

# Our atoll adventure



PACIFIC CLIMATE READERS

Level  
**3**



**Our atoll  
adventure**

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## Introduction

Climate change is a global threat and the greatest challenge to human wellbeing and survival. The Pacific Islands are especially vulnerable to its impacts, which have become visible in people's daily lives. Climate change education and adaptation are essential to Pacific Islanders and should become a topic of discussion in every classroom and every home. Helping people of all ages to understand climate change is important, because without the right knowledge, we cannot imagine the best solutions.

Along with other books in the **Pacific Climate Readers** series, this book aims to build the foundational knowledge required for understanding climate change impacts and adaptation options in different Pacific Island settings. By exploring island ecology, health, hygiene, and traditional knowledge within the diverse and dynamic contexts of Pacific communities, this series of readers helps children interpret and navigate the complexities of a changing world.

This series was made possible by the Australian Government's **Australia Pacific Climate Partnership (APCP)** working with **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)** on a programme called **Accelerating Climate Education (ACE)** for the Pacific. The goal of this initiative is to empower through knowledge and to inspire educators and students throughout the Pacific to lead meaningful climate action within their own schools, homes, and communities. Working together is the best way to move forward with hope for a safe, healthy, and sustainable future.





## How to use this book

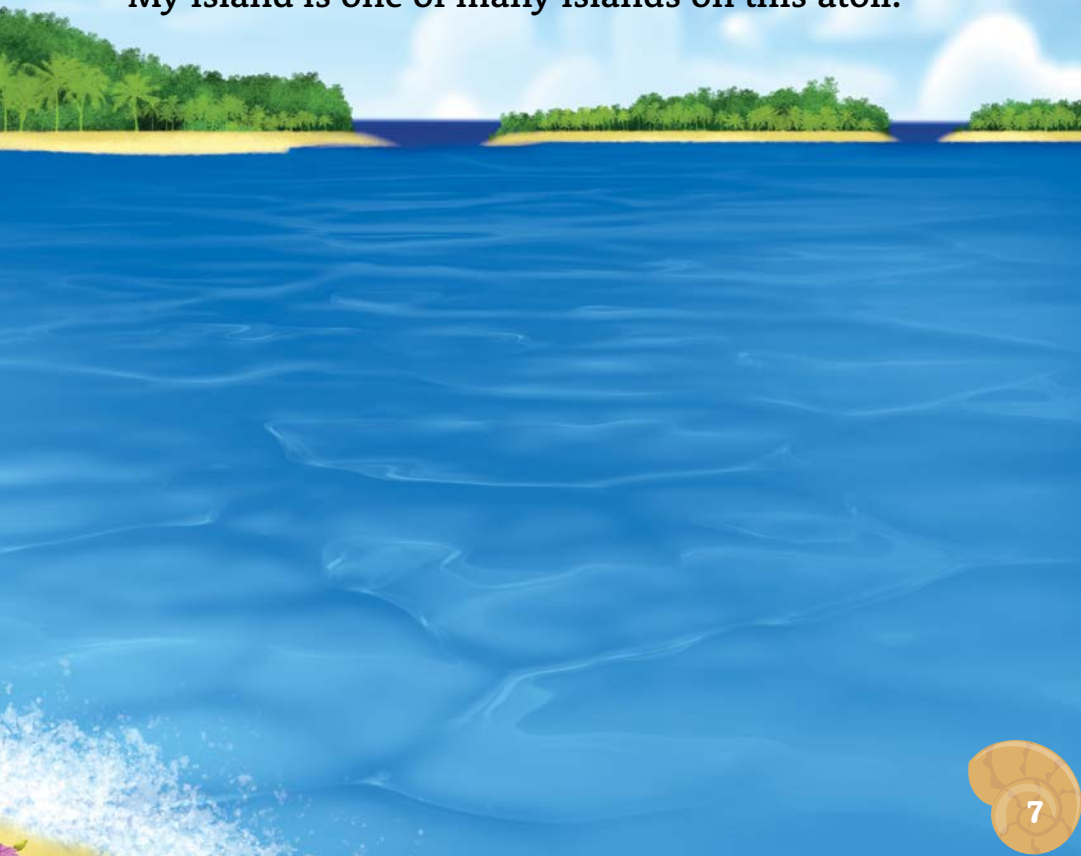
Like other books in this series, this climate reader has several parts to support the learning of the reader.

- a) The informational narrative (story): Children can read the story by themselves, take turns to read as a small group, and/or listen to it being read by an older child, parent, educator, or another adult.
- b) **Learning outcomes**: This is what the reader should be able to know and do after reading the book.
- c) **Interactive prompts** for deeper discussions on topics raised in the narrative: These help parents and educators encourage children to think more about the story and research more about it, especially by talking to elders and local experts in the community.
- d) **Facts and tips** related to the topic: These help parents and educators create projects, assignments, outdoor activities, and other educational opportunities in which children will take on roles similar to the story characters and follow practical advice to engage in learning through play.



My name is Samu and this is my island. I have come to the beach to give you a nice look at it.

My island is one of many islands on this atoll.



An aeroplane is about to land.  
My cousin, Sera, is coming to  
visit me. This will be her first  
time on a low-lying island.  
I am so excited to see her!





I greet my cousin by placing a garland on her head, as is our custom. We are very happy to see each other and chat excitedly about our plans.

“Sera, in preparation for your visit I fixed the sail of my canoe. This is how we get around here on the atoll.”

“A sailing canoe? Wow! I have only seen those in books!” Sera exclaims. She looks happy and curious.





We walk from  
the airstrip to the  
lagoon shore.

“The sand is so  
white and bright,  
and the ocean so  
clear and blue,”  
Sera says.

“It’s different from  
my island.”







“Yes, I remember that there were black rocks on the high island, and rivers flowing from a mountain. We have none of that here,” I reply. “However, we do have this blue lagoon and many beautiful beaches!”

We laugh, recalling the high island adventure we had together.

We get to a small cove where my canoe is beached. I put Sera's things in the hull and cover it with a plastic tarp. "You are going to sit there." I point at the outrigger platform. "Your job is to keep the canoe balanced."

Sera is a little nervous, but excited. She carefully gets onto the canoe and I push us off.



We set sail for my village. My island is narrow and very long. To get from the airstrip to my village, it's easier to sail than to walk.



The wind is steady and the waves are small today. We sail along not far from the shore and make quick progress.



I notice that Sera is looking across the lagoon. “There are so many little islands over there,” says Sera. “Do people live on all of them?”



“No,” I reply. “Most of the small islands are not inhabited. We only visit them to collect coconuts and medicinal plants or to get fish and crabs for food.”

“Can we visit those islets?” Sera asks.

“Some islets are off limits. This is a cultural rule. They are sacred places and sanctuaries where birds nest and turtles come ashore to lay eggs. The best fish and biggest crabs live there, too. We don’t go there unless we have permission from the elders to collect food for special occasions,” I explain.





“Welcome to our village!” I say as we step onto the beach sand. My family is happy to see Sera.





My younger brother gives her a coconut to drink. My father has prepared dried fish and my mother is roasting breadfruit. Sera hands out the gifts from her family to my family. Gift-giving is an important part of our culture.





Sera has many questions about life on an atoll, on a low-lying island like ours.

“Life is good here, much slower than on the big islands like yours. I am sure that you will like it here,” mother says.

“I noticed how calm it is here. The breeze is gentle and the water is flat,” Sera says.

“Yes,” my mother replies. “This side of the island is quiet. Most of the community lives here, on the lagoon side, because it is more protected from the winds that blow from the ocean side.”

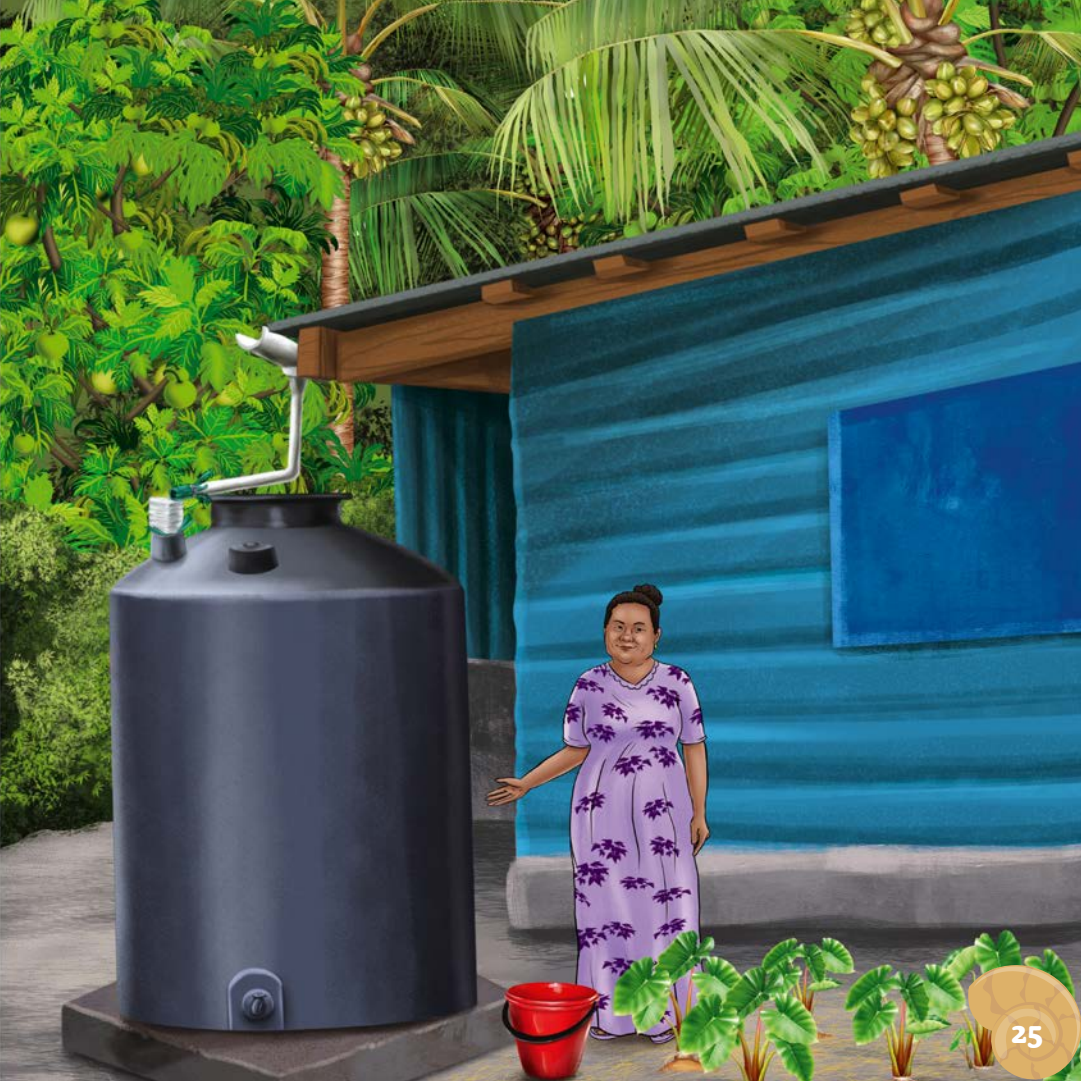
My mother smiles and says, “Sera, you are family, so you can stay with us as long as you want.” Then, she adds, “But there is one thing I need you to pay attention to. Water, fresh water.”

My mother shows Sera the small water tank behind the family hut. “All of our drinking water comes from rain. When it rains, water from our tin roof goes into this tank. This is all the fresh water we have to drink, cook, and shower with, so we need to be conservative,” she says.

“To shower, put some water in this bucket, and this is all you have to use. I save the water after doing dishes and pour it on my small garden. The weather has been unusual and we don’t seem to be getting as much rain as we did in the past. So, try not to waste fresh water.”

“Yes, Aunty. I will be careful,” Sera nods.







I grab a few small sacks and my fishing gear.

“Sera, let’s go exploring!” I say.

I look at my mother. “Don’t worry, Mother, we will be careful, and we’ll bring back dinner!”





We first walk through my family's land.  
"This area looks like the agroforest on my island," Sera notices.





“I see many of the same vegetables and fruits, but some are unfamiliar to me,” she says.

“Samu, what is this?”

“This is pandanus. It is important food on atolls. Here, chew on a piece!” I pluck a piece from one huge pandanus fruit.

“This is so sweet!” Sera exclaims.

“And also healthy,” I add.

We see my uncle harvesting pandanus nearby.

“Welcome to our island,” he says to Sera. “Let me show you what we do with pandanus.”







We follow my uncle to a small shed.

“We cook the pandanus and then scrape it,” he shows us. “Then we preserve it by drying it in the sun. Preserving food is important.”

“Why is that so, Uncle?” Sera asks.

“We have been having more frequent storms that bring the ocean water deeper into our narrow island. This saltwater kills many of the plants we eat. So we need to preserve food to survive until the new crops we plant give us food,” Uncle replies.

We help my uncle scrape the pandanus and spread it on trays. Uncle gives us each a piece of preserved pandanus as a snack.

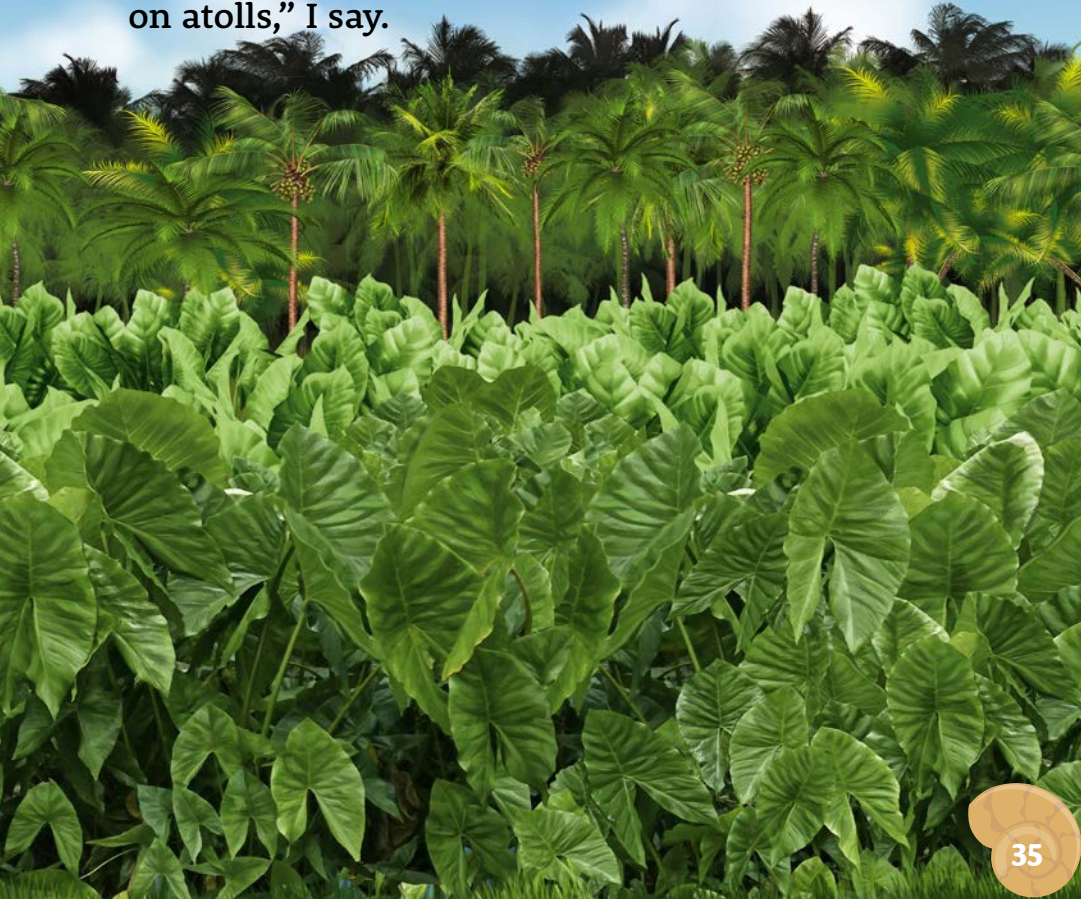




We walk through a plantation of coconut palms to a taro patch in the centre of the island. Sera points up and says, “Samu, these taro have their leaves pointing up and they are huge!”



**“Yes, it’s not the same taro as on your island.  
This is swamp taro and it is very important food  
on atolls,” I say.**











We see a young man working in the taro patch.

I introduce Sera to him. “This is my cousin, Sera. She is visiting us for the first time.”

“I notice the taro here is different from the ones on my island,” Sera chimes in.

The young man shows us his digging tool. “I use this tool to dig pits in this wet area of the island. The water is a little salty here. We plant swamp taro in these pits because they can tolerate some salt. I am planting different varieties to see which ones can tolerate more salt. As the sea level rises, the water in these pits gets saltier.”

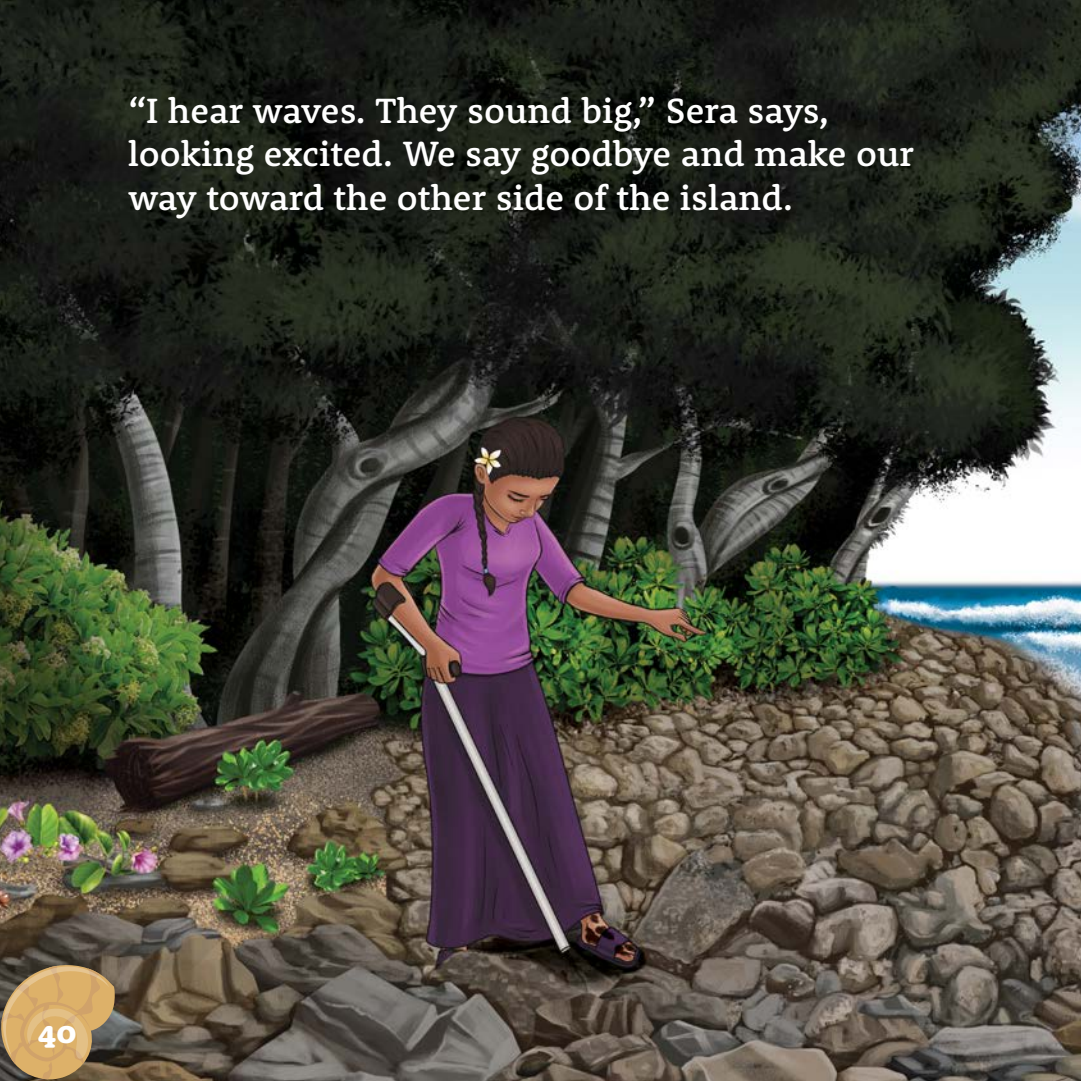
“I love to eat taro,” Sera says. “Does this taro taste the same as the ones on my island?”

The young man smiles. “If you help me do some digging, I will bring you taro to eat for dinner.”

We happily help him dig a new pit for a test variety of taro. We get very muddy.



“I hear waves. They sound big,” Sera says, looking excited. We say goodbye and make our way toward the other side of the island.



The shore here faces the ocean. It is rocky and windy. We wash off in a small tide pool, keeping an eye out for large waves.









We pick our way among the broken coral and see many scattered pieces of rubbish. They are things that float and are mostly made of plastic.

“The sacks I brought are to fill up with rubbish that the waves threw out on the beach.” I hand a sack to Sera, who immediately begins filling it with pieces of plastic, discarded fishing gear, and other waste.

“We’ll save one sack for any fish we catch for dinner,” I say.

We proceed to walk along the shore. We see a group of women planting. “This is my cousin, Sera,” I tell them. “It is her first visit to our island.”

“Your island is beautiful,” Sera says. “What are you planting?”



One of the women hands Sera a sprouted coconut.  
“We are planting coconuts, and in between them,  
we plant shore plants,” one of them replies.





Sera follows the women and plants the coconut. “The roots hold the sand together and keep it from being washed away by waves.”

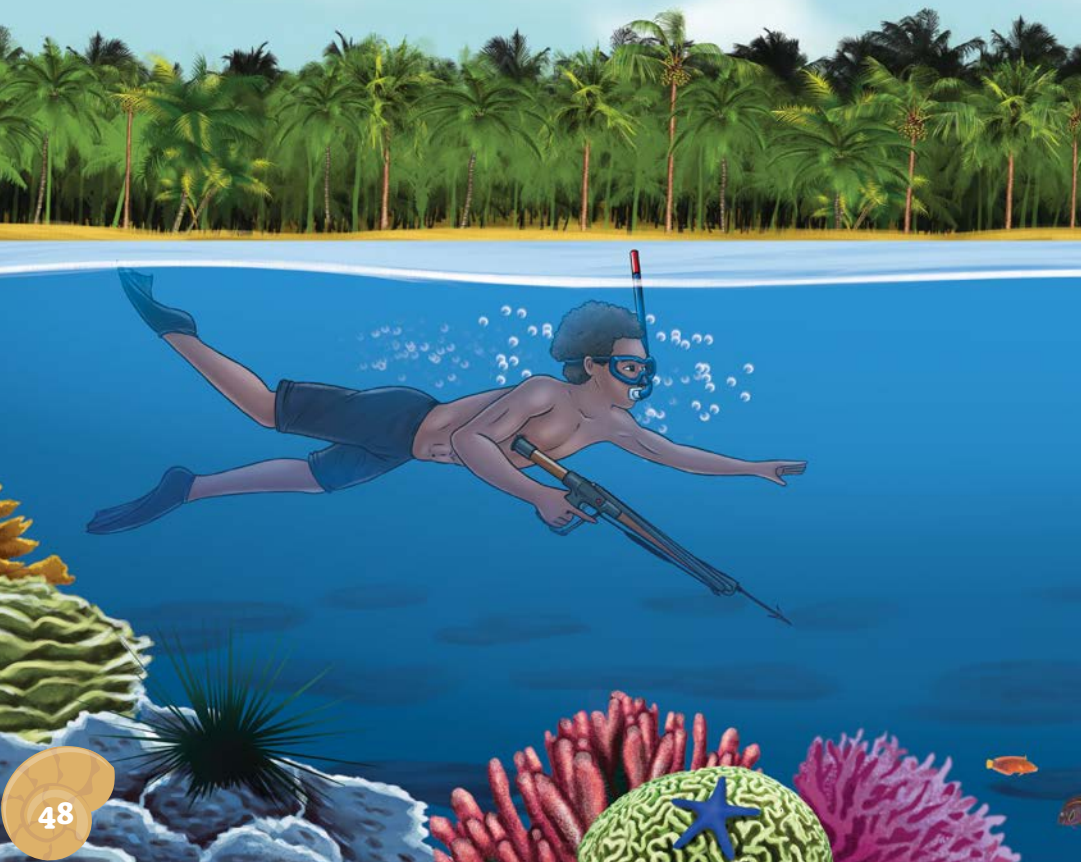
“Sometimes, when a storm piles up sand in a new area, we plant shore plants there. They can hold the sand with their roots and can turn a sandy area into new land. That is how we work together with nature to protect our island,” another woman explains.

I take a few shore plants and help to plant them.

It does not take long to get the new sandy area planted with so many of us helping. We say goodbye to the women.



“Let’s catch dinner!” I say. We make our way to the lagoon side. We put on masks and get into the water.





In these calm waters, we see many fish and even a turtle swimming among the corals. There are colourful clams, sea stars, and sea urchins.



Sera watches a group of parrotfish as they swim from coral to coral and scrape off fast-growing algae.

Meanwhile, I look for other fish to spear. I don't catch parrotfish ever since I learned how important they are.

As they scrape on coral to feed, they create a lot of sand. That is what all atoll islands are made of.

We need the parrotfish around to give us the sand that builds the land on which we live. This is especially true now that the sea level is rising.



I spear three goatfish and an octopus. I am happy that Sera and I can bring some food back to the family.

My father is there and happily greets Sera. He shows us the bounty of fish and a lobster he caught.





My mother uses coconut fronds to weave small food baskets and we divide up the catch.

She tells us, “Children, please take some of this food and share it with the other families.”



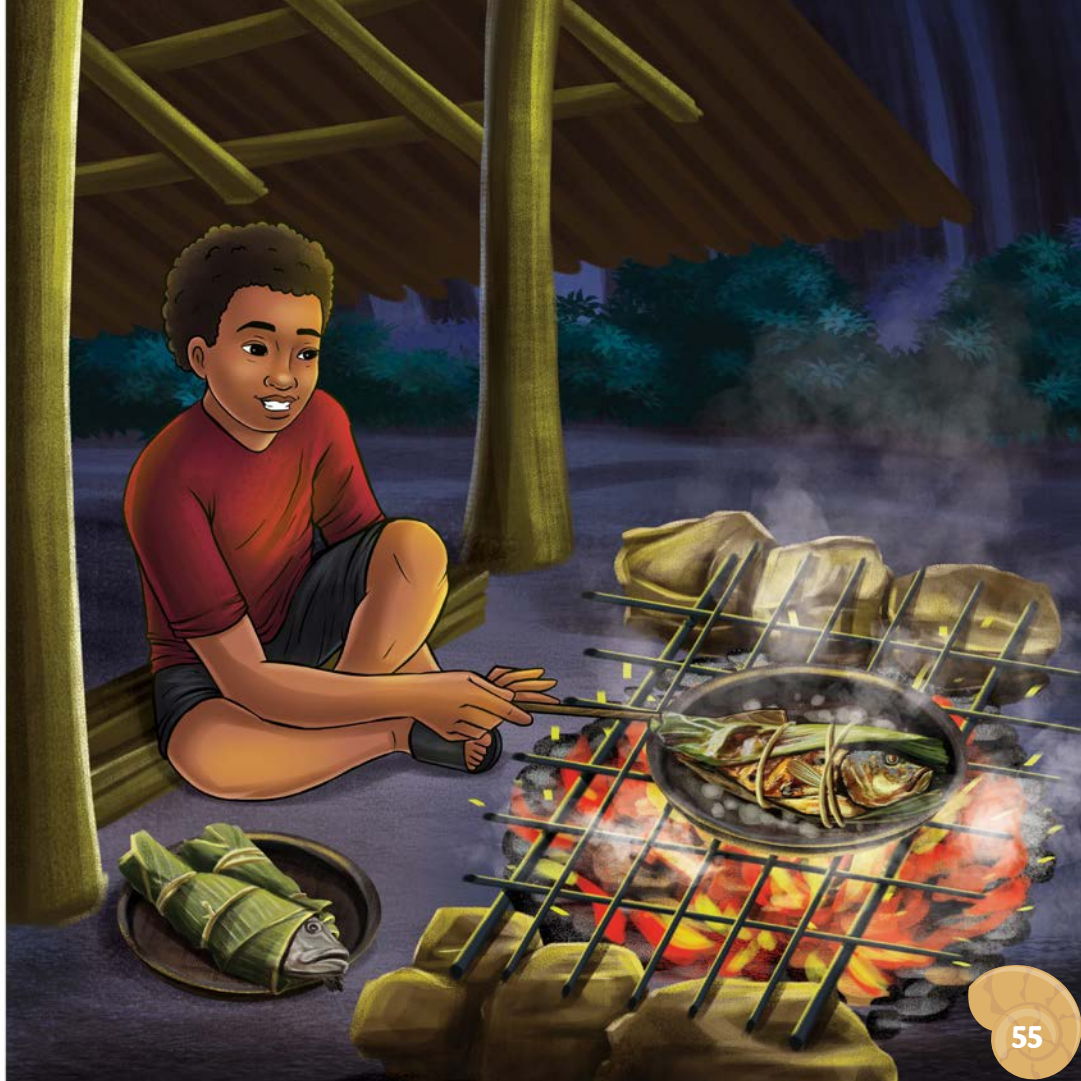
After sharing the food with our neighbours and relatives, we get back home and help prepare our dinner.

I clean the fish, wrap them with leaves, and place them on the cooking fire.

Sera lays out pandanus leaf mats to sit on.

Our friend from the taro patch brings Sera some taro.





After dinner, the men of the village sit around a fire, telling stories.

The women are gathered in an open area near the school, chatting and enjoying the evening.



The sound of laughter fills the quiet night.

After our busy day, we quickly fall asleep on our pandanus leaf mats under our mosquito nets.



## Learning outcomes

In this story, Samu welcomes his cousin, Sera, for her first visit to his island. Samu takes Sera on a journey through several ecosystems found on atolls and other low-lying islands in the Pacific. In each ecosystem, Samu and Sera meet someone who is engaging in some activity there and learn new things from them. Together, they learn how different parts of the island are being impacted by various threats and what they can do to help.

Pacific Islands are threatened by climate change and many associated problems, including sea level rise, coastal erosion, soil salinisation, pollution, deforestation, and damage to coastal environments. To best address these challenges now and in the future, it is important that we understand how different ecosystems are connected and how they relate to each other, and how each is important to the health of our islands and our way of life as Pacific Islanders.



After reading this book, children will be able to:

- 1.** Identify different types of ecosystems found on low-lying islands and learn to recognise them in their own surroundings,
- 2.** Recognise how different ecosystems are interconnected,
- 3.** Identify different resources that each ecosystem provides,
- 4.** Describe actions for resource conservation and protection from climate change, and
- 5.** Understand the need to protect and conserve island ecosystems to increase the capacity to adapt to climate change.

## Interactive prompts

Educators, caregivers, and parents can use these guiding questions to kick off discussions with students. The discussions are intended to support the students' deeper understanding of the story by helping them reflect on what they read, and by encouraging them to find out more.

1. Samu and Sera walked through many different ecosystems on the island. Can you name some of them? How are these ecosystems similar to those on your island? How are they different?
2. If you could join Sera and Samu on their trip around the island, which ecosystem would you want to explore the most and why?
3. Fresh water in atolls and other low-lying islands is precious. There are no streams or rivers there. Fresh water collects in sand and rocks. Fresh water is less dense than salt water. It stays separate from salty water that is deeper underground. Some communities dig wells to access that water in the ground. The height of the water in wells changes along with the tides. With rising sea level, freshwater wells are becoming more and more salty. If there are wells in your community, where are these wells

located? Ask the elders and leaders in your community about the water in these wells. Is the water staying fresh or is it getting salty?

4. Most communities in atolls and other low-lying islands have to collect rainwater off their roofs. With the changing climate, many atolls are getting less rain. Do you know where your family gets water? Ask an elder or community member if they have noticed any changes in the rainfall patterns. What are some ways you can practise water conservation?
5. Higher sea level means that waves can erode more of the coasts of islands. Sera and Samu helped the women on the island plant shore plants and coconut palms to hold the soil. What other ways can a community slow down the erosion processes along the coasts? What are some of the ways people can adapt and become resilient to sea level rise?
6. Samu was careful to only catch fish that were abundant on the reef. Ask an elder or community member if there are marine conservation practices on your island. If there are, ask them to describe to you the methods used.

## Tips

*Actions that help protect the land and environment on atolls and other low-lying islands:*

- Plant and maintain vegetation along the shore to stabilise the coast. Coastal shrubs grow together to make a natural barrier against salt spray and winds. These salt-tolerant plants also provide medicine and wood. Look at the kinds of plants shown on page 6. Do you recognise some of those species? What do you call them in your language? Talk about these plants, their relationship with the ecosystem, and how people use them in everyday life and culture.
- Protect the large parrotfish, protect the reef. Parrotfish have many roles on the reef. They clear the fast-growing algae that grow on top of corals. While they do that, they scrape coral and turn it into sediment. This sediment becomes beach sand as it piles up on the shore and builds the land. Without parrotfish, algae quickly cover and kill corals. Without coral, there is no sediment. Without sediment (sand), the land gets eroded away.





## About this book

This book is a part of the **Pacific Climate Readers**, a series of early readers created specifically for children in the Pacific Islands. The place-based focus on Pacific Island landscapes, local flora and fauna, and the island way of life helps students to explore new concepts within familiar contexts. While providing engaging and relatable literacy materials that children and educators can use to promote reading and comprehension skills, these books' Pacific Island focus on themes such as ecology, communities, health, and hygiene also allows students to develop fundamentals of climate literacy and refine their critical thinking, problem solving, and understanding of adaptive solutions.

The individual titles in the series are interrelated and grouped in three levels, with higher level books building on the lower level ones. To date, the Pacific Climate Readers include:

- ***How I take care of myself and others*** looks at ways to take care of oneself and others including steps and resources used while promoting drinking clean water and eating healthy local food.
- ***Welcome to our garden*** cultivates understanding of the need to maintain local agriculture and food security even during changing climate.
- ***Teamwork in my community*** highlights the importance of working together as a community to build climate resilience.

- ***Our high island adventure*** explores high islands in the Pacific, their key habitats, how they are interconnected, and what challenges they face.
- ***Our atoll adventure*** explores atolls and other low-lying islands, reiterating the interconnection of different habitats and promoting the need to protect and conserve island resources.

This series was made possible by the Australian Government's **Accelerating Climate Education (ACE)** for the Pacific programme, an initiative of the **Australia Pacific Climate Partnership (APCP)** implemented in partnership with **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)**.

## About the publisher

**Island Research & Education Initiative (iREi)** is a non-profit organisation dedicated to upholding the unique environmental and cultural legacies of islands and island peoples. We are based in Micronesia, but our work spans the entire Pacific. Our core activity is to assist educational authorities in creating locally relevant school resources, particularly in indigenous languages. That grants the children of Pacific Islands place-based tools they can relate to and positively reinforces their adventures in the world of learning. iREi can be contacted at [irei@islandresearch.org](mailto:irei@islandresearch.org)

## Disclaimer

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Although the authors have taken all reasonable care in preparing this book, we make no warranty about the accuracy or completeness of its content and, to maximum extent permitted, disclaim all liability from its use.

The production of these climate readers is supported by the **Australian Government**. The perspectives and recommendations expressed in this book are those of the authors, and do not necessarily reflect the views of the **Australian Government** nor **GIZ International Service** as implementing partner.





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