



Sustainable Use and Conservation

There are about 30 species of mangroves in Solomon Islands, representing 40% of the world's mangrove species. They can be found on most islands and it is estimated that mangroves here cover an area of about 50 000 hectares.

Mangroves are an important resource for livelihoods of rural coastal communities. However there is not an endless supply.

Communities need to plan now to think about developing ways to help conserve and protect mangroves for future generations. This may include developing a management plan with rules for cutting down mangroves or re-invigorating traditional management methods.

Sustainable use simply means wise use.

Only take what is really needed and do not destroy mangroves when it is not required.

This pamphlet has been developed as part of a project undertaken by the WorldFish Center in partnership with WWF-SI funded by the Packard Foundation.

Further Information

The WorldFish Center

Nusa Tupe Field Office
PO Box 77, Gizo, Solomon Islands
Phone: +677 60022

Honiara Office
PO Box 438, Honiara, Solomon Islands
Phone: +677 25090

Email: worldfish-solomon@cgiar.org

WWF-SI

PO Box 97, Gizo, Solomon Islands
Phone: +677 60191



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A Guide for Mangrove Rehabilitation in Solomon Islands



The importance of mangroves

Mangroves are important ecosystems for the people of Solomon Islands both for their value and many uses. Mangrove **timber** is used for building material, firewood, and making tools. The **fruit** of some mangroves is a valuable traditional food source. Mangroves also provide a home and nursery **habitat** for fish, shellfish and crabs. Mangrove trees help **stabilise and protect** the coastline from wind, waves and rough sea.

In some areas of Solomon Islands there has been recent decline in mangrove forests due to overharvesting of mangroves (because of population increase), and in some places mangroves have been lost/destroyed by natural events such as earthquakes and tsunami.

All Solomon Islanders need to work together to help save mangroves to ensure there are mangroves left for our children's future

Mangrove rehabilitation - why replant?

In most situations, mangrove forests are able to naturally grow and replace themselves through the distribution of seedlings from the mature mangrove trees within the local area. The fruit/seeds can float and are transported by water and start to grow in an area where they will survive. In some cases however, nature may need a helping hand. This is where mangrove rehabilitation projects can be of assistance.

These cases may include:

1. Areas where mangroves have been dramatically overharvested in the past and there are few mangroves left to produce seedlings.
2. Areas where extensive areas of mangrove have been removed or severely damaged by external factors such as tsunami's, earthquakes, logging, building roads etc.

How to replant mangroves

1. What mangroves to plant where ?

Mangroves grow in coastal areas near the sea, but they do not grow anywhere. They grow best in between the highest tide and mean sea level in places sheltered from big waves. Within this zone, some mangroves grow better in different areas than others. The figure below shows the best place for four common mangroves. You should re-plant what mangroves were growing there before. If there are no plants left in the area - ask an elder what mangroves used to grow there before. If mangroves have never grown in a certain area - it is unlikely that they will never grow there.

2. Plan your planting

You need to sit down and plan the area that you want to re-plant. Make a map that shows where you will plant, where there are walking and canoe pathways etc. Make sure you discuss the plan with your family and community.

3. How to collect seedlings

Mangroves have seedlings that mature on the tree before falling to the ground. Mature seedlings can be collected from the ground (check there is no insect damage) or shake the tree and collect what falls down. The collected seedlings should be planted within a few days.

	<i>Lumnitzera</i>	<i>Bruguiera</i>	<i>Rhizophora</i>
Seedling type			
Planting depth	 1/3 length	 1/3 length	 1/3 length
Between plants	1.5 - 2 m	1 - 1.5 m	1 - 1.5 m

3. How to plant mangrove seedlings

Be careful not to damage seedlings when planting (use a stick to create a hole first). It is best to plant in clumps with 2-3 plants per clump (about 15 cm apart). Not all will survive, but the ones that die will provide food for the others. If your mangroves are being eaten by crabs, try cutting a piece of bamboo and place over the seedlings.

4. Monitor the mangroves growth and survival

Watch your planted mangroves grow. Mangroves that are growing leaves and looking healthy have been planted in the right spot - if many of the plants have died, you may have chosen the wrong type of mangrove to grow in this area or it may be an area where no mangroves will grow.

