

No mountain to run to:

Mangrove forest the last resort for the disadvantage communities of the Rewa Delta

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Mangrove forests are an important ecosystem in Fiji because a large portion of Fiji's population, infrastructure, and economic activities are centered around coastal areas. Mangrove resources are one of the main livelihood support systems for coastal/deltaic dwellers. With an estimated total area of 46 600 hectares, Fiji has the third-largest area of mangroves in the Pacific after Papua New Guinea and the Solomon Islands, mostly on the two main islands of Viti Levu and Vanua Levu. The largest area of mangroves is in the Rewa Delta, on Viti Levu, but it is under threat.

These coastal communities are in the forefront of climate change especially continuous sea surges and coastal erosion due to storm surges during tropical cyclones which may lead to potentially devastating and life-threatening flooding along the coast. The low-lying flat land of the Rewa Delta is always flooded whenever it rains heavily. Coastal communities affected by rise in sea level in Fiji are relocated to high grounds by the Fijian Government but unfortunately for the people of the Rewa Delta they have no mountain to run to. People of the Rewa Delta would call themselves the people of the Badlands "*Kai Vanua Ca*" because they cannot run away from the flooded area. As they have adapted themselves to this Climate Change impact so whenever the Rewa Delta is flooded they would say it is just a rain bath "*Na Tebara sili wacala*". Therefore, since they do not have any mountains the mangrove forest is the only solution to their problems.

Mangroves play an important role in climate adaptation in coastal communities. Therefore, these coastal communities are recognizing their mangrove forest as the most productive nature-based solution for the service and protection they provide from the significant buffering against coastal erosion, storm surge, and sea level rise. Hence, reducing wave heights, protecting homes, property, and infrastructure from dangerous flooding. As coastal vulnerability increases, it is crucial that climate adaptation and risk reduction measures be put in place.

Consequently, the restoration of mangrove forests in degraded areas in the Rewa Delta can help to provide protection against climate threats, and can bolster food and livelihood security, both of which are threatened by climate change. Despite having no ownership rights to mangroves or their resources, coastal village communities have considerable autonomy in the manner in which they use them; as a generalization, such communities have long been relied on as the unpaid custodians of the nation's mangrove resource. However, community participation in the project has been impressive, especially among the women's groups in each of the six villages. There is a strong desire among the women's groups to rehabilitate and conserve the vulnerable delta ecosystem, thereby minimizing further coastal erosion, providing a more sustainable supply of wood fuel and reducing pressure on existing mangroves due to overharvesting. Most women in the Rewa Delta rely on mangroves as a source of income and for food for their families—they fish, catch crabs and collect shellfish in the mangroves. This continuous use has degraded the habitat, with a consequent negative impact on livelihoods. In response, the women decided to work together to plant mangroves along the foreshores of their villages. The ITTO project has facilitated the inclusion of women in community decision-making processes, enabling them to lead and advocate on environmental issues that affect their lives. This, in turn, has helped improve food security (marine resources), skills development

and education of women and girls in the communities. For example, the women's group in Nasilai planted 5000 mangrove seedlings along the foreshore as part of their mangrove restoration and rehabilitation work; they also planted native coastal trees, such as tavola (*Terminalia catappa*), vutu (*Barringtonia edulis*), dilo (*Calophyllum inophyllum*) and coconuts behind the mangrove forest to prevent coastal erosion and provide a future resource. Furthermore, the women group in Waicoka carried out a survival assessment of their mangrove plantings in 2019 and replanted areas with insufficient stocking. The involvement of the women's groups has been crucial in the project's success.

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At present, Mr. Aporosa Ramulo is the Project Coordinator for the ITTO Mangrove Project - Fiji. He joined the Ministry of Forestry, Fijian Government in 2019 after Graduating with the Bachelor of Forestry of Science with Honors from Universiti Malaysia Sabah.