

# RISK INFORMED ROAD ENHANCES ACCESSIBILITY OF VATAWAI COMMUNITY, FIJI

## OVERVIEW

For many years, the members of the 27 households of Vatawai, including children and people with disabilities, have primarily transported school goers and farm produce on horseback to and from the community. Some were able to hire transport, however this was costly. The Vatawai community is located in the interior of Ba Province, approximately 22 kilometers from Ba town. The journey to Ba town has been arduous and at times unsafe.

In 2020, the Ministry of Rural and Maritime Development and Disaster Management (MRMDDM) assisted Vatawai community with the construction of a new farm road under its Community Access Roads programme. The construction of this new farm road has connected the villagers, and other nearby villagers, to healthcare services, markets, schools and other farming sites. It has significantly reduced travel time, as well as opening up new economic opportunities.

*“The days spent worrying about the quality and condition of roads you depend on are over. Journeys that were once arduous and inconvenient are quicker and, most importantly, safer than they have ever been”* says Turaga ni Koro of Vatawai Village.

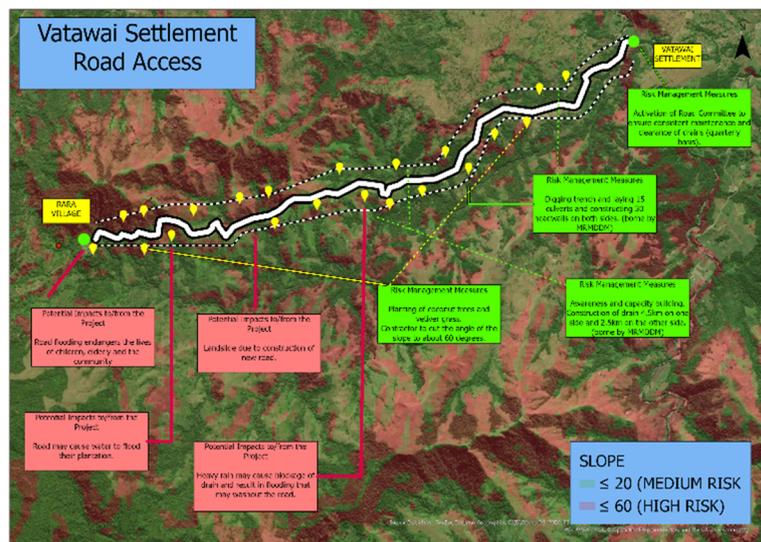


Residents of Vatawai Settlement, Ba, Fiji (photo by MRMDDM)

“Before the construction of the road, we had to travel almost 30 minutes by foot to the nearest bus-stop,” says Meresi, 53-year old woman from Vatawai.

## APPROACH

A participatory approach to the planning, design and development of the project was utilised by the MRMDDM in an effort to ensure the project was genuinely meeting community needs, and to promote ownership by community members.



GIS Risk Map produced as part of risk screening exercise, Ba, Fiji (photo by MRMDDM)

MRMDDM, in partnership with the UNDP Governance for Resilient Development in the Pacific Project (Gov4Res) also promoted a risk informed approach for all phases of the project:

- **Leadership and planning** – Commissioner Western Division, Divisional Planning Officer and Senior Economic Planning Officer championed the need for risk informed development and provided guidance during the implementation of the project.
- **Dedicated implementation capacity** – Provincial Administrator, District Officer and Assistant District Officer, in Ba Province were pivotal in ensuring that risk measures identified were understood and implemented.
- **Risk informed training** – training of divisional representatives on risk-informing development projects was undertaken
- **Contextualised risk screening toolkit** – risk-screening toolkit used to capture risk measures from Vatawai Access, which will be used to inform other access road projects
- **Risk mapping** – GIS mapping of Vatawai access and associated risks, as illustrated in the figure above.
- **Gender and social inclusion** – consultation with women’s groups and persons with disabilities on their needs
- **Financing of risk measures** – FJD 49,870 was allocated for the project and an additional FJD 7,000 was funded through UNDP for the risk management measures.

## ACTIVITIES

**1. Design Phase** – The Western Division Senior Economic Planning Officer and District Officer Ba Province conducted a risk screening exercise with community members to ensure potential risks were factored into the design of the road project. The risks which were identified, and associated mitigation measures, are detailed in the table below. The officers also used the opportunity to familiarise other divisional officers and community members with the risk screening process.

**2. Implementation Phase** – through implementation, particular attention was taken by the contractors to ensure that the angle of slope avoids landslides. to avoid soil loss. Culverts and headwalls were also placed in water-crossings (identified by the community) to avoid water overflowing into gardens. The full list of management measures implemented are detailed in the table below.

**3. Project Oversight** – throughout the implementation and following the completion of the project, inspections were conducted by the District Officer to assess the implementation of risk measures. A completion certificate was issued once all risk management measures were implemented.

Table 1: Risk Assessment Summary for Vatawai Road Access project

Risk TO the project	Risk Management Measures
Heavy rain may cause blockage of drain and result in flooding that may washout the road	Activation of Road Committee to ensure consistent maintenance and clearance of drains (quarterly basis)
Risk FROM the project	Risk Management Measures
Road may cause water to flood plantation	Digging trench and laying 15 culverts and constructing 30 headwalls on both sides of the road
Road flooding endangers the lives of children, elderly and the community	<ul style="list-style-type: none"> <li>- Construction of drain 4.5km on one side and 2.5km on the other side</li> <li>- Awareness and capacity building</li> </ul>
Landslide due to construction of new road	<ul style="list-style-type: none"> <li>- Planting and landscaping of pine trees and vetiver grass on the side of the road.</li> <li>- Contractor to cut the angle of the slope to about 60 degrees</li> </ul>



Culvert and Headwall put in place as risk measures, Ba, Fiji (photo by MRMDDM)

## RESULTS AND LESSONS LEARNED

Vatawai access road was exposed to heavy rainfall throughout August and September 2021. Despite the flooded rivers, there were no landslides around the road, and the community was still able to access their newly developed farmlands utilizing the new road.

Additionally, enhanced access to farmland has allowed villagers from Vatawai and Rara village to increase the amount of produce they grow, and sell this excess to markets. Each phase of the project cycle presented an opportunity to address risks to and from a project before they occur and reduce costs to the community and government. For example, landslides which affect road networks often disrupt access to farmland and significantly reduce a community's income. Further, this becomes a cost to the Fiji Government to repair the road.

Incorporating risk management measures into the contractor's instructions transferred responsibility for final design and implementation of risk management measures to the private sector. Contractors can play an important in designing cost effective and innovative risk management measures, and such practices can be championed and advocated by them in future.

## TAKING RISK INFORMED DEVELOPMENT TO SCALE

The risk informed access road has contributed to a growing evidence base on why and how to risk inform development in Fiji. Following a training of Divisional Planners from across Fiji, MRMDDM has formally adopted risk screening into its standard operating procedure (SOP).

The Commissioner Western's Office is now incorporating risk into other public sector projects, such as water projects and health centers. Lessons learned from the integration of risk management measures into this road project are also being used to inform larger projects such as the new Nadarivatu Government Station, which was partly destroyed during TC Winston and completely destroyed following TC Yasa.