

# Enhanced income security through a risk informed farm road, Nasolo Village, Fiji

## Introduction

Fiji regularly experiences heavy rainfall and flooding associated with tropical cyclones and the agricultural economy suffers severely. For example, damage of heavy rainfall to remote farm roads can disrupt market access for agricultural producers for extended periods of time, limiting cash incomes and affecting quality of life.

A 'risk informed' community development plan was developed by Nasolo village, which prioritised improved access to the community's agricultural land. In response, Commissioner Northern's Office committed funding under the Fiji Government's capital project grants to cut a new farm access road for the community. This new road enabled vehicle access to remote farm land for the first time, meaning that the community could plant thousands of taro (dalo), cassava and kava plants in response to demand in the country's capital Suva. Working together collectively instead of individually, the community was able to enter into contracts with wholesalers for the first time. The significant amounts of funds raised from the crops were channelled into a village development fund, which supports implementation of village development priorities such as women's honey production projects.



Revenue from increased access to farmland was used to fund community development projects. Photo credit: The Greenhouse Studio.

Unlike in the past, this road development project considered risk in the prioritisation, design, implementation and oversight of the road. As such, the susceptibility of the road to landslide was woven into the project's delivery.

What resulted was remarkable. Despite experiencing the full brunt of 500mm of rainfall from two cyclones in two weeks in April 2018, the farm road stood up to the ultimate test. Due to this, the community were able to continue harvesting tonnes of produce for Suva markets with minimal disruption, while communities in other parts of Fiji were cut off from their farm lands and sources of income.

## Approach

This briefing note outlines the approach that was taken to ensure that the Nasolo farm road project was delivered in a risk informed manner, with minimal additional cost to the project. This was possible through an innovative and experimental approach led by local government.

Pacific Risk Resilience Programme (PRRP) was able to support:

- **Leadership:** Commissioner Northern Division (CND) championed the need for risk informing development in the Division and led the oversight of this innovation and experimentation at the local level.
- **Dedicated capacity:** PRRP helped establish a full-time senior government post dedicated to climate change and disaster risk management (CCDRM) within Commissioner Northern's Office.
- **Risk informed community development:** The new post collaborated with local government and partners Live and Learn Environmental Education to weave risk management into the Nasolo village development plan.
- **Gender and social inclusion:** The Ministry of Women, Children and Poverty Alleviation ensured that training for community development plan facilitators included safety, unity and inclusion.
- **Risk screening of divisional development projects:** Commissioner Northern mandated the CCDRM Officer to trial risk screening in the approvals process for selected public sector investment projects in the Northern Division.
- **Risk informing development budgets:** \$43,000 FJD was allocated by Commissioner Northern's Office to the farm roads project and risk management measures were incorporated into the overall project cost.

## Activities

Risk considerations were built into the project management cycle for the community's priority farm road project:

### Design phase:

The Senior CCDRM Officer trialled risk screening to ensure potential risks were factored into the design of the Nasolo road project. The officer also used the opportunity to familiarise the Provincial Administrator and Assistant District Officer Bua to the risk screening process.

The major risk identified TO the project was the potential for landslide, as there was a strong chance of the new road washing out during heavy rainfall. The other potential risk FROM the project was the potential to lose a lot of soil from the road side, causing blocked drains and waterways (which could have negative flooding, health and environmental implications).

## Implementation phase:

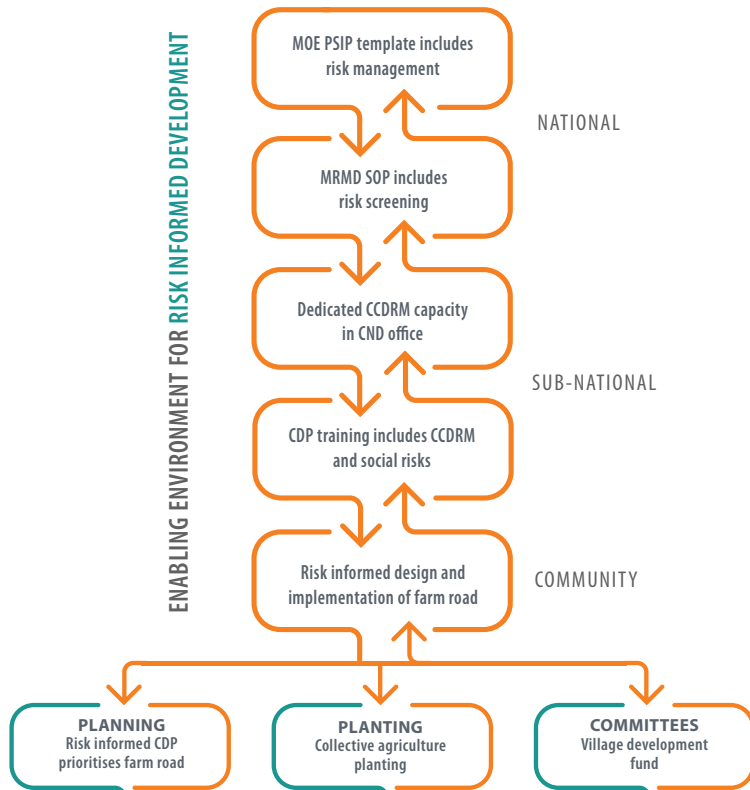
In design and implementation of the project, particular care was taken on where and at what angle the road was cut by the contractor to avoid soil loss during the wet season. This also avoided vegetation loss and reduced landslide risk.

## Project oversight:

Once the road was completed, an inspection by the CCDRM Officer demonstrated that he was satisfied with the work and a completion certificate was issued for payment.



The farm road withstood rain from two cyclones in two weeks. Photo credit: The Greenhouse Studio.



## Learning

During a series of heavy rainfall events in April 2018, **the Nasolo farm road stood up to the test as it was designed to consider landslip risk**. The community was able to continue access to its newly established farm lands and their incomes underwent minimal disruption.

**A risk informed approach ensures greater economic opportunities.**

The year-round access to the farmland has meant that the kava and dalo (taro) growers have been able to sign contracts with exporters, who ship the Nasolo community's produce to Suva, Fiji's capital.

Nasolo farm roads project is one of the first risk screened capital projects to have undergone the full project implementation cycle in the Northern

Division. **Each phase of the project implementation cycle presents an opportunity to address risks to and from a project before they happen.**

This is likely to save considerable money in the future. For example, if landslide were to affect the farm road this would disrupt access to farmland and significantly reduce the community's income. It would also cost the Fiji Government significant amounts of money to repair the road.

Given risk management measures were incorporated into the contractor's instructions, **the contractor's capacity to understand the rationale behind and complete risk informed roads was increased**. Involving the private sector in risk management is essential as they implement a high proportion of public investments.

## Taking this approach to scale

The risk informed farm road project has contributed to a **growing evidence base** and learning on risk informed development in Fiji (along with other projects in the Northern and Western Divisions).

Following a training of Divisional Planners from across Fiji (which included the Nasolo project example), the Ministry of Rural and Maritime Development (MRMD) formally adopted risk screening into its standard operating procedure (SOP). **Having risk screening as a mandatory part of the planning process ensures that it is institutionalised and ongoing.**

In the Northern Division, the Commissioner Northern's Office is **now incorporating risk into other public sector projects, such as government stations, health and evacuation centres**. Lessons learned from trialling the integration of risk management measures into this road project are also being used to inform larger projects, such as the Seaqaqa township development. The Ministry of Economy (MOE) also revised the Public Sector Investment Programme (PSIP) template to include risk management.

### For more information:

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