask:

- Are you going further today than before to catch fish?
- Are you spending more time?
- Are you spending more money on petrol or fishing gear?

TIP:

Asking different members of the community about how fishing was in the past can provide different answers depending on how old they are. Be sure to encourage older fishers to share their experiences with younger ones. As you do more group discussions, you can also share stories you heard from other groups.

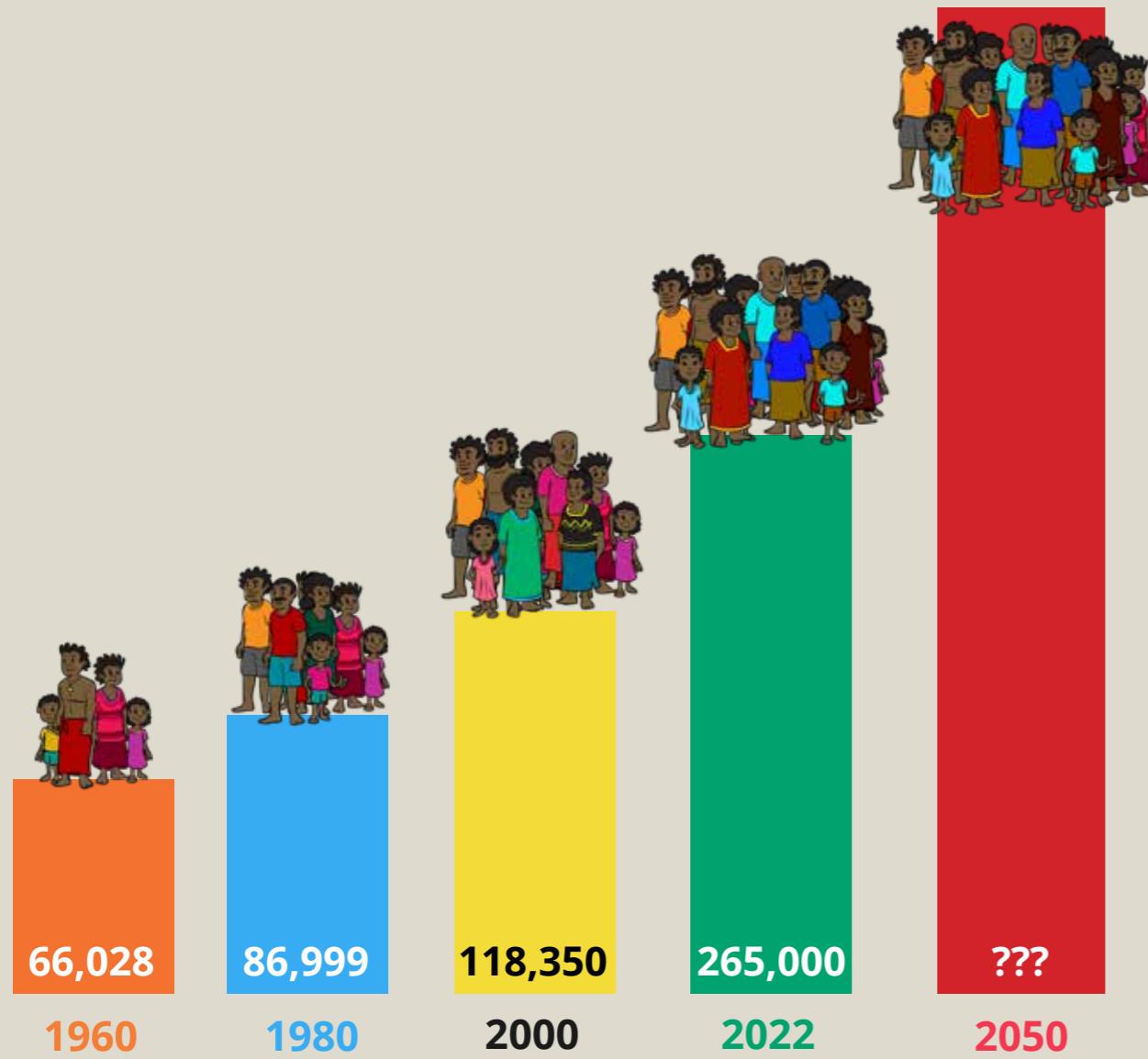
MATERIALS NEEDED

Pen and notebook.

If possible, you could record the feedback from the group in a notebook so you can review them later and compare them with other groups. You can also use the notes from all the groups to present back later on at the village level, to share the most common perceptions of fisheries management.

Ideally, try to record how far they are traveling today compared to past years. It's OK to use the years from the illustration or allow them to talk generally about how it was when they were young, or for their grandparents. The important part is just to reflect on the changes.

Wanem samting em rong?



BACKGROUND

People sometimes think overfishing is driven by outsiders, for example, by offshore fishing vessels, or an outside threat such as climate change.

More often, it's local drivers for overfishing. The top two drivers are population increases and the rising need for money: these have increased the amount we are fishing and are driving down our fish stocks.

Acknowledging these changes helps put the focus on what communities are doing and communicates that these issues are not for outsiders to fix.

KEY MESSAGE

Life has changed over the years, with more mouths to feed, and more needs for cash, we are fishing a lot more than we did in the past.

SCRIPT

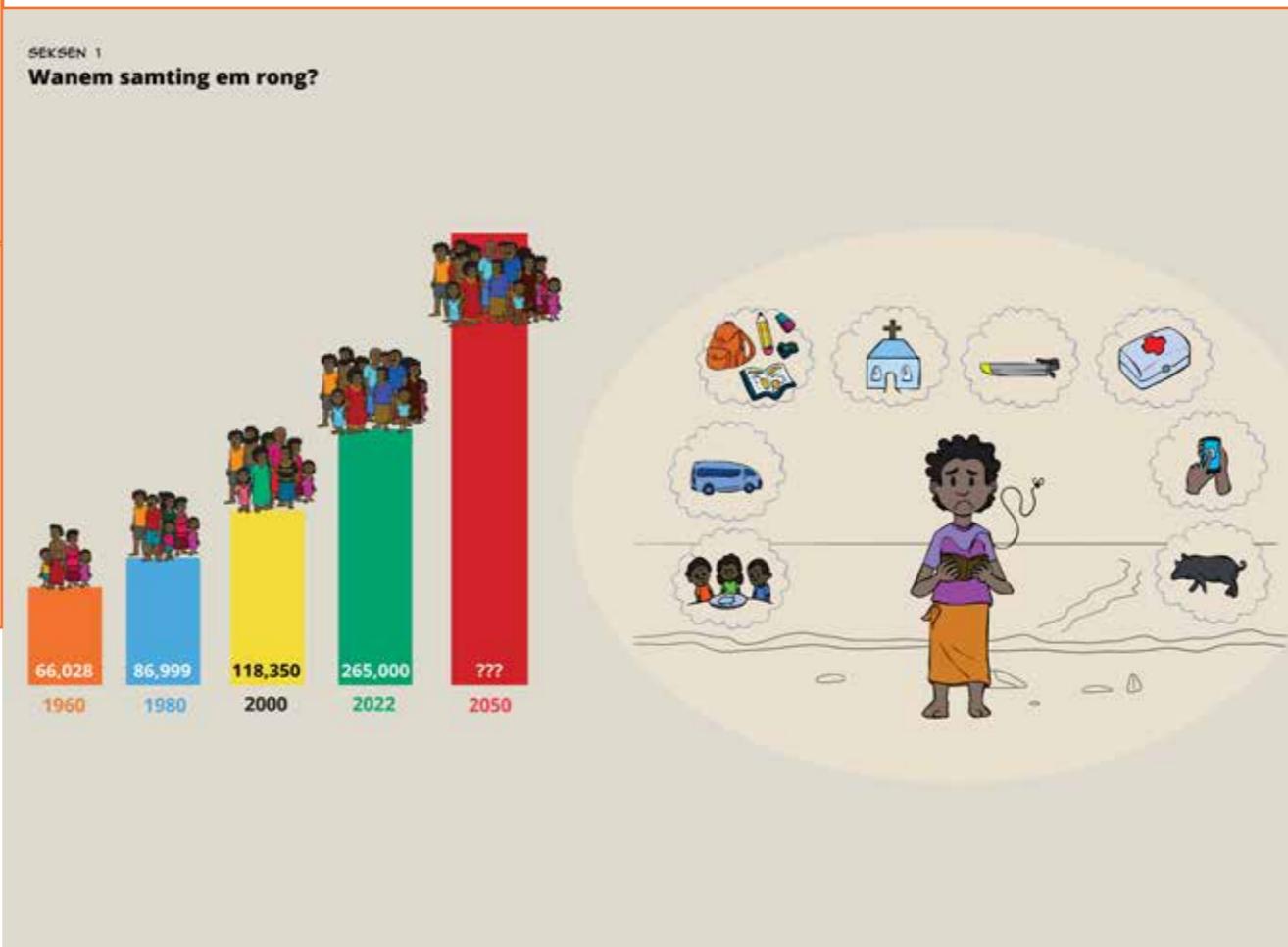
So why has fishing changed? There are two top reasons. Number one, we have a lot more mouths to feed than we had in the past. A lot more. Look at how many more people live in New Ireland today. We are one of the fastest growing provinces in the country.

This means a lot more people eating fish.

Just as important, is number two: we have more needs than ever before. Our lifestyles have changed as the country has developed, and we have gained more access to such things as health care and modern services, and our

children have more opportunities for education. Those lifestyle changes are good in many ways.

But it also means we need more money than we did in the past, and that means we are fishing a lot more than we once did. We now fish for money.



DISCUSSION

Ask:

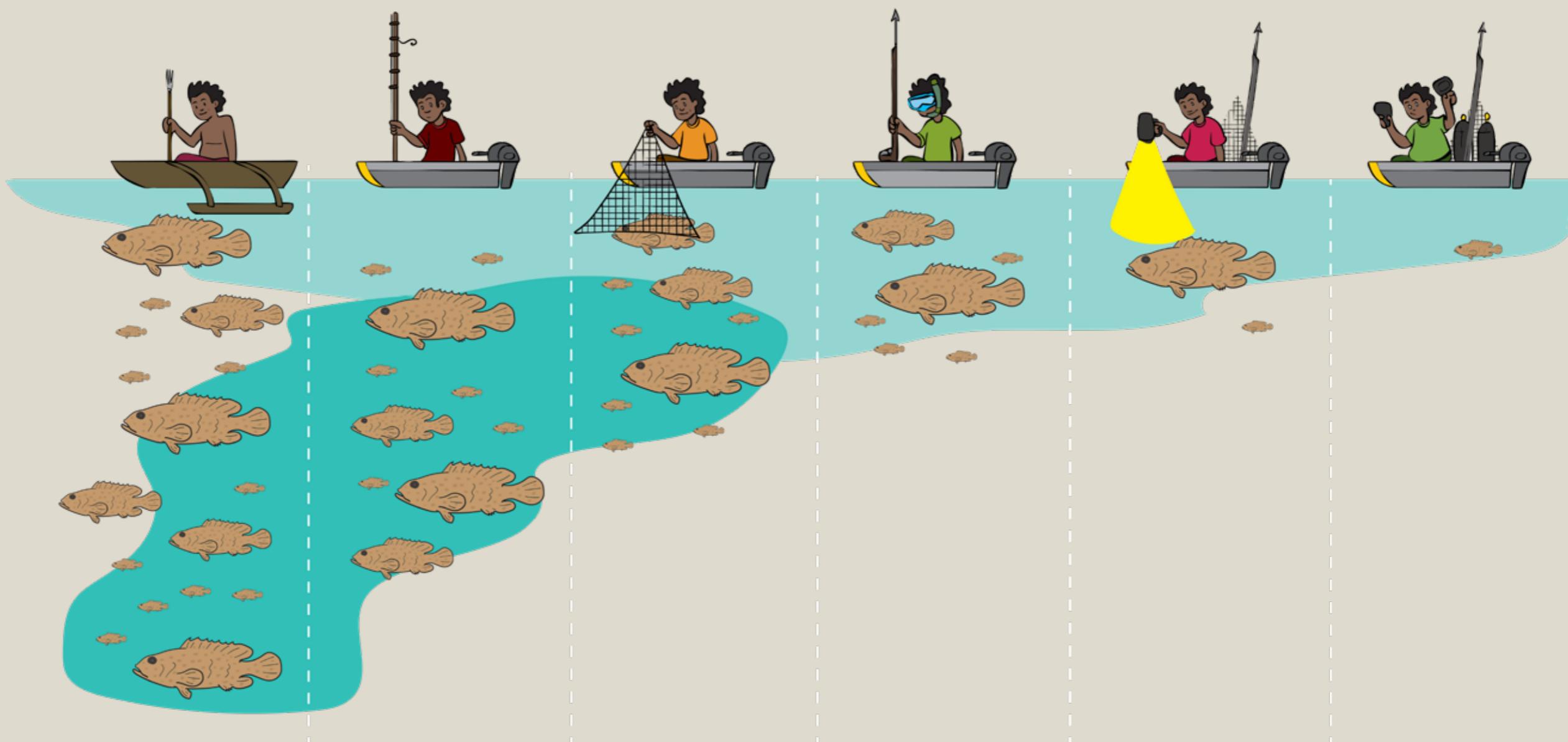
- What is this the story for this community? Has the population grown like other parts of New Ireland?
- What about our lifestyles? What has changed from the past? Do we need more income today, which is resulting in more fishing than before?
- Have these changes resulted in more fishing than the past?

MATERIALS NEEDED

Pen and notebook.

The feedback for this discussion is not as critical to record. You can just record whether these are changes they have experienced and if they think the changes have impacted fishing. It will be more noteworthy however, if they feel they have not experienced these changes and they are not fishing more than before.

Wanem samting em rong?



BACKGROUND

Most fishers are well aware that new gear has led to increased catches.

This point can be made briefly or turned into a longer discussion to reflect on how fishing gear has changed. The script below follows the long discussion and can be further expanded with questions for the audience about if/when they saw each gear change in their village. As you present this page more and more, you will get a feel for the best approach for your community.

For example, hardcore fishers might want to discuss this at length, but others may be happy with a general discussion.

KEY MESSAGE

Fishing gear has improved dramatically over the years and enabled some fishers to get bigger and bigger catches. This has in turn left fewer fish behind to breed and restock our fishing grounds.

SCRIPT

We have had more opportunities to sell more fish, and we are now so much more effective at catching fish.

In the old days, fishers needed to be experts about each type of fish and how they could be caught when and how to make the right fishing gear out of locally available materials. Hooks were difficult to carve out of bone or shell and fishers mainly used a gorge — just a straight piece of bone or shell with a line of natural fibre.

And there were no good nets, so instead of putting a net around a school of fish, coconut leaves were woven together into leaf sweeps. The fish crowded close to shore where they could be speared or scooped up. Most fish would escape by swimming through the leaves.

Spear fishing was done from above the water, and to fish at night the moon had to be big, or we had to use a burning torch. Mainly the fishing happened in shallow water, because the natural

fibres floated and were not strong enough to fish effectively in deep water outside the reef.

So most of the fishing was mainly for small fish —once the fish became adult, and lived on the outside of the lagoon, they were more or less safe from fishing.

All this has changed in modern times. Modern monofilament nets can catch entire schools of breeding rabbit fish, gold-spot herring, mullet and scad. When they come close to shore, almost nothing escapes. Outboard motors enable fishers to fish a long way from their village after they have taken all the fish close to home.

Westerners introduced face masks and skin-diving to the Pacific in the early 1900s because they wanted locals to collect pearl shell for them to buy. After the second world war, modern spearguns became available making it easier to spear the big fish.

In the 1970s and 1980s, underwater torches became available, making it easier to spear many types of reef fish while they are asleep in shallow water.

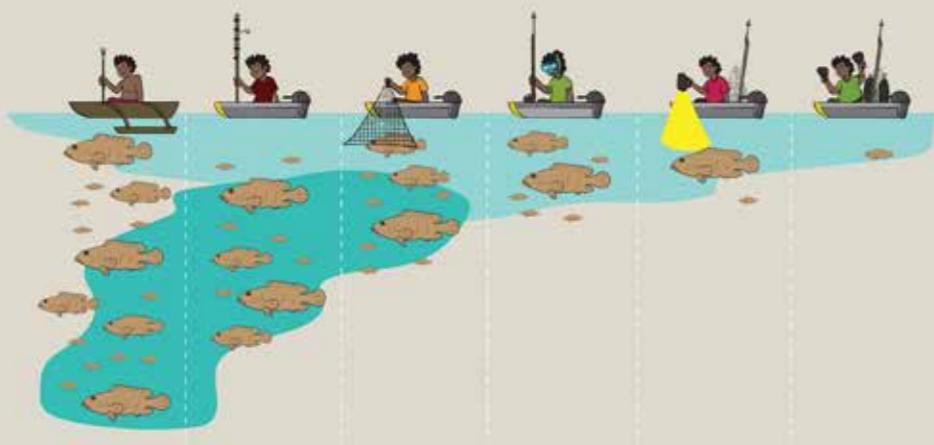
Unlike the original fishing lines, which were made from natural fibre and were thick, floated and relatively weak, modern fishing line is very fine and strong. With modern fishing reels it is possible to fish down hundreds of meters, depths that could not be fished with traditional fishing.

Now technology such as GPS – global positioning system – makes it possible to easily find any good fishing spot.

All of this means we are taking a lot more fish and there are fewer fish being left in the water to reproduce and provide fish for next year.

This is how the world has changed, and why it's becoming harder and harder to fish.

SEKSSEN 1
Wanem samting em rong?



DISCUSSION

ASK:

What changes have you experienced in your lifetime with fishing gear?

Follow-up questions:

- What were some of the old ways used?
- When did you start using monofilament nets? Do you remember the impacts?
- What masks and torches are used for night-time spear? When did that start? Did you notice changes in catches?
- Modern fishing line – did that change fish catches?
- Have you seen anyone using GPS or other new tools?
- What do you think has been the impact?

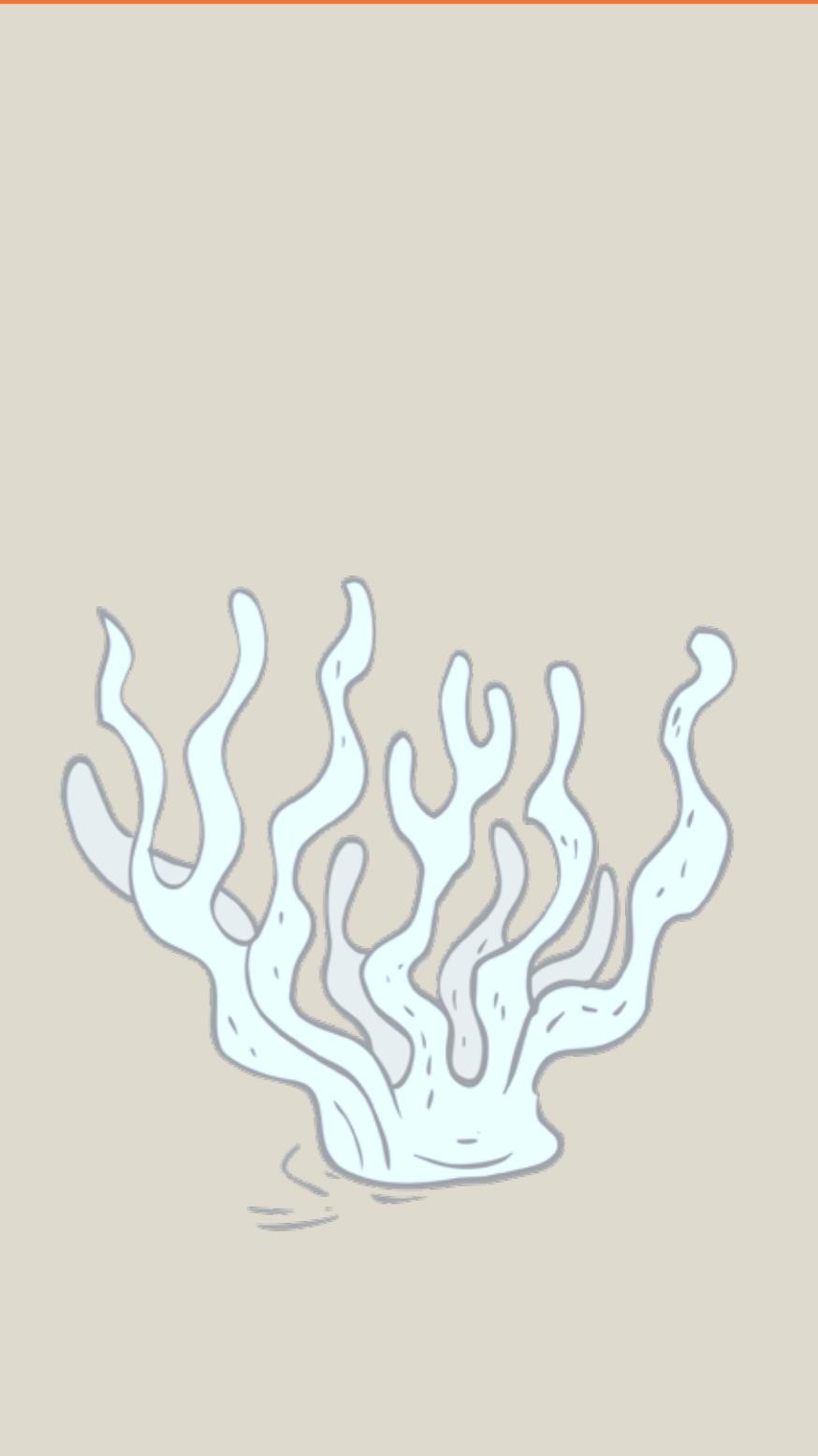
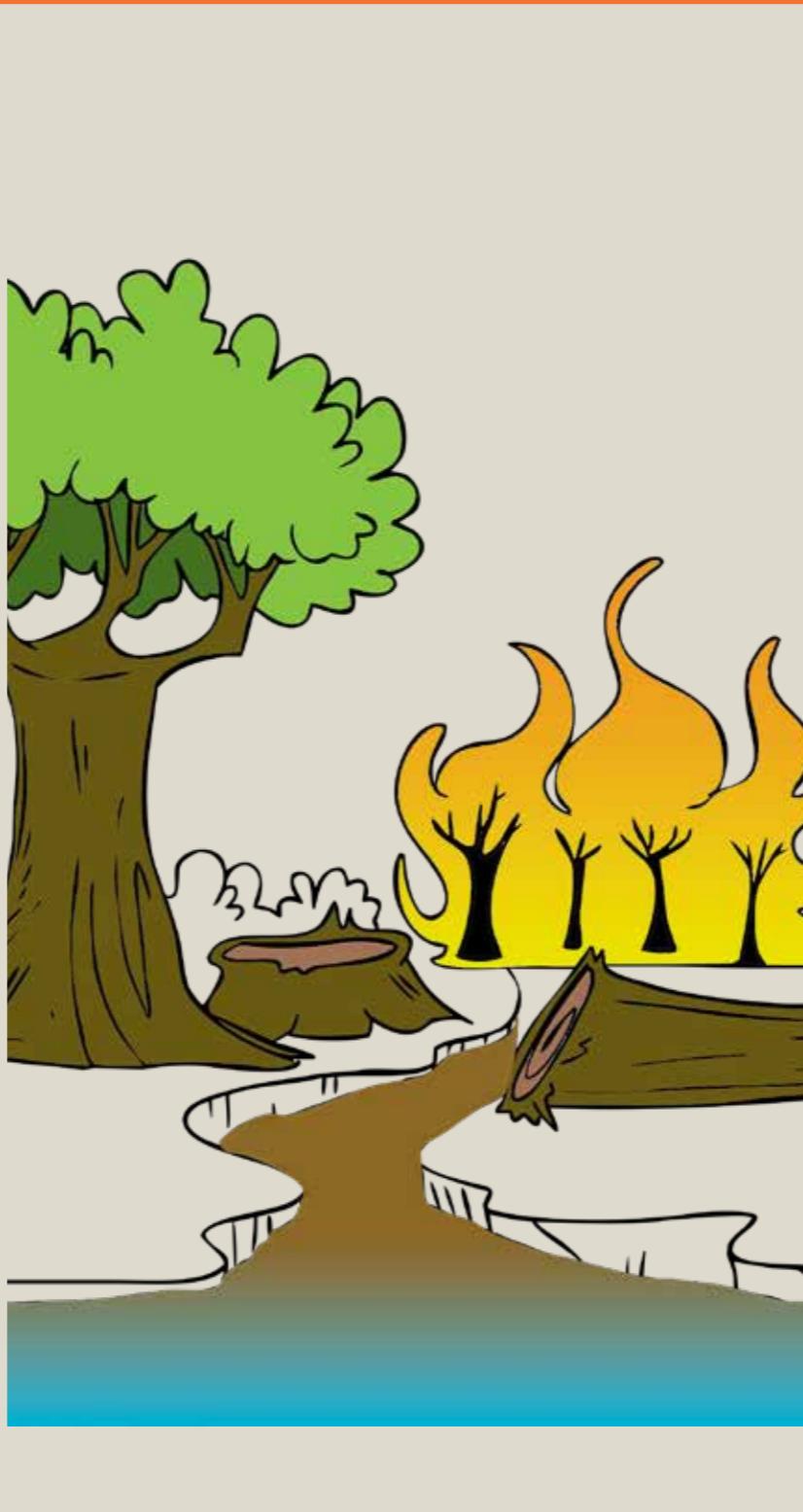
MATERIALS NEEDED

Pen and notebook.

If possible, record the feedback from the group in a notebook so you can review them later and compare them with other groups. You can also use the notes from all the groups to present back later on at the village level to share the most common perceptions of fisheries management. This information is critical to create the "local" story of changes in fishing.

People need to see themselves in the story, or they won't care about any future solutions. So, these discussion notes are critical to tell your community's story of fishing.

Wanem samting em rong?



BACKGROUND

As you discuss changes in fishing and catches, it's also important to understand and reflect on any non-fishing threats or impacts. For example, forest clearing can cause excessive runoff that damages key fish habitat. If that's the case, the land-based threats needs to be discussed as part of the rule making process.

Please note that sometimes the land-based threats are harder to explain and you can get complicated questions. There is almost always someone in the audience who wants to show how much they know and will ask tough questions to trip you up.

Don't take the bait. Tell them if you don't know the answer. You do not have to be the expert: made up answers will hurt your credibility over time.

If this happens, reach out to local partners or the campaign through text or social media.

We can help.

KEY MESSAGE

Decline in catches can also be driven by non-fishing activities. These include habitat destruction, coral harvesting, land clearing, and coral bleaching from warming water.

SCRIPT

We have talked a lot about fishing and how it has changed. It's also important to understand and reflect on some of the non-fishing activities that can impact the health of our fishing grounds.

Fish and other species we like to eat and sell need healthy habitats, or places to live, to keep their populations healthy. This includes coral reefs, but also mangroves, and sea grass. Some species live in sea grass and mangrove when

they are small and move onto the reef as they get bigger. Some need to high in the coral to survive.

Our actions on land, and in the sea, can impact on the health of those areas.

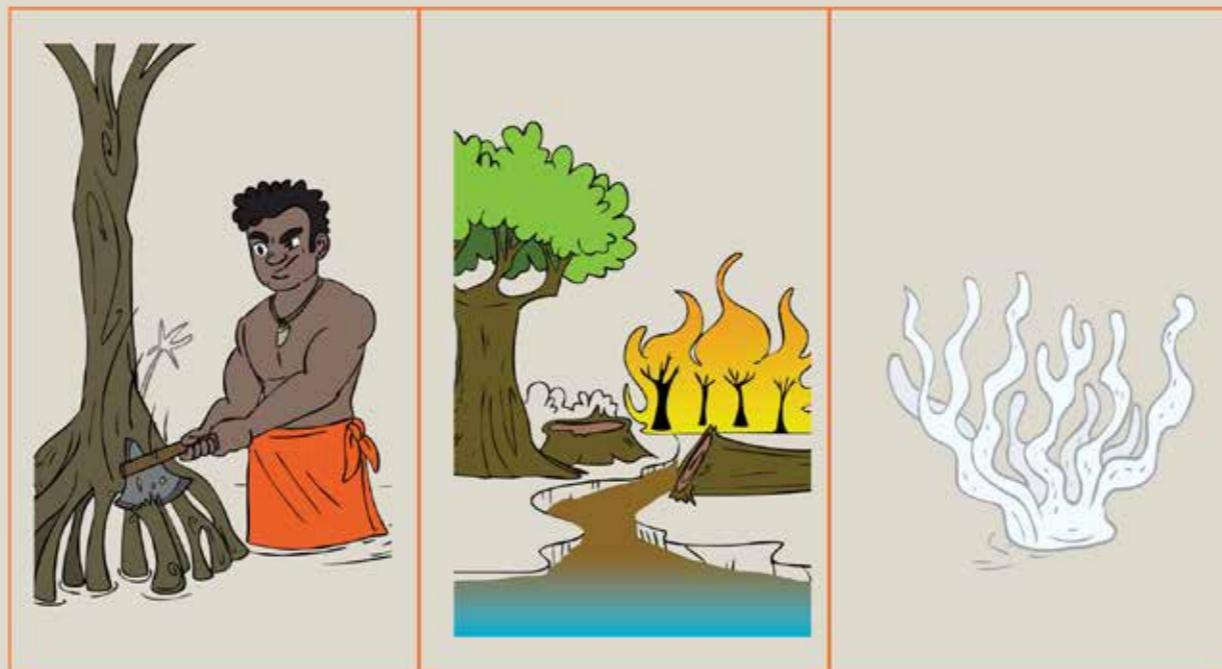
For example, people can clear mangroves for building material or firewood, or just to have space for homes, not realizing it might impact the health of their marine resources.

Harvesting coral for lime also takes away important fish homes.

Land clearing too, from deforestation, or things like palm oil plantations can also create harmful runoff that kills corals, and other habitats.

Finally, we also experience coral bleaching now, when waters warm, and this can kill coral.

SEKSEN 1 Wanem samting em rong?



DISCUSSION

Ask:

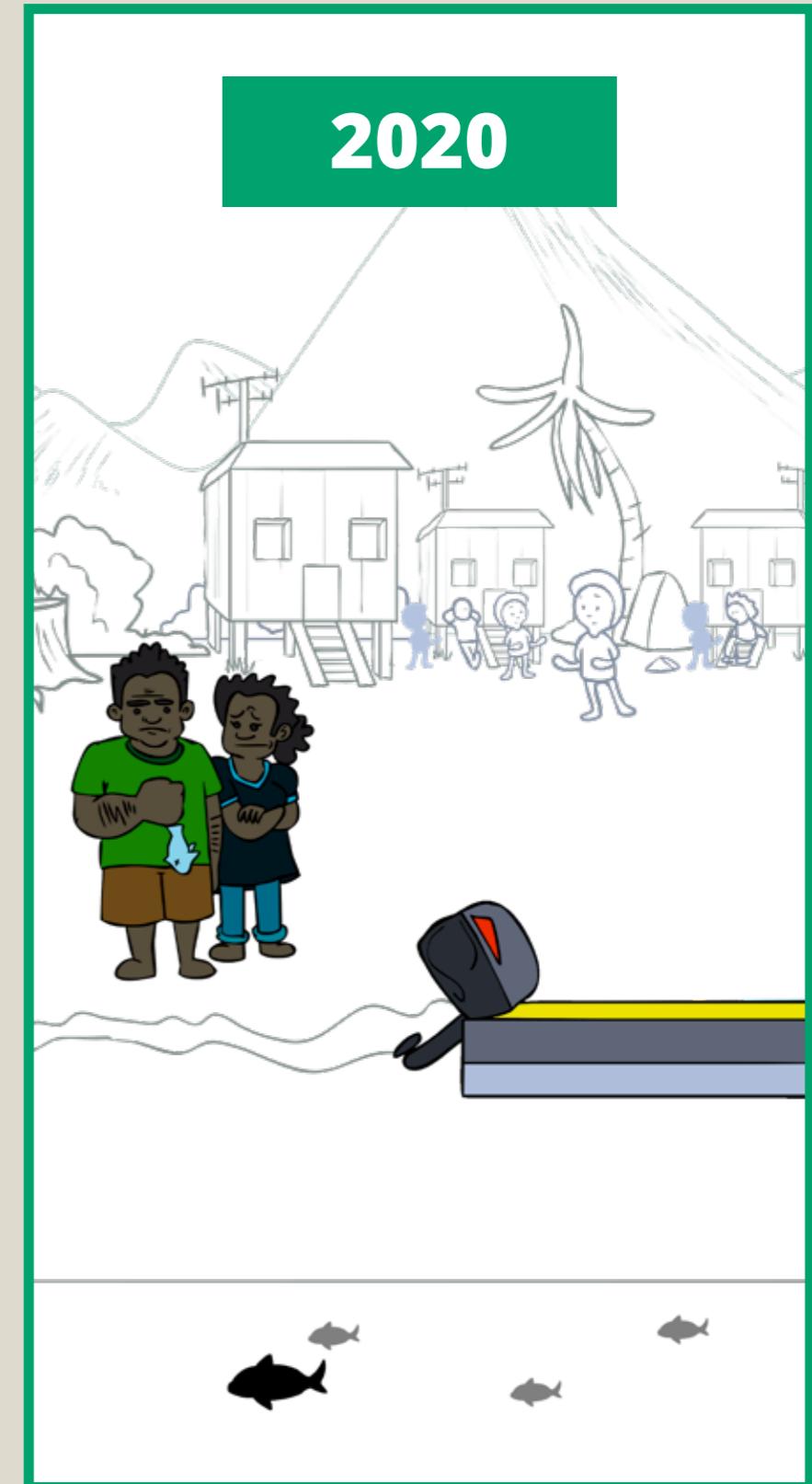
- Have you had any experiences where habitats were lost or damaged?
- If so, what did you notice happened after?
- Do you think losing these habitats or homes impacts fishing grounds health? What is your experience?

MATERIALS NEEDED

Pen and notebook.

If possible, record the feedback from the group in a notebook so you can review them later and compare them with other groups.

Wanem samting em rong?



BACKGROUND

Communities are increasingly discussing the loss of traditional culture. This is a big topic that impacts many aspects of our lives. The loss of traditional culture and traditions can also impact things like fishing.

In many places, without traditional restrictions on fishing, the situation arises where people take whatever they want, leaving too few or nothing for the next person. This illustration intends to create a discussion about whether traditional culture is eroding and if that is having an impact on fishing.

KEY MESSAGE

As traditions break down, the ocean can become a place where there are no longer limits on fishing, and as a result, people take as much fish as they can, without considering leaving enough fish for tomorrow.

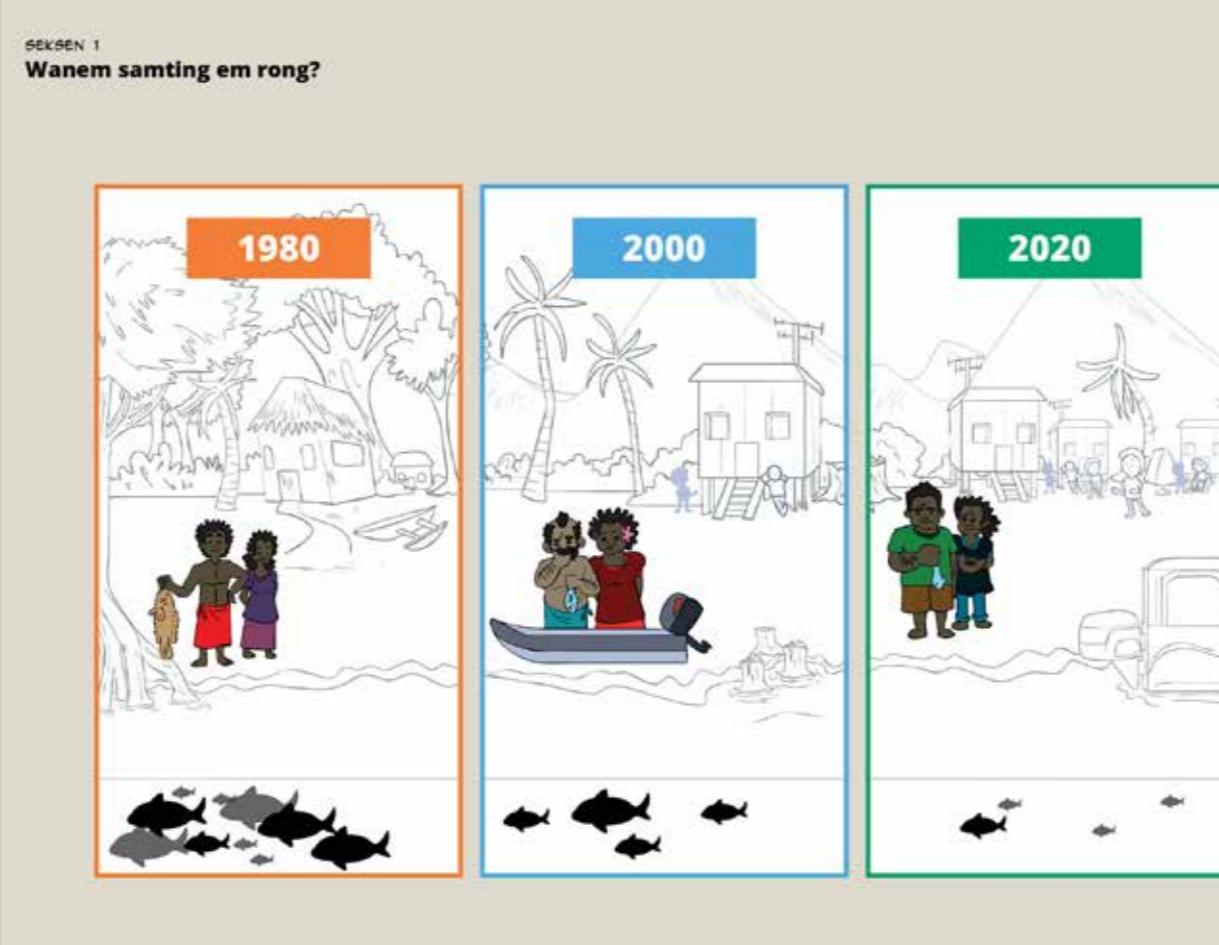
SCRIPT

We have experienced many changes in our lifestyles and communities in recent times. As we modernize our lives, we are also experiencing changes in our traditional lifestyles. This includes some of our old traditions being lost, including

how we used to manage our fishing grounds.

As we lose these old ways of controlling how much we fish, who fishes, and where, we are seeing people, using both

modern gear, and sometimes harmful fishing practices, taking as much fish as they can, and not only what they need. This can lead to overfishing.



DISCUSSION

Ask:

- Do you remember how we used to manage the sea? Are we seeing some of our old ways go away?
- Do you think that is causing any impacts on our fishing grounds?
- Do you think reviving some of the old ways might help us improve our catches?

MATERIALS NEEDED

Pen and notebook.

Record the feedback from the group in a notebook so you can review them later and compare them with other groups.

Wanem samting em rong?

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BACKGROUND

The strength of this presentation is that it presents the issues in ways that people can relate to and discuss.

This means that you have a great opportunity to get people talking about their own experiences, which helps them put the information into their local experience, and increases the chance that they can put the information into action later. This is the core objective of the presentation —to get people talking and interacting — and there are discussion questions on every page.

Ideally, you have used the previous pages to talk and reflect. But it's always positive to pause and make sure you have covered everything and that everyone has had a chance to share their thoughts.

If you have not used the discussion questions, and instead presented the previous content without asking for comments, use this page to hold a big discussion on all the pages.

If you have already answered all the questions, use the questions on this page to provide a summary of what was shared — and ask if it's accurate — before moving to the next section.

KEY MESSAGE

It's important for us to reflect together on how fishing has changed and any impacts that has had on our catches.

SCRIPT

Let's take a moment and talk about what's happening in your village. These are some questions to talk through how fishing has changed. Can you tell me some of your stories?



DISCUSSION

Now it's time to listen to their experiences.

Ask:

- Are our catches declining? Do we catch the same fish as before? Have some fish disappeared? What about the sizes of fish – are they the same or smaller?
- Do you travel further? Do we spend more time and money to catch fish?
- Have you thought about why those changes happened? What do you think are the reasons for the changes?

MATERIALS NEEDED

Pen and notebook.

If possible, record the feedback from the group in a notebook so you can review them later and compare them with other groups.

SEKSEN 2

Wanem rot bai yu ken lukim olsem i gat senis long namba bilong pis?



BACKGROUND

This section aims to help communities explore how to check the health of their fishing grounds with three simple activities.

Please note that these activities are simply intended to get people to reflect on the changes in fishing and to take a good look at their catches in the future. It's not critical for them to do all of them perfectly. The activities offer a simple process for communities to reflect on how fishing has changed to sustain community dialogues.

If it gets people talking, over time they will most likely examine their own catches more and more and you will have done your job in bringing their attention to the problem.

KEY MESSAGE

Your catches can tell you a lot about the health of your fishing grounds.

SCRIPT

This section is about asking some simple questions to better understand if you have a problem with overfishing.

We want to keep things simple. We want to look at our catches more closely, to understand if we have an overfishing problem, and if so, how urgent it is to take action .

Our catches can tell us a lot.

Here are some common observations from areas that do start examining their catches:

- Wow, those are not the kind of fish we used to catch.
- We never ate those fish before.

- I can't remember the last time we caught a grouper.
- Look at how small that fish is. It's a baby.

SEKSEN 2

Wanem rot bai yu ken lukim olsem i gat senis long namba bilong pis?

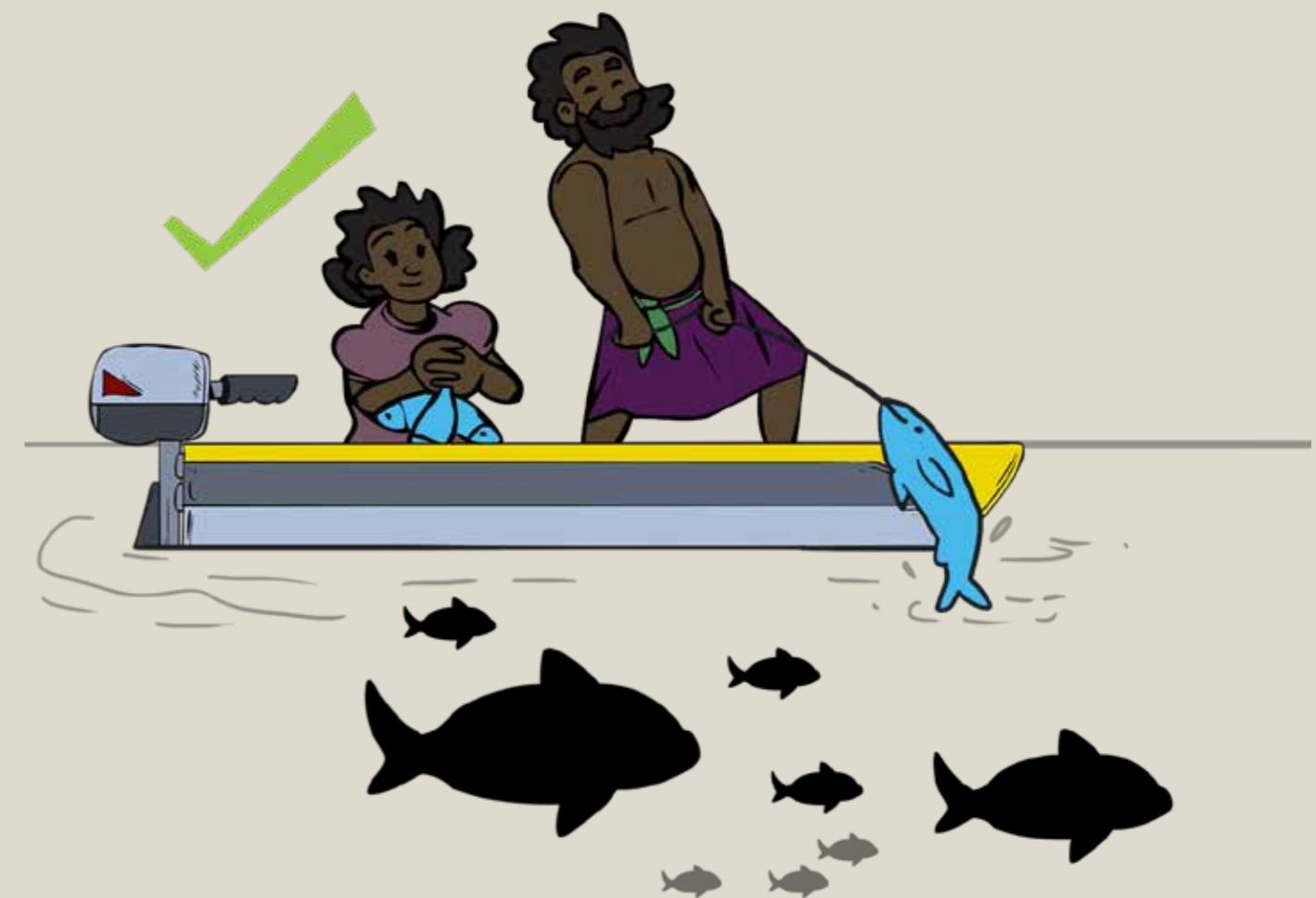
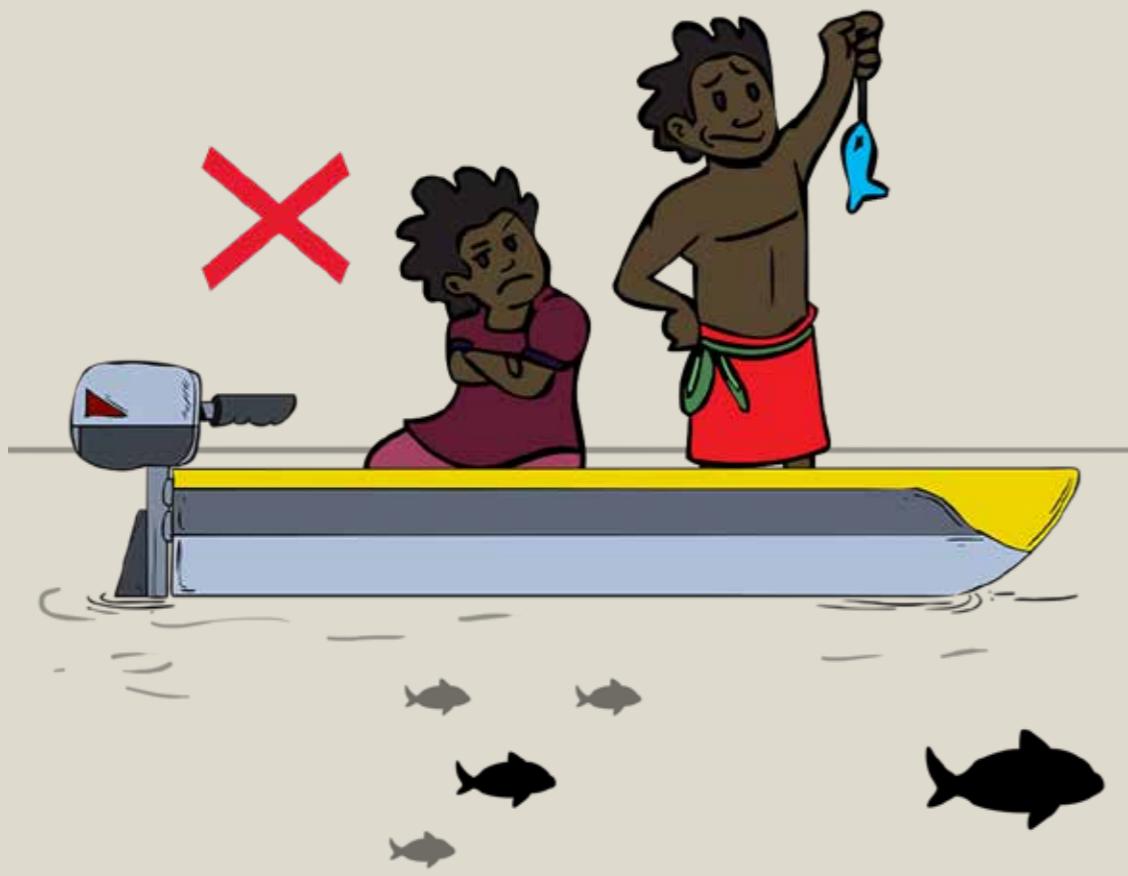


DISCUSSION

- This is only to introduce the topic: no discussion is needed at this stage.

SEKSEN 2

**Wanem rot bai yu ken lukim olsem i
gat senis long namba bilong pis?**



BACKGROUND

In our experience, often outreach is very technical and so it fails to focus on the basic problem with overfishing.

Overfishing is when too few fish are left to breed and restock fishing grounds year after year.

When really technical information on fisheries health is presented, often this message is lost, and misconceptions arise about overfishing.

Here are a common responses we hear:

"The ocean is so big, how could it run out of fish, right?" "Good fishers can find the fish."

So instead, we find that talking about fish reproducing year after year is a focused and concrete message that almost everyone can understand and remember!

The first illustration in this section frames fisheries management around this simple idea: ensuring enough fish able to breed to sustain stocks into the future.

KEY MESSAGE

Overfishing is catching too many fish and critters too few are left behind to breed and restock fishing grounds. If more fish or other marine species come out of the sea than new fish spawn each year, you will see less and less fish year after year.

SCRIPT

Before we get into the health checks, we need to understand what overfishing is. Overfishing happens when you have too few mature fish are left on your fishing grounds to breed. So, catches decline and you get less and smaller fish.

You can see in this boat (red sarong), they are experiencing overfishing.

SEKGEN 2
Wanem rot bai yu ken lukim osem i
gat senis long namba bilong pls?



Because if you catch too many fish and too few fish get big enough to breed, catches decline.

Or if you have harmful land-use practices harming critical habitat, it can also mean less fish survive and breed, and catches can still decline.

In this boat (purple sarong) most fish are

reaching sexual maturity and breeding.

Because if you have smart fishing practices and rules, and healthy habitats, fish will get big enough to breed before you catch them, and catches will get bigger and better.

That's the goal.

DISCUSSION

Ask:

- Does this concept of overfishing make sense?
- Does it help explain any changes in catches you have experienced? Have you seen the sizes decrease and then catches decline rapidly when there were only little ones left?

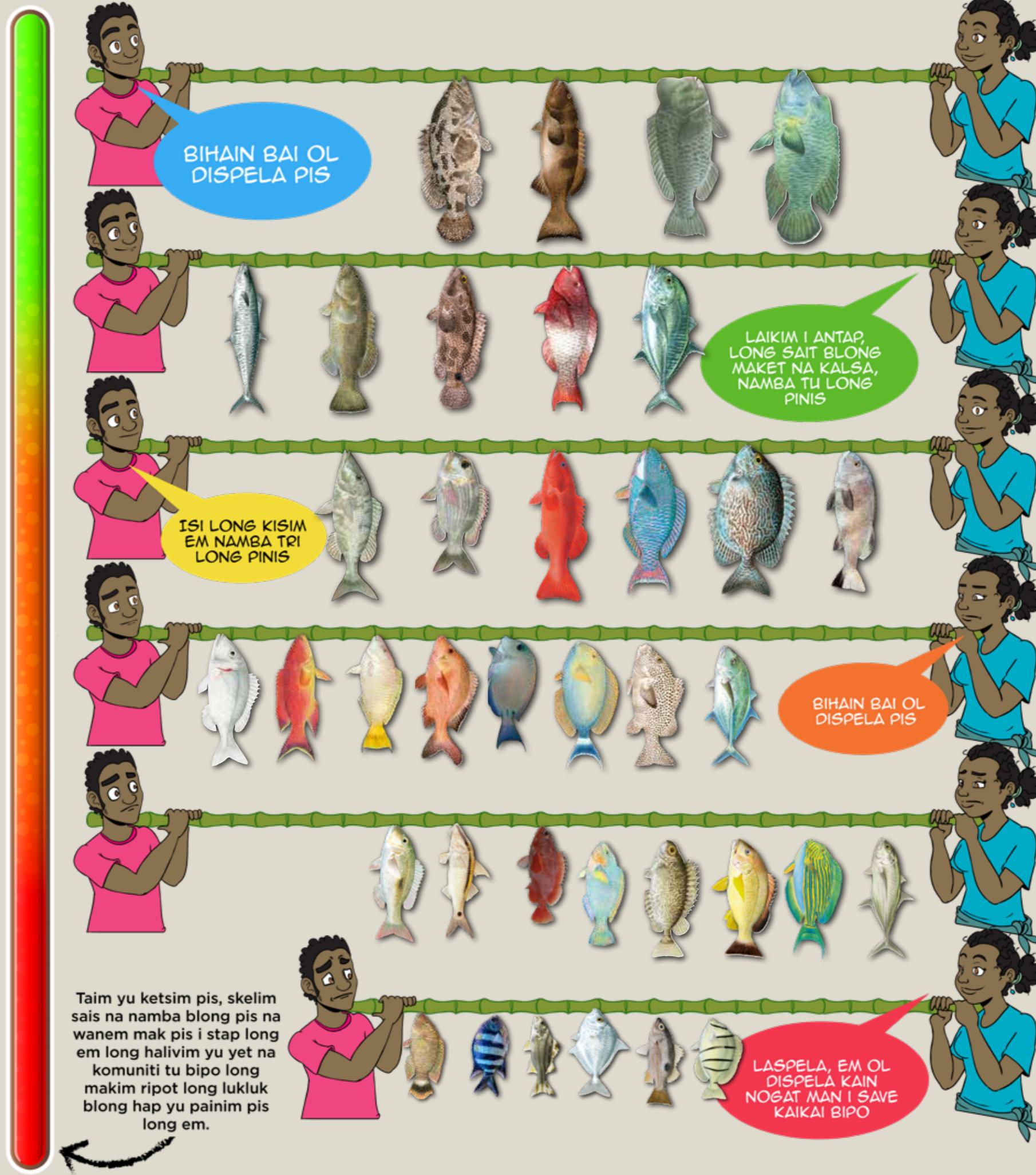
MATERIALS NEEDED

Pen and notebook.

If possible, record the feedback/comments from the group in a notebook so you can review them later and compare them with other groups.

SEKSEN 2

Wanem rot bai
yu ken lukim
olsem i gat senis
long namba
bilong pis?



BACKGROUND

Overfishing can be hard to spot as it happens over many years, or even over generations. But most fishers deal with overfishing challenges by thinking short-term, day to day: I need money for school fees, so where should I fish today? Because of that, overfishing is not an urgent issue.

The reality is that people are often more concerned about such things as education, health care and infrastructure that gives them better access to markets, than the health of fishing grounds which provides for all these things. So here, our question is whether fishers want to think longer-term, and work to ensure their fishing grounds can keep providing for their needs.

A very effective way to breakthrough this challenge is asking fishers to reflect on what they have already lost.

This illustration helps people understand overfishing in the fish they have already lost or are losing.

KEY MESSAGE

You can tell how bad is the overfishing by seeing how far down the food chain is your current catch. The further down, the more overfished is your area.

SCRIPT

In the sea, there are many types of fish, with the biggest types of fish eating the middle size fish, the middle size fish eating the smaller fish, and the smaller fish eating the smallest baitfish. This is called the Food Chain.

As fishing pressure increases to unsustainable levels, overfishing often happens in the same ways wherever you live. The first fish which disappear are always the biggest. We like to catch the biggest fish, which will feed the most people in their family and community or give us the biggest bragging rights.

So the biggest and best go first.

The next fish to start disappearing are the highly valued species, valued by the

market or for customary reasons.

Then all the most easily caught types of fish start disappearing. The ones that come together seasonally in spawning or feeding large schools, that we learn to take advantage of.

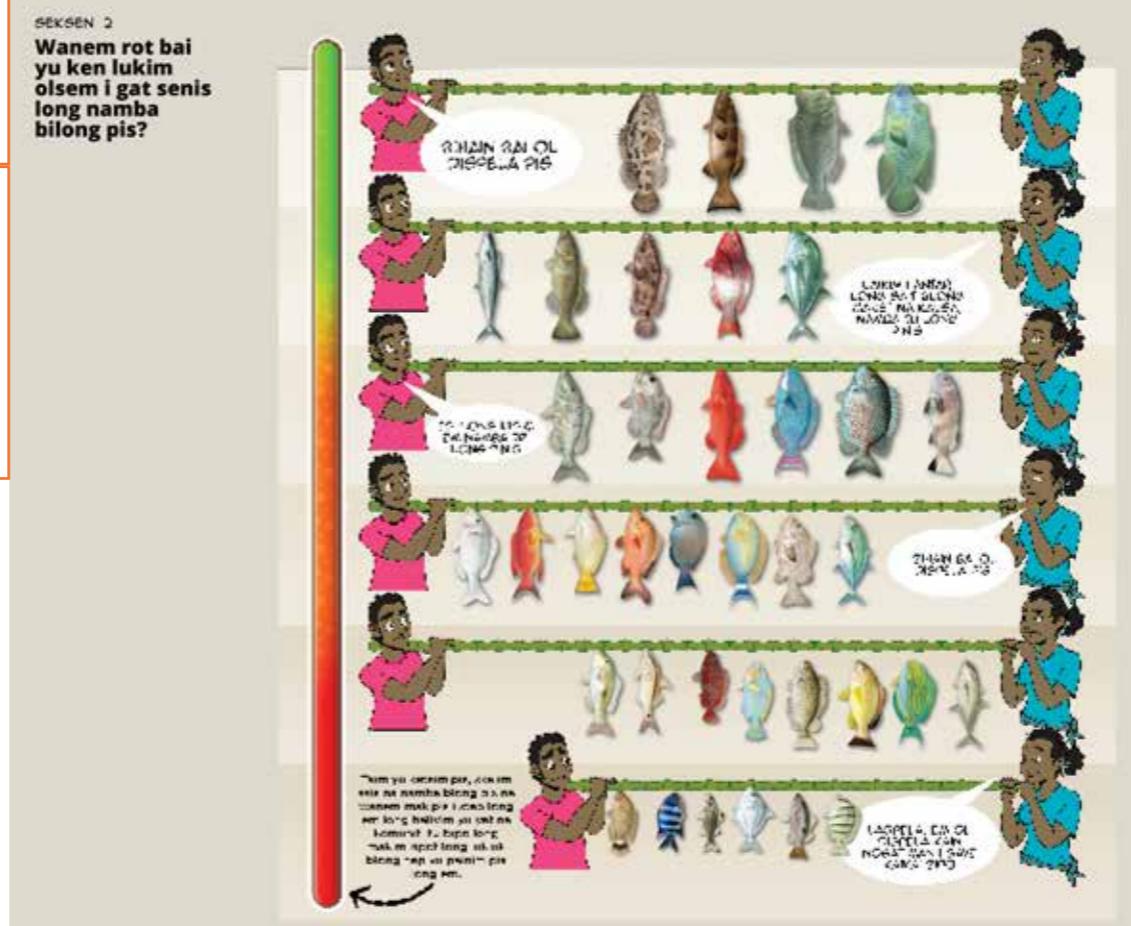
Eventually, where before people mainly fished for the big types of groupers, parrotfish, snappers and wrasse. This type of small red snapper here becomes the most important fish for people. It is small, but forms big schools and aggressively takes the hook.

In time, it too gets fished out and then all that is left are types of fish, that once no-one wanted to eat, fish that before would have been used for bait.

So we need to ask ourselves, where are we in this story? Are we here? Still catching good amounts of big groupers and with plenty of Bumphead wrasse, Humphead wrasse, rabbitfish? But even if we still have plenty of these best types of fish are things changing? And how are they changing? Are they changing from this?

Or have we moved on this: Where the best fish are now very hard to find or locally extinct.

Or maybe we are way down the food chain, eating mostly fish we never used to eat?



DISCUSSION

Ask:

- What's in the bucket today?
- Are you still catching big fish like these? Or the next group, or the next group, and on down the page. Where are we on the food chain?
- Is it the same fish as in past years?
- Have we lost any fish?
- Are there fish you are worried about losing?

MATERIALS NEEDED

Pen and notebook.

This is an important discussion to record. Please write down the answers to each question, getting a consensus from the group on any fish that have been lost, what the current catch is, and what fish they are worried about losing.

This information will be important to collect and present at the village level.

Wanem rot bai yu ken lukim olsem i gat senis long namba bilong pis?

HAMAS TAIM I KISIM
YUPELA LONG PAINIM PIS
INAP LONG MAK BILONG
LUKAUTIM FAMILI INSAIT
LONG WANPELA WIK?

YU SAVE KISIM DISPELA
KAIN OL PIS LONG WANEM
HAP TRU LONG SOLWARA?

HAMAS TRU YU SAVE
USIM LONG GO PAINIM
PIS, OL SAMTING BAI
YU USIM LON GO
PAINIM, BENSIN?



BACKGROUND

An easy way for fisheries managers to monitor fishing health is to ask questions about the effort used by fishers to catch fish, and then ask these same questions over time.

This is called catch per unit effort (CPUE).

This activity is very similar to some of the questions that you have asked in the first section. The difference is that the same questions are asked again and again over regular intervals of time — like every year — and then you compare the answers year after year.

For example, you can ask fishers questions about how long it takes them to catch enough fish for their family or a specific weight of fish."

Or you can ask fishers what they think is a good measure to consistently track time and resources for a fishing trip. Ask them to come up with a measurement that works for them.

The key is using the same questions every time. That way you can compare the answers.

KEY MESSAGE

We can monitor the health of our fishing grounds by asking the same questions about how hard or easy it is to catch fish. This can be done once a year to assess changes.

SCRIPT

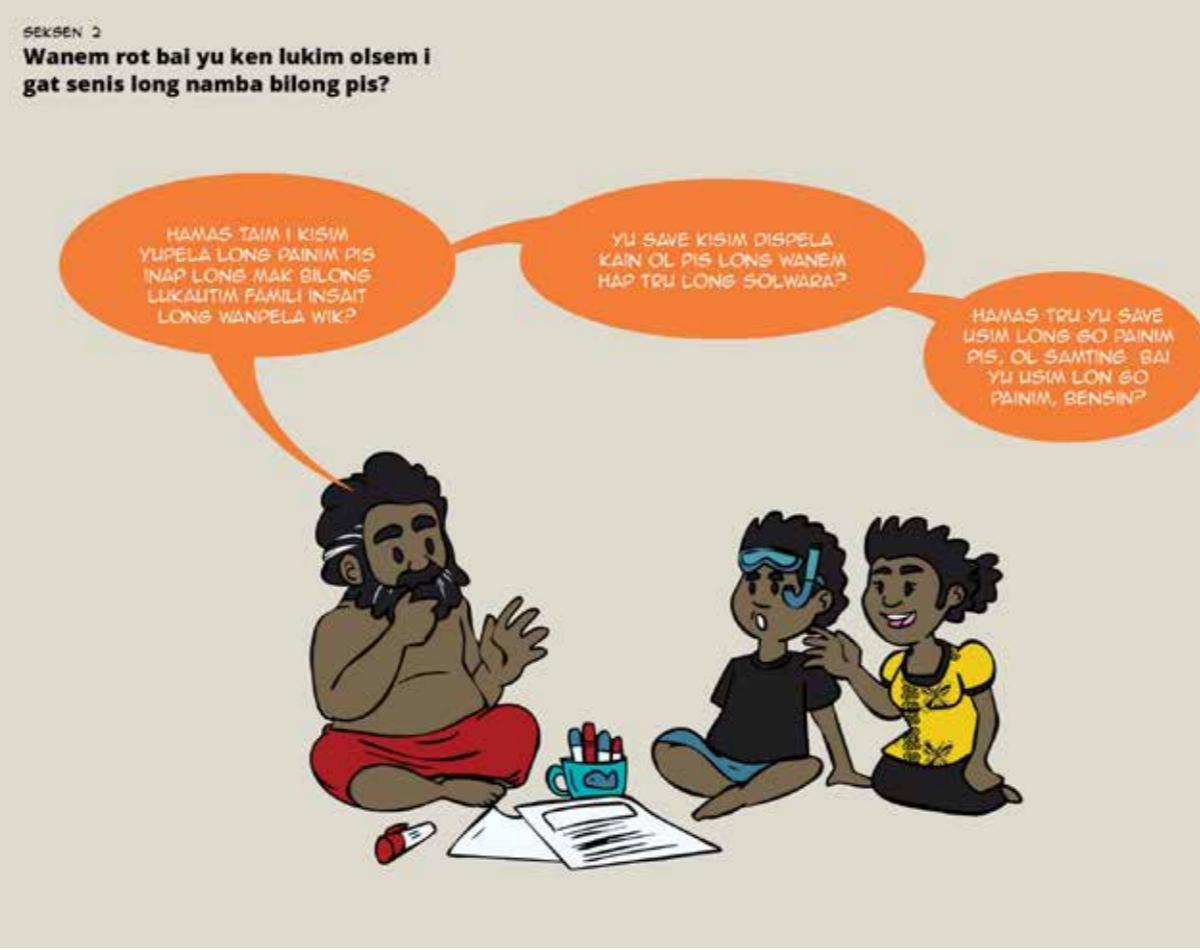
We can also try to assess if fishing is getting easier, harder or staying the same by asking questions about how long it takes us to catch fish.

For example, you can ask "how long does it take to catch enough fish to feed your family for a week?"

Or, "how long does it take you to catch 10 kg of fish?"

We need to decide for ourselves what a good measure of fish would be. Then we compare our answers over time, typically every year, to see how different it is.

Let's give it a go right now, with some simple questions.



DISCUSSION

Ask:

- How long does it take you to catch enough fish to feed your family each week? How many hours or days?
- How much do you spend to catch those fish - on gear or fuel?
- If we asked these questions five years ago, what would you have said?

This last question gives us an idea of how CPUE can help us to compare answers over time. In the future, you only need to ask the first two questions and compare answers with previous years.

MATERIALS NEEDED

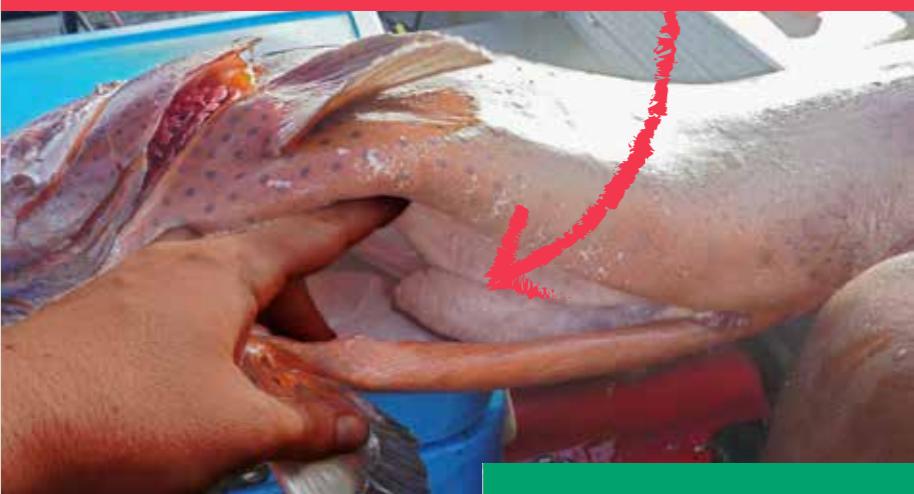
Pen and notebook.

Please write down the answers to each question. Later you can compare all the different groups' answers, to see if there is some agreement on how hard it is to catch fish and potentially how hard it was in the past.

Wanem rot bai yu ken lukim olsem i gat senis long namba bilong pis?

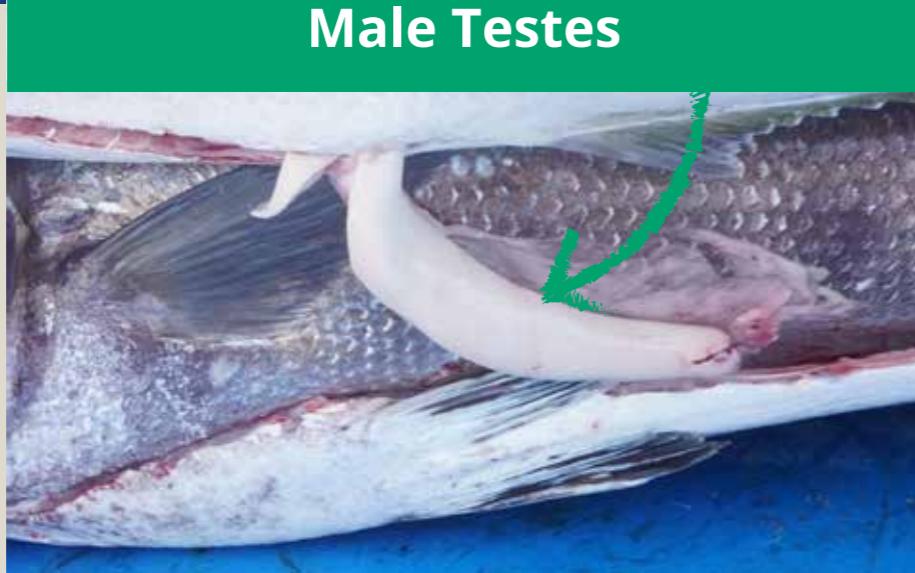
Au blong sekim sais?

Female Ovaries



© Gabrielle Cotonéa

Male Testes



© Gabrielle Cotonéa

Step One. Katim na openim pis, painim sapos pis emi meri o man. Bikpela sais pis bai soim olsem em i man o meri.



© Sammie Waru

Step Two. Raitim i go daun wanem kain ol sais pis (liklik o bikpla) long lukim wanem kain sais tru pis bai bikpela na soim ol man o meri. Traim long wok painim out long 50 – 100 pis, long helpim yu long save gut long dispela ol sais pis.

Fish	Sexually Mature	Size
	Yes/No	

BACKGROUND

All types of fish have different sizes they need to reach before they become sexually mature and able to reproduce. As we discussed earlier, to have good catches year after year, enough fish need to get big enough to breed, before you catch them.

In many countries, minimum

sizes are set for fish, to ensure they get big enough to breed. Unfortunately, in Papua New Guinea, there is not a lot of scientific information about what size fish should be to ensure enough fish are breeding.

For many species, looking at the sizes of your catch can help you to understand if enough fish are breeding to be restocking your fishing grounds.

This illustration explains the value of measuring fish and also how to determine the minimum size for a species of concern (given PNG does not have that information).

KEY MESSAGE

The sizes of the fish you catch can tell you a lot about the health of your fishing grounds.

SCRIPT

All types of fish have different sizes they need to reach before they become sexually mature and able to reproduce. To have good catches year after year, enough fish need to get big enough to breed, before you catch them.

In many countries, minimum sizes are set for fish, to ensure they get big enough to breed. Unfortunately, in Papua New Guinea there is not a lot of scientific information about what size fish should be to ensure enough fish are breeding.

If you know at what size a fish becomes sexually mature, you can use it to assess

the health of a fisheries by seeing how many fish are over the minimum size and how many are under it. For example, you want at least 50 to 60 percent of the fish you catch to have reached minimum size and to have had a least once chance to breed.

If fishers already know at what size a fish they catch starts breeding, they can use this method to see how many are undersize and how many are mature.

If fishers don't know what size the fish they catch starts breeding, you can cut open your catch to figure out what is the size that they typically become sexually

mature. When fish are cleaned, you can see if they have developed gonads, which are testes for male fish and ovaries for female fish.

Here are pictures of the male testes and the female testes. If fish have these, they are sexually mature.

For a fish we are worried about being overfished, we could measure 50 to 100 of these (over days or weeks) and keep a record of whether each one is mature or not. You could also share this information with other fishers so they know what size this particular fish becomes mature.

SEKSEN 2
Wanem rot bai yu ken lukim olsem i
gat senis long namba bilong pis?

Au blong sekim sais?

Female Ovaries

© Gabrielle Cotonéa

Male Testes

© Gabrielle Cotonéa

Step One. Katim na openim pis, painim sapos pis emi meri o man. Bikpela sais pis bai soim olsem em i man o meri.

Step Two. Raitim i go daun wanem kain ol sais pis (liliklik o bikpla) long lukim wanem kain sais tru pis bai bikpela na soim ol man o meri. Traim long wok painim out long 50 - 100 pis, long helpim yu long save gut long dispela ol sais pis.

Fish	Sexually Mature	Size
	Yes/No	

DISCUSSION

Ask:

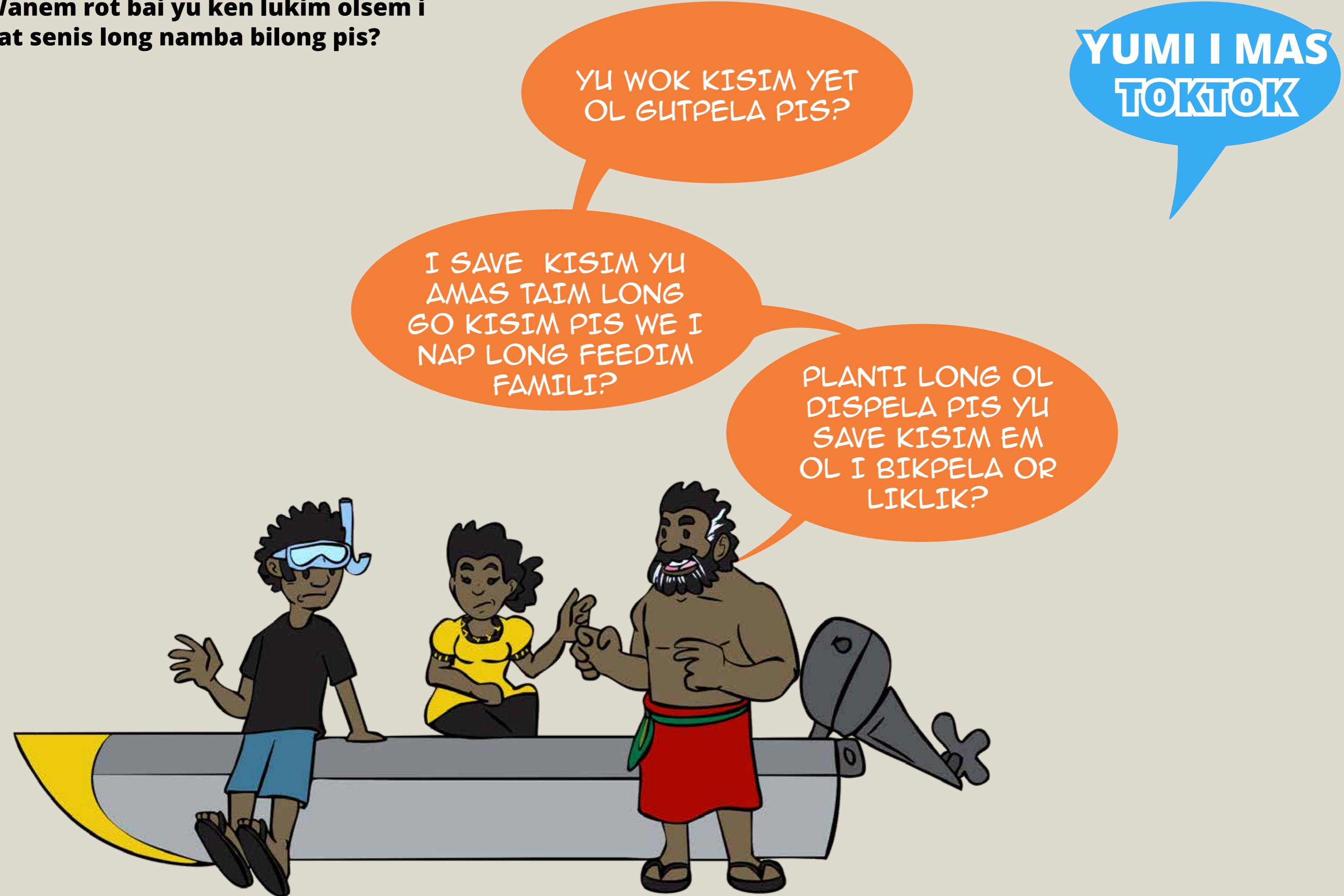
- Does anyone here know what some minimum sizes are for our fish?
- Have you noticed when cleaning the fish, if some are mature and some are not?
- Do you think if we picked a fish that was important to us, and we were worried about losing, we could cut enough open and see what is the size they starting becoming mature?
- If so, could we also then measure the catch to see how much is undersize? Do you think would help us to assess the health of the fishery?

MATERIALS NEEDED

Pen and notebook.

Record if there is a (1) species of concern, (2), if they know its minimum size, (3) if they are willing to cut them open to find the minimum size, and (4) if they are willing to measure length of the fish.

**Wanem rot bai yu ken lukim olsem i
gat senis long namba bilong pis?**



BACKGROUND

The strength of this presentation is that it shares issues in ways people can relate to and discuss. This means that you have a great opportunity to get people talking about their own experiences, which helps them put the information into their local experience and increases the chance of them putting the information into action later.

This is the core objective of the presentation, to get people talking and interacting, and there are discussion questions on every page.

Ideally, you have used the previous pages to talk and reflect. But it's always positive to pause and make sure you have covered everything and that everyone has had a chance to share their thoughts.

If you have not used the discussion questions, and instead presented the previous content without asking for comments, use this page to hold a big discussion on all the pages.

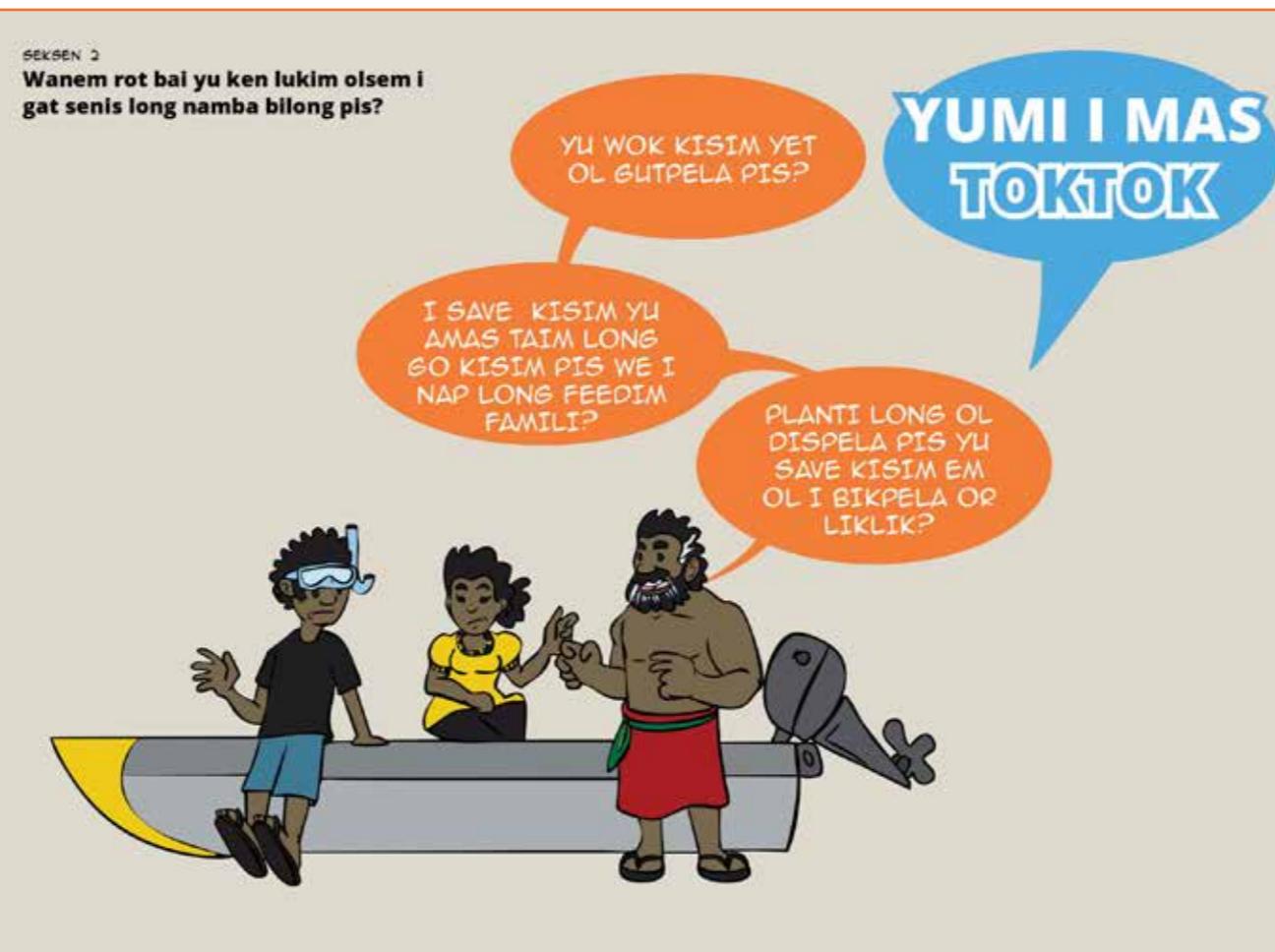
If you have already answered all the questions, use the questions on this page to provide a summary of what was shared — and ask if it's accurate — before moving to the next section.

KEY MESSAGES

It's important for us to reflect together on how fishing has changed and any impacts this has had on our catches.

SCRIPT

Let's take a moment and talk about what's happening in your village. These are some questions to talk through how fishing has changed. Can you tell me some of your stories?



DISCUSSION

Ask:

- Are you still catching any good fish? Have you lost any? How far down the food chain are you?
- How long does it take you to catch enough fish to feed your family?
- Are most of the fish you are catching immature or mature?

MATERIALS NEEDED

Pen and notebook.

If possible, record the feedback from the group in a notebook so you can review them later and compare them with other groups.

SEKSEN 3

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?



BACKGROUND

This section shares the actions that communities can take to respond to declining catches.

Presenting a range of actions that communities could take, can help to make fisheries management less complicated and can help communities to take ownership of the decisions. For you, as the facilitator, there are a few things to understand when you host discussions on these actions.

Fisheries management is an approach to ensuring fish and other marine species are harvested at sustainable levels. It is not about stopping people from fishing or collecting. It is about balancing short term needs with long term needs for communities to thrive.

Government agencies such as fisheries departments are mandated to manage coastal fisheries and large commercial fisheries, such as those based on tuna. But they rarely have the resources to directly help inshore communities.

Local communities are best placed to manage the inshore fisheries themselves. Local communities often have (1) legal rights to the resources, (2) broader traditional information on their fishing grounds, such as the knowledge of places and times where fish and other marine species reproduce, and (3) a better understanding of the impacts of imposing controls on different community groups. This tends to make communities better placed to set rules that deal with local problems to manage their fishing grounds.

This is the thinking behind Singaut Blo Solwara: to help communities manage their fishing grounds themselves.

SCRIPT

Community-based fisheries management is an approach to ensuring fish and other marine species are harvested at sustainable levels, through smart fishing practices and rules and habitat protection.

It is not about stopping people from fishing or collecting.

It is about balancing short term needs with long term needs for communities to thrive.

This is the thinking behind Singaut Blo Solwara: to help communities manage their fishing grounds themselves. It is up to us what rules to make to improve our catches.

Rules and restrictions arrived at by common agreement are more likely to be respected by communities.

In addition, local rules are more likely to be respected if backed by traditional, customary or religious

structures. If all fishers – men, women, young and old – support communally-made decisions then enforcement is also less challenging.

This section shares some of the rules that a community might consider, so we can discuss them.

I will now go through all the rules shown here.

SEKSEN 3

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?



DISCUSSION

This page introduces the rules, and a long discussion is not needed.

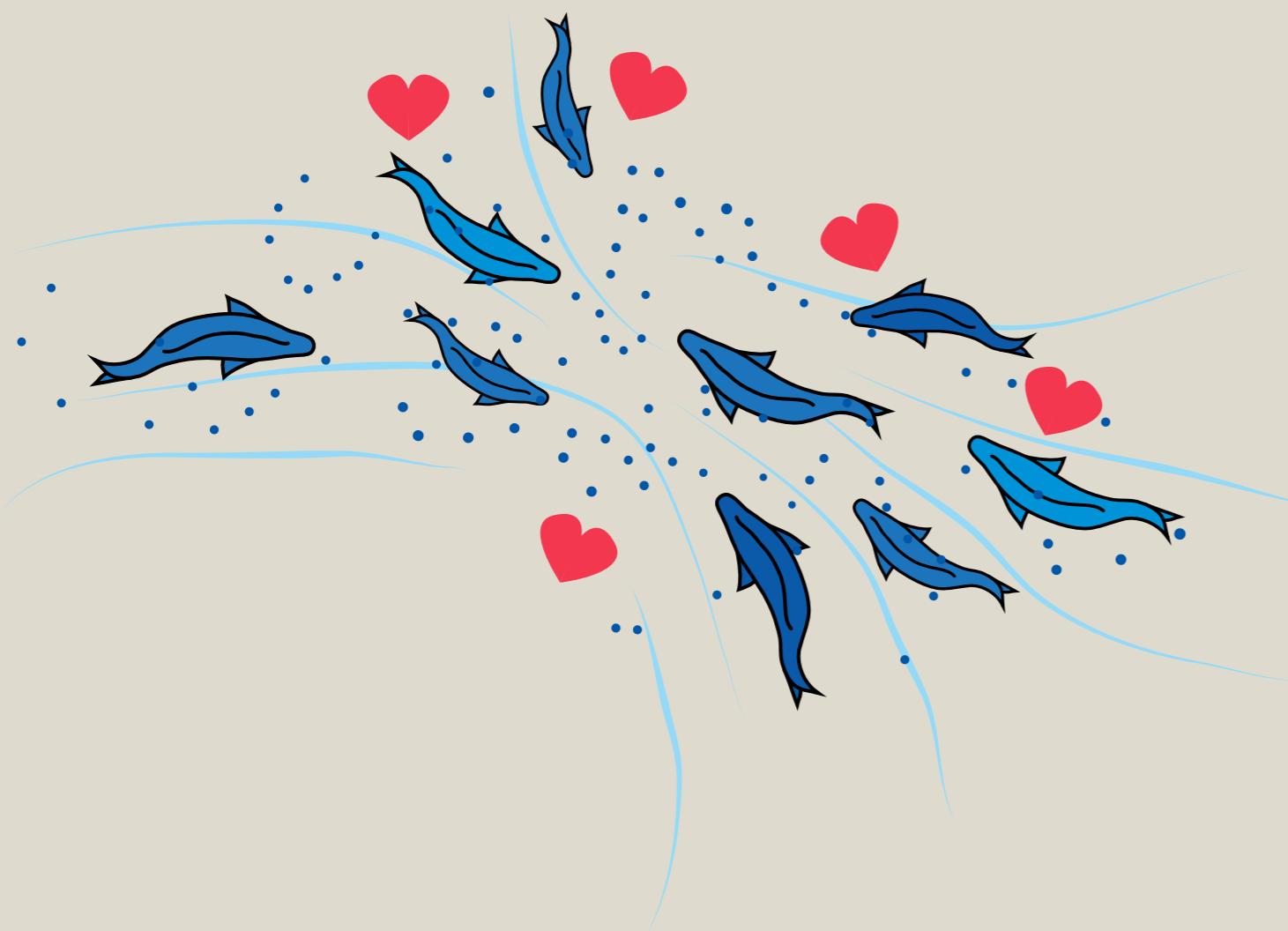
However, it is OK to see if they have any general questions about what you shared on community-based fisheries management, before you start discussing the rules.

KEY MESSAGE

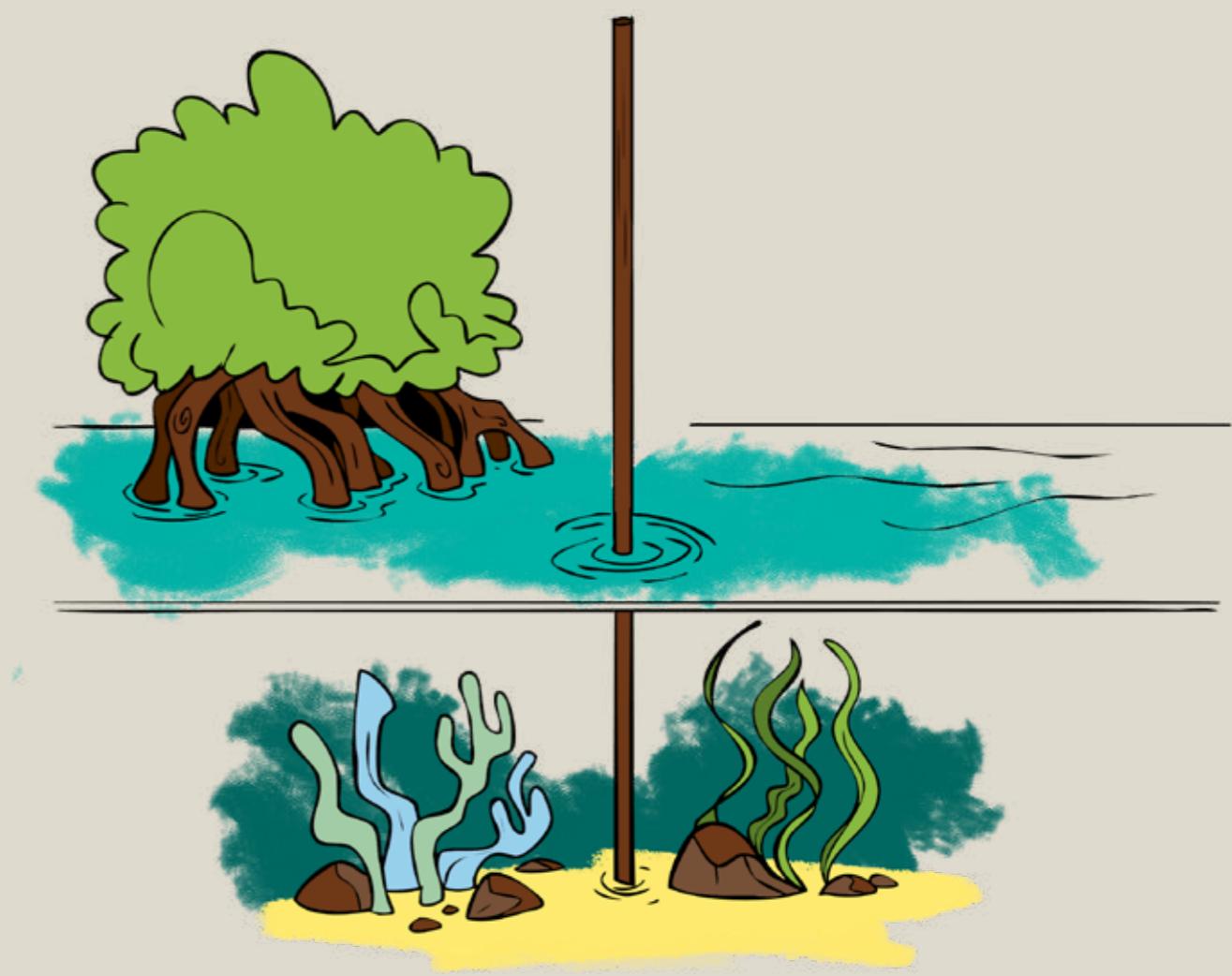
Communities should not wait for someone to turn up to start a fisheries management project. Communities need to take the lead.

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?

**PUTIM
TAMBU
LONG TAIM
BLONG
PIS LONG
KARIM**



**LUKAUTIM
SOLWARA**



BACKGROUND

This section shares some of the typical rules communities can make. These pages are important to show clearly what local actions are. Please note that rules should be assessed based on the threat.

Here are some points to consider and criteria to share if there is deep discussion about the rules.

Some criteria are:

1. Does the rule address the issues driving overfishing, such as harmful gear, too many fishers, or habitat destruction. In other words, make sure the solution matches the problem.

2. Will fishers and the community support the rule? This is why it is so important to host community discussions: to ensure everyone is involved and can accept the decisions made. Some rules will limit current fishing practices more than others. So, encouraging the community to talk through problems and solutions is critical to understanding how the rules may impact (all) fishers and what rules will be most supported.

3. Can the community enforce the rule if people don't obey it? If there are concerns about people not complying, it is useful to discuss how hard it will be to enforce. For example, if you are banning catching a specific fish, perhaps they can check people's catches when they return to shore. But if they are establishing a protected area, can they monitor it, or is it too far from the village?

4. Will fishers from outside the community obey the rule? As gear and boats have improved, poaching from outsiders has increased in some places. Will this be an issue for this community? The community will lose support quickly if people see outsiders stealing the benefits while community fishers obey the rule. If outsiders poach, how can the community stop them?

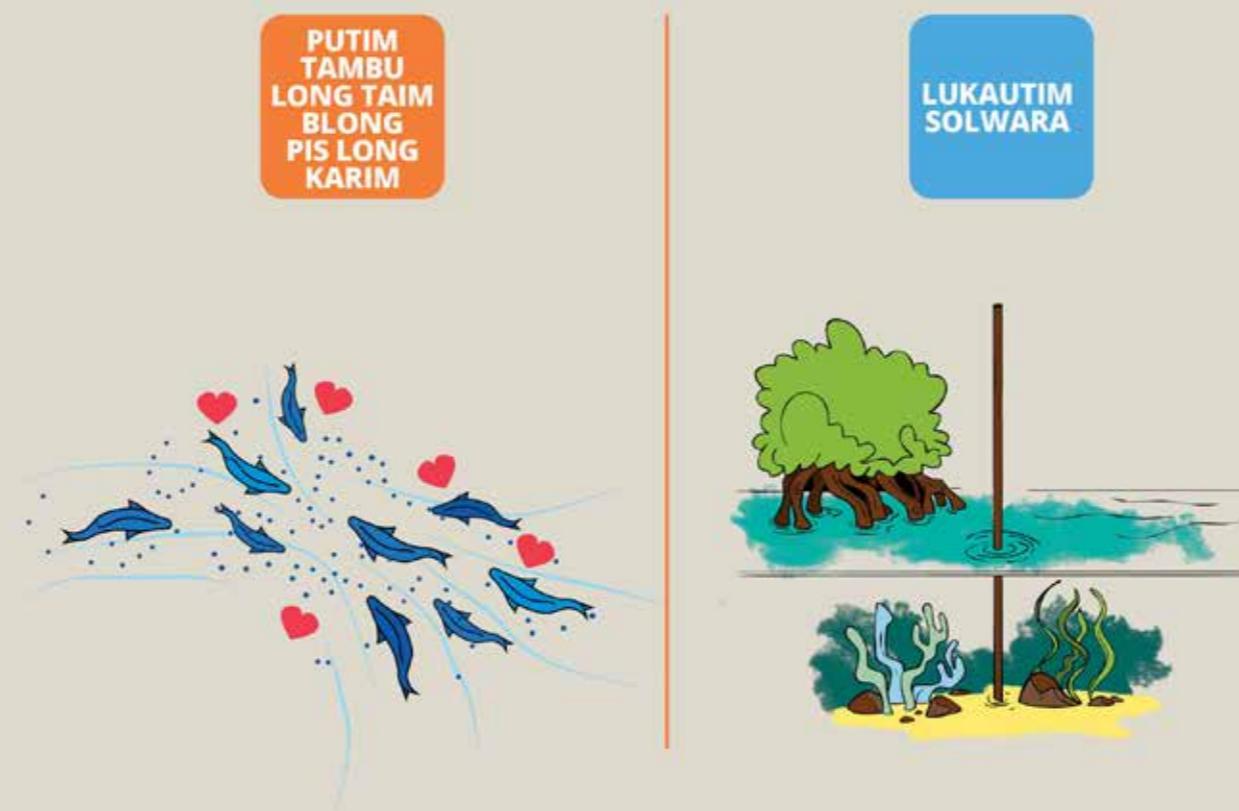
SCRIPT

The first two rules to share are Spawning Season Bans and Marine Protected Areas.

SPAWNING SEASON BANS

Some fish are especially vulnerable during their peak spawning months, when they gather in large numbers to breed. If you allow the fish to breed first —before you catch them—, you help maintain good fish catches each year. Grouper are good example of fish that can use spawning season protections.

SEKSEN 3
Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sals pis?



KEY MESSAGE

To ensure you maintain sustainable fish stocks, might require fishing rules. But the rule should match with the threat you are experiencing.

MARINE PROTECTED AREAS, or tambu areas.

You can establish marine protection areas, or tambu areas, to help create space for fish to grow and breed each year. The fish in tambu areas help restock all the fishing grounds. Tambu areas can also be placed on important habitat that fish need. Please note small tambu areas will not fully protect fish that swim over large areas.

DISCUSSION

Ask:

- Has our village had experience with any of these rules?
- What was the experience?
- Is this something we could consider in the future? Why or why not?

MATERIALS NEEDED

Notebook and pen.

If possible, record if they have established one of the rules and the general experience of this rule.

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?

**TAMBUIM
BAGARAP
WEI BILONG
PAINIM PIS**



**KATIM
DAUN PA-
SIN BILONG
PAINIM PIS**



BACKGROUND

Please see previous pages for the background on rule making.

The rest of this section will share scripts and discussion points only.

SCRIPT

This page shares information on Bans on Harmful Fishing Practices and Limits on Fishers or Catches.

HARMFUL FISHING PRACTICES

You can ban harmful gear that leaves too few fish behind. Poison root fishing, night diving & scuba

spearfishing are examples of practices banned by communities. Small net sizes too, particularly in fish nursery grounds.

LIMITS ON FISHERS OR CATCHES.

You can limit the number of fishers allowed to fish in your fishing

grounds. Some places limit the number of outsiders first. Alternatively you can limit how much fish people can take, by weight or fish number. This is a good idea in areas that decide to open up their protected area. They limit the number of fish, so not all the breeding stock is lost.

SEKSEN 3
Bal yumi mekim wanem long pasin bilong kisim plenti kainkain sals pis?



KEY MESSAGE

To ensure you maintain sustainable fish stocks might require fishing rules. But the rule should match with the threat you are experiencing.

DISCUSSION

Ask:

- Has our village had experience with any of these rules?
- What was the experience?
- Is this something we could consider in the future? Why or why not?

MATERIALS NEEDED

Notebook and pen.

If possible, record if they have established one of the rules and the general experience.

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?

**PUTIM
TAMBU
LONG OL
WANWAN
SOLWARA
ANIMOL**



**KISIM PIS I
NAP LONG
MAK**



BACKGROUND

Please see previous pages for the background on rule making.

The rest of this section will share scripts and discussion points only.

SCRIPT

This page shares Bans on Endangered Species and Rules on Minimum Fish Sizes.

BANS ON ENDANGERED SPECIES

Some fish are so heavily overfished they risk collapsing and disappearing all together. In these cases, if there is an important fish that is disappearing, it might best to have bans on taking that fish. At the national level, that's the reason for some of the bans already in place.

SEKSEN 3
Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sals pis?

PUTIM
TAMBU
LONG OL
WANWAN
SOLWARA
ANIMOL



KISIM PIS I
NAP LONG
MAK



KEY MESSAGE

To ensure you maintain sustainable fish stocks might require fishing rules. But the rule should match with the threat you are experiencing.

RULES ON MINIMUM FISH SIZES

Establish size limits to ensure fish reach Set Sizes and restock your fishing grounds. You can also use bigger hooks and bigger mesh size in nets, to ensure the little ones get a chance to grow before you catch them.

DISCUSSION

Ask:

- Has our village had experience with any of these rules?
- What was the experience?
- Is this something we could consider in the future? Why or why not?

MATERIALS NEEDED

Notebook and pen.

If possible, record if they have established one of the rules and the general experience.

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?

**KISIM
TASOL OL
PIS BILONG
KISIM**



**LUKAUTIM
OL AS PLES
BILONG OL
PIS**



BACKGROUND

Please see previous pages for the background on rule making.

The rest of this section will share scripts and discussion points only.

SCRIPT

This page shares Selective Harvesting and Protection of Key Habitats.

SELECTIVE HARVESTING

You can limit the taking of certain sexes of species. For instance, not taking a female mud crab, or taking ones that are carrying eggs. You can also ban taking male or female of

certain species where the fish change sexes of their lifetime. For example, some parrotfish change from male to female later in life, so reproduction can fall off, if you fish all the large ones, or all the males.

PROTECTION OF KEY HABITATS.

Protect key habitats from harm, so fish can grow through key life stages. For example, protecting mangroves or sea grass, or stopping coral harvesting.



KEY MESSAGE

To ensure you maintain sustainable fish stocks might require fishing rules. But the rule should match with the threat you are experiencing.

DISCUSSION

Ask:

- Has our village had experience with any of these rules?
- What was the experience?
- Is this something we could consider in the future? Why or why not?

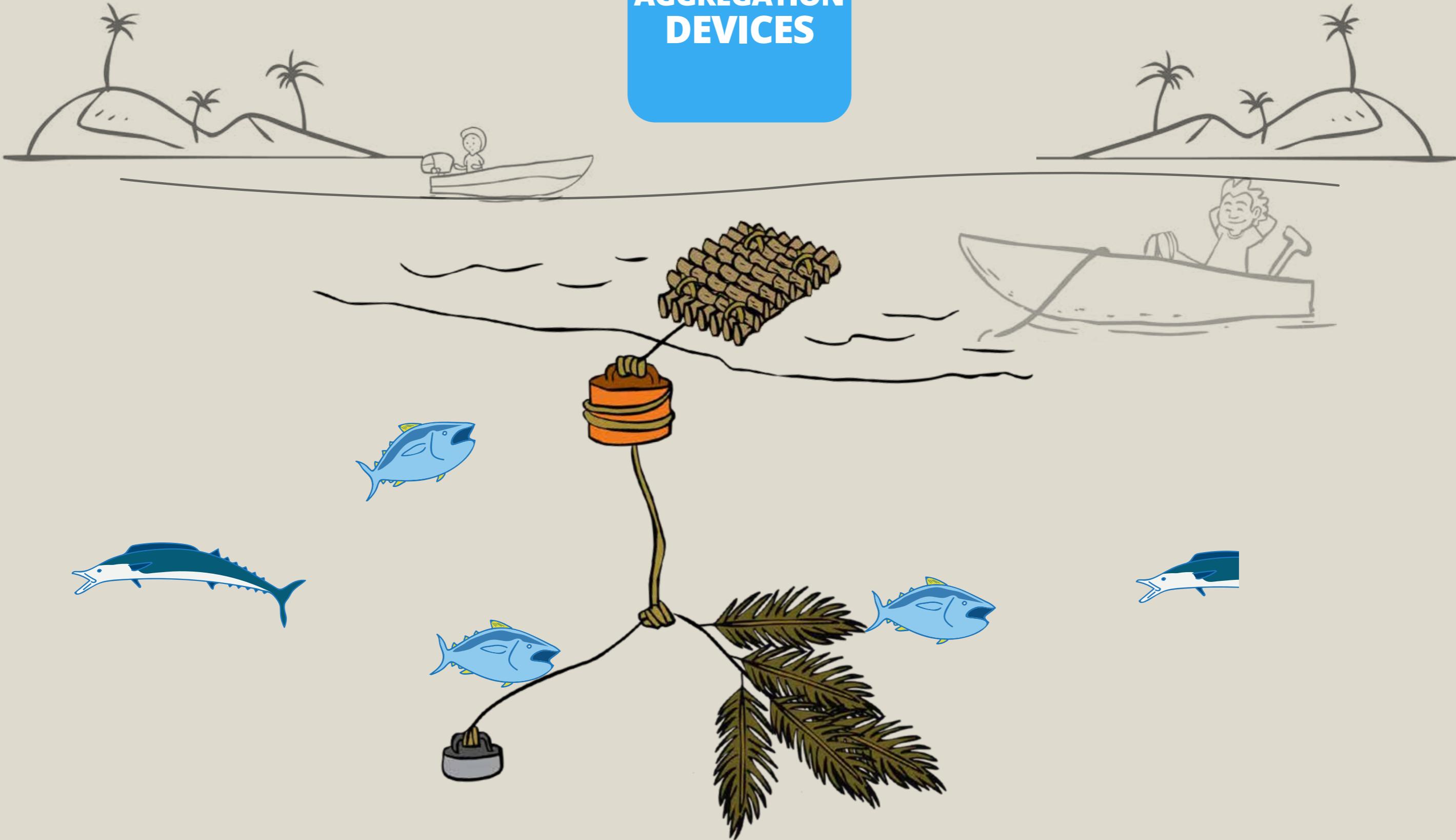
MATERIALS NEEDED

Notebook and pen.

If possible, record if they have established one of the rules and the general experience.

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?

FISH
AGGREGATION
DEVICES



BACKGROUND

The previous pages shared rules for improving fish catches. Often, rules are perceived as limits on fishing, because the benefits take time to build. In other words, it takes time for fish to grow bigger, restock fishing grounds, and provide in bigger, better catches.

This page shares a more immediate way of finding better catches and relieving some pressure on inshore fishing grounds: Fish Aggregating Devices or FADs.

FADs are placed in deeper water, to attract deep sea fish and make it easier to catch them. They can be made in many different ways, including by using local materials.

The page shares the concept, more support would be needed to build one locally.

SCRIPT

The previous pages shared rules for improving fish catches. Often, rules are perceived as limits on fishing, because the benefits take time to build. In other words, it takes time for fish to grow bigger, restock fishing grounds, and provide in bigger, better catches.

Fish Aggregation Devices are man-made objects used to attract fish to one location. FADs make it easier to catch them.

FADs are typically placed offshore to attract fish such as tuna or wahoo.

Fishing FADs can help reduce fishing pressure in overfished areas like inshore reefs.

They can be made in many different ways, including by using local materials.

The page shares the concept, more support would be needed to build one locally.



KEY MESSAGE

There are opportunities to relieve pressure on inshore fishing grounds as they recover, including using FADs.

DISCUSSION

Ask:

- Has anyone heard of a FAD?
- Has anyone used a FAD? What was your experience?
- Is this something that might make sense for us? Why or why not?

MATERIALS NEEDED

Notebook and pen.

This is a discussion to share information, but overall

Bai yumi mekim wanem long pasin bilong kisim plenti kainkain sais pis?



Wanem hevi?	Komuniti rul	Sapos yu burukim rul
Bagarap bilong painim pis	Tambu long usim gillnet wantaim sais <3inches	Komuniti lida bai givim yu wok bilong mekim Baim fine inap long K20 mak igo long managmen komiti
	Tambu long usim posin rop	Salim yu i go long vilis kot, sapos i bikpela rong tumas or yu mekim wankain samting plenti taim bai ol i salim yu i go long distrik kot
Komuniti kisim planti pis tumas or namba bilong pis i wok long go daun	Tambu long painim pis long nait	
	Tambu ples	
Ol bik maus pis i wok long go daun isi isi	Tambu long painim pis long ol ples na mun bilong ol long karim	



BACKGROUND

This page shares some of the results that might come from a community planning session. Sometimes these are called management plans by NGOs. That term can be confusing for some audiences. The plan is really just rules for your fishing grounds.

This page shares the problem a community was dealing with, the rule they made to deal with that problem, and the penalties for breaking it.

In some cases, communities have said once the traditional ban was put in place, people were scared to break it. If that's the case, perhaps you don't need levels of penalties. This page presents just one example, each community must work to find its own way forward. For reference, here are some criteria for rules to consider: These pages are important to show clearly what local actions can be. Please note that rules should be assessed based on the threat. Here are some points to consider:

1. Does the rule address the issues driving overfishing, such as harmful gear, too many fishers, or perhaps habitat destruction. In other words, make sure the solution matches the problem.

2. Will fishers and the community support the rule? Hosting community discussions are very important to ensure everyone is involved and can accept the decisions made. But some rules will limit current fishing practices more than others. Encouraging the community to talk through problems and solutions is critical to understanding how the rules may impact (all) fishers and what rules will be most supported.

3. Can the community enforce it, if people don't obey it? If there are concerns about people not complying, about it is important to assess how hard it will be to enforce. For example, if you ban catching a specific fish, perhaps people's catches can be checked when they return to shore. But if they are establishing a protected area, can it be monitored, or is it too far from the village?

4. Will fishers from outside the community obey the rule? As gear and boats have improved, poaching from outsiders has increased in some places. Will this be an issue for this community? The community will lose support quickly if people see outsiders stealing the benefits while community fishers obey the rule. If outsiders poach, how can the community stop them?

SCRIPT

This page shares some of the results that might come out of a community planning session. Sometimes these are called management plans by NGOs. That term is a bit confusing at times.

The plan is really just rules for your fishing grounds. But this page highlights that the rules must follow from the problem a community was dealing with. It is also important that there are penalties for breaking it which everyone understands.

In some cases, communities have said once the traditional ban was put in place, people were scared to break it. If that's the case, perhaps you don't need

levels of penalties. This page is one example, each community must find its own way forward.

How can communities make rules they can enforce themselves? Like most things, it best to follow existing community processes and encourage lots of discussion.

NOTE: The background section here includes additional information about criteria for good rules. If helpful, you can read that to the group. But it is better not to overwhelm them at this stage. Only read that section if they are discussing rule making in more depth, or have lots of questions on how to do it.

DISCUSSION

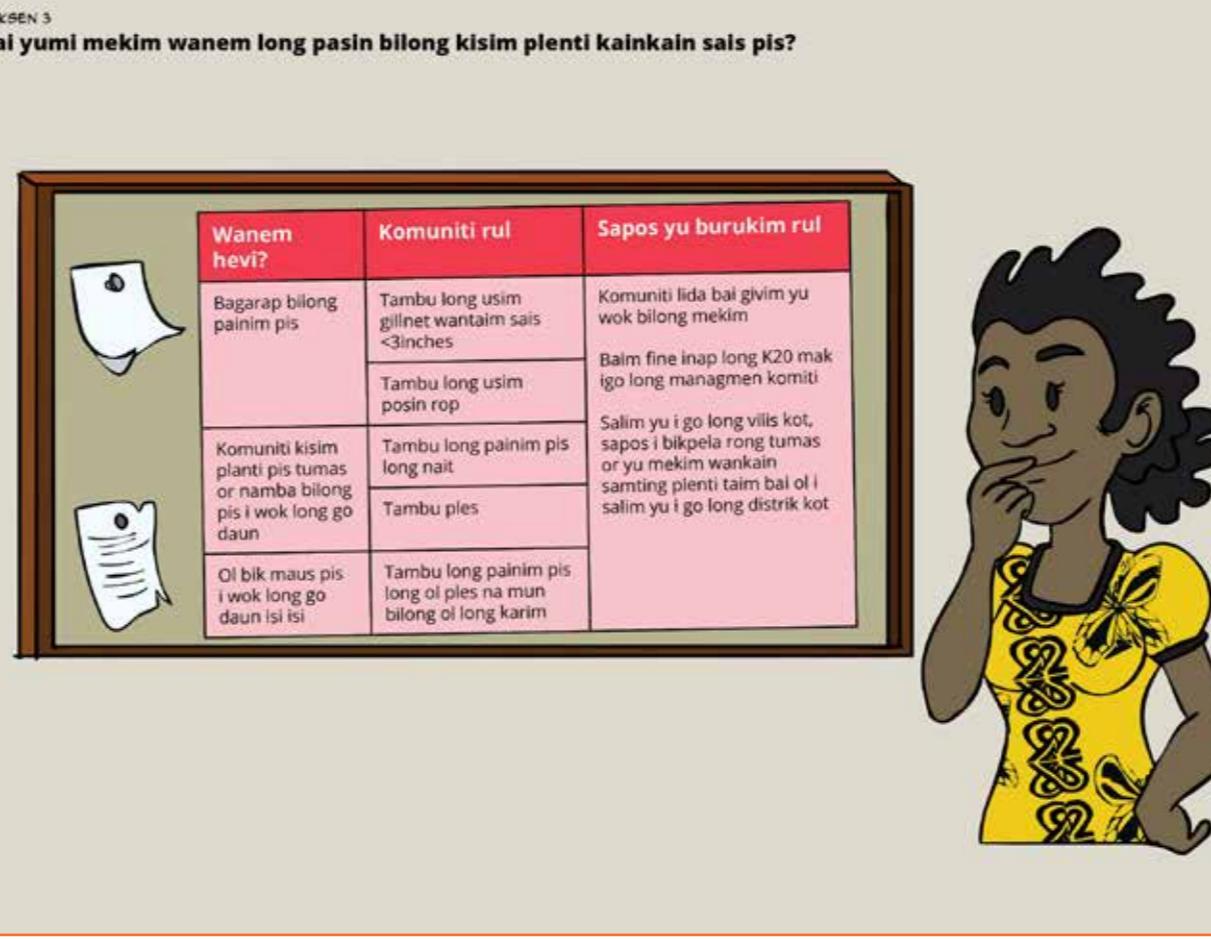
Ask:

- Does this process of making rules look like something we could do?
- Does it look promising and is it worth considering more?
- What would be a concern if we take this path?

MATERIALS NEEDED

Notebook and pen.

Just record general comments. This can help you report out to leaders, the wider community and partners who might support you further.



KEY MESSAGE

Community-based fisheries management should follow simple lines of thinking and make sense for that community. Identify the problem, make a rule to address the problem, and establish penalties if people break it.

SEKSEN 4

Bai yumi go we long hia?

**YUMI OLGETA
I KEN MEKIM
WOK!**



BACKGROUND

The flipchart aims to start discussions and create interest in learning more and taking action, if a community considers it has an overfishing problem or issues that needs to be addressed.

This page can help to close your talk and encourage people to stay engaged, learn more and share the learning with others.

KEY MESSAGE

We have been managing our fishing grounds for tens of thousands of years. The only thing we need to do today is a commitment to come together as we have in the past.

SCRIPT

There are many things that communities can do and are doing to get bigger, better catches. The good news is that communities have been making rules for tens of thousands of years in New Ireland to get better catches.

The question to ask everyone and yourself, do you have the will to come together to find a better way.

This is what the Singaut Blo Solwara campaign is about.

Working together to revive our fishing grounds and traditions so all communities can thrive.

There is a radio show, social media, message apps to send questions, and tools this one to help us. There are also videos.

But most of all, it will take work to get bigger, better catches. We can all do the work. We all need to do this work.

SEKSEN 4

Bai yumi go we long hia?



DISCUSSION

Ask:

- Do think it's important for us to discuss community-based fisheries management more with our families, in small groups and at the village level?
- Why or why not?
- What are good next steps for all of us?
- What more do we need to know to make this work?

MATERIALS NEEDED

Pen and notebook.

Record these comments to help plan your next steps, in both asking for more support but also in making sure to respect and respond to interest in moving forward.

This is the start of your Singaut Blo Solwara journey and you will need everyone on board.

NOTES



