



ECOSYSTEM AND SOCIO-ECONOMIC RESILIENCE ANALYSIS AND MAPPING

Central Province, Solomon Islands Community Summary



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Our vision: A resilient Pacific environment sustaining our livelihoods and natural heritage in harmony with our cultures.

INTRODUCTION

Central Province lies in the centre of the Solomon Islands, north of Guadalcanal Island and the capital city of Honiara. The province comprises three main island groups: Nggela Islands, Savo Island and Russell Islands, each split into smaller wards.

Central Province has many rural communities, most near the coast and along major rivers. These areas are only reachable by outboard motorboat and require sea travel to move goods and access services.

People in Central Province rely on natural resources, mainly through subsistence activities to support their daily needs. For example, a farmer may grow enough food to feed their family, but not any extra to sell or trade. People earn cash by selling fruit, vegetables and nuts, copra production, fish for market sales in Honiara, collecting marine products, tourism and timber exports.

The province faces many natural hazards such as cyclones, earthquakes, landslides, extreme wet and dry seasons. It also experiences volcanic activity from Savo Volcano.

30,326

Total population



1.5%

Annual growth rate



20.9

Average age



86.3%

Literacy rate



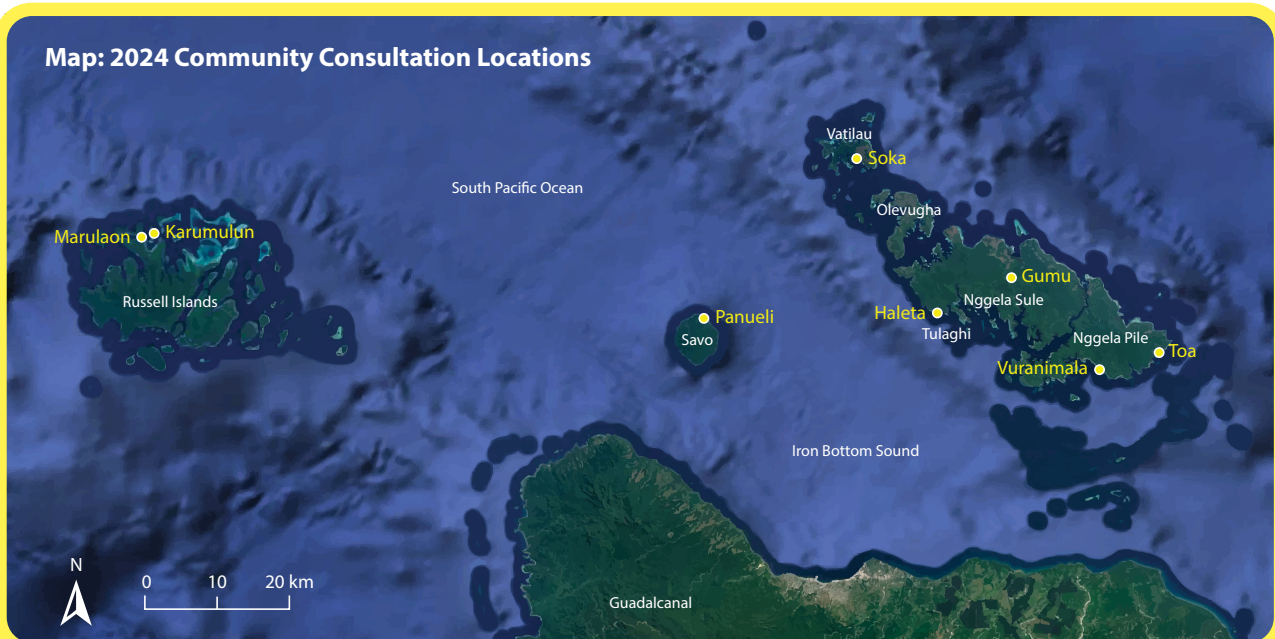
5.6%

Population below the poverty line



(all figures from 2019 census)

Map: 2024 Community Consultation Locations



ECOSYSTEM AND SOCIO-ECONOMIC RESILIENCE ANALYSIS AND MAPPING

In 2024, several communities in Central Province took part in an assessment called *Ecosystem and Socio-economic Resilience Analysis and Mapping*. These communities were Soka (25th Nov), Gumu (26th Nov), Toa (27th Nov), Vuranimala (28th Nov), Haleta (29th Nov), Panueli (3rd Dec), Marulaon (5th Dec) and Karumulun (5th Dec). Their locations are shown on the map above. This report summarises the information gathered and the key findings from the assessment.



COASTAL AND MARINE

Islands, mangroves, beaches, reefs and sea waters

The sea and shoreline are very important to Central Province communities. They provide food, cash income, building materials and help protect against storms and bad weather.

The sea also holds cultural value and is used for tourism, recreation and fun!

Fishing is the main source of income for many along the Nggela coast and in the Russell Islands with fish sold in Honiara and Tulagi markets. On Savo Island people mostly harvest and fish for their own use.

Unfortunately, less reef fish are being found cross the province. Fishermen must go further out to sea and big fish are becoming rare.

Unsustainable harvesting, rubbish, pollution, and lack of toilet facilities are harming nearby marine areas. Soka and Panueli get plastic waste and other pollution from Honiara.

In Gumu and Haleta, logging has caused soil to wash into the sea, making the water muddy. Oil spills have been

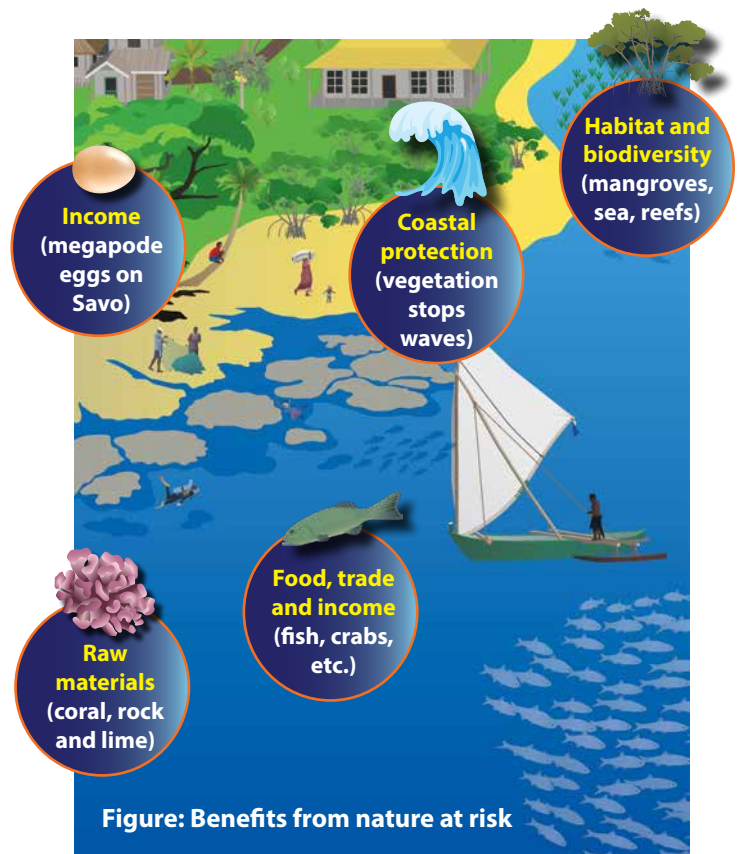


Figure: Benefits from nature at risk

HUMAN IMPACTS

- Population growth**
- Depletion of marine resources and loss of biodiversity from unsustainable harvesting**
- Overharvesting and destructive fishing methods**
- Physical destruction of coral reefs for the collection of coral products**
- Pollution from poor sanitation and waste management**
- Clearing of coastal vegetation**

CLIMATE CHANGE IMPACTS

- Decline in reef ecosystem health and coral dieback due to coral bleaching (rising temperature), ocean acidification, poor water quality (sedimentation due to extreme rainfall events)**
- Change to marine ecosystem due to rise in sea temperature**
- Altered capacity for oceans to regulate climate from increased sea temperatures**
- Coastal erosion of sand islands and beaches from coastal hazard events (made worse by sea level rise)**
- Chronic coastal erosion from sea level rise**
- Permanent inundation of sand islands**

Figure: Benefits from nature at risk



FRESHWATER

Rivers, streams, swamps and groundwater

Freshwater sources like rivers, streams, swamps and groundwater are very important to communities in Central Province, not just for drinking but also for building materials and as a food source.

In Gumu, most people get their protein from fish, eels and prawns caught in rivers and streams.

Coastal communities, such as Vuranimala, Soka, Panueli and Karumulun, have problems with saltwater entering their wells due to high tides and rising sea levels. On Savo, volcanic activity can also cause seasonal streams to dry up.

Toa, Haleta, Panueli, Marulaon and Karumulun mainly use rainwater tanks for drinking water but these may not be enough as the population grows, or during long droughts.

Soka, Gumu and Vuranimala depend on rivers and streams for drinking water. These are at risk from sedimentation caused by illegal logging, removal of riverside vegetation and pollution like chemicals and oil spills.

Freshwater areas also provide homes for many plants and animals that help keep the natural environment healthy and balanced across Central Province.

HUMAN IMPACTS



Population growth



Modified river and creek banks and altered vegetation caused by stream side gardens



Contamination of rivers and streams by chemicals (such as those used to treat mosquito nets)



Increased sedimentation and contamination by illegal logging companies

CLIMATE CHANGE IMPACTS



Saltwater entering groundwater wells and freshwater swamps due to sea level rise



Increases in rainfall (particularly more extreme rainfall events)



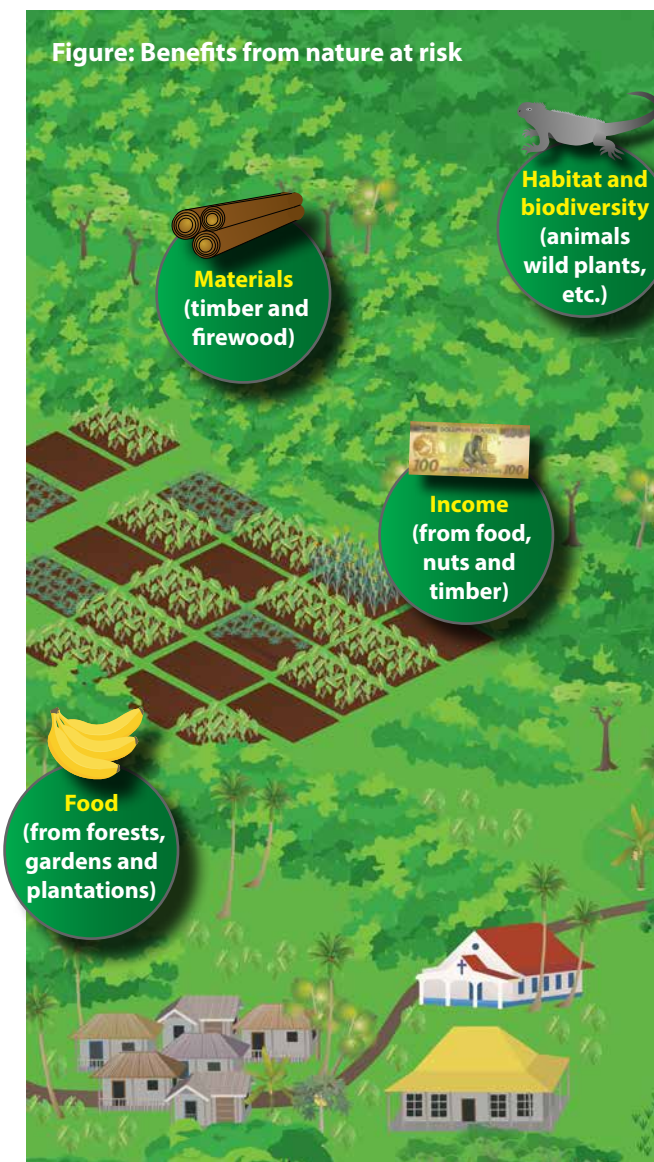
Increasing frequency of flooding



Increasing temperatures drying out freshwater swamps



Figure: Benefits from nature at risk



LAND

Forests, gardens and plantations

The forests in Central Province provide food from hunting, medicine, timber and firewood. They also keep temperatures cooler, prevent soil erosion and protect water in streams.

Gardens grow staple foods like sweet potato, cassava and taro while plantations produce important tree crops like coconut, betel nut and sago which communities depend on.

Selling garden produce is a key source of income, especially for river communities such as Gumu, where crops are the main way people earn money and they are a major supplier to Tulagi market.

On Nggela, many fishermen also grow food gardens. In Panueli on Savo Island income mainly comes from selling garden/plantation crops and megapode eggs.

Communities in Russell Islands rely heavily on plantations for income, especially coconuts. In Marulaon coconut plantations are common and selling copra is the main way people earn money.

However, forests, gardens and plantations across Central Province are under threat from human activities and the impacts of climate change.

HUMAN IMPACTS



Population growth



Land clearing and timber harvesting (including illegal logging)



Unsustainable harvesting of gardens and plantations



Pests and diseases in gardens (e.g. African Snail)



Excessive weed growth in gardens and plantations



Encroachment from expanding villages



Theft of garden produce

CLIMATE CHANGE IMPACTS



Extreme rainfall can cause:

● **Soil erosion and landslides**

● **Loss of plants and trees from local flooding**



Reduction in crop yield, soil structure and stability from extreme rainfall and increasing temperatures



More pests and diseases from increases in temperature

NOW IS THE TIME TO ACT

The Central Province is very vulnerable to climate change and is already feeling its effects. Though human activities may pose an even bigger threat to some communities and the environment. The good news is, there is still time to take action!

Where should we begin?

The study highlighted the following sites where urgent issues need to be addressed to protect natural resources as soon as possible:



More detail on these sites is available in the full *Ecosystem and Socio-economic Resilience Analysis and Mapping* report.

What can we do about it?

Communities in Central Province have many ways to respond including using 'nature-based solutions'. These are actions that protect both people and the environment. For example, planting more mangroves helps reduce damage from waves, storms and rising seas – while also creating a home for fish, crabs and other sea life people rely on for food.

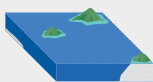
Nature-based solutions usually fall into four categories:



Restoration: Working to take an area back to a more natural state.
(e.g. replanting native species in damaged forest, mangrove and riverbank areas)



Management: Planning to make sure there will be enough natural resources.
(e.g. following a plan to stop fishing at one reef during one season every year)



Protection: Setting up an area of land or sea where resources cannot be taken.
(e.g. where fish can breed undisturbed, so overall fish numbers increase)



'Green' infrastructure approaches: Building in ways that provide natural benefits.
(e.g. rainwater tanks or planting trees to make a village more shady and cooler)



