



Seeds of resilience

Conversations with farmers on climate change adaptation

Fiji's agriculture sector supports over 70,000 farming households and makes up more than 10 percent of the country's GDP, on average. In an industry highly susceptible to changes in climatic conditions, such as increasing temperatures, changing rainfall patterns and extreme weather events, better access to quality seed varieties is vital to support horticultural and off-season farming. More resilient seeds are a key tool of climate change adaptation for smallholder farmers – who otherwise risk losing their livelihoods.

To address this, MDF has partnered with local company KK's Hardware to import East-West seeds, an internationally renowned seed brand available in over 60 countries. The seeds have proven to be more climate-resilient than traditional varieties, helping farmers reap harvests and earn income despite adverse weather patterns. They are also high-yielding and off-season friendly.

When Joseph Hill decided to try East-West seeds on his farm, he was sceptical at first.

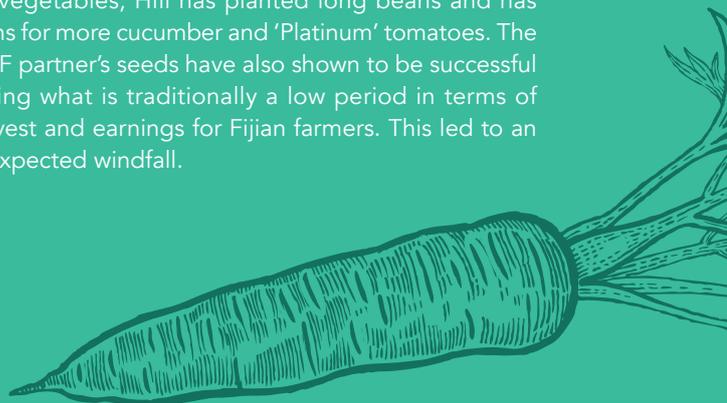
"I had heard about East-West seeds. So, I did a trial of 'Altruism' cucumber in January [2021] but because of the flooding and cyclones we get, we thought they would never grow," he confessed.

Hill lives at Nabitu in the Sigatoka valley, a region that supplies most of the country's fruits and vegetables. In the 14 years his family has called Nabitu settlement home, he has noticed climatic changes, which make farming in the area more challenging.

"There's heavy rain when I plant. You never expect the really heavy rain during that time. But nowadays, there's heavy rain and there's flooding and waterlog and it damages the plants," said the seasoned vegetable farmer.

As a result, he explains that farmers are hesitant to plant during the rainy season. In fact, when Hill conducted his trial, he was the only farmer on the east bank of the Sigatoka River to plant cucumbers during that time. The risk paid off.

The successful harvest has encouraged the 46-year-old to expand his investment into the use of East-West vegetable seed varieties. Going into the off-season for vegetables, Hill has planted long beans and has plans for more cucumber and 'Platinum' tomatoes. The MDF partner's seeds have also shown to be successful during what is traditionally a low period in terms of harvest and earnings for Fijian farmers. This led to an unexpected windfall.





I got 100 per cent of the harvest. I got 33 bags and made FJD3,300 (AUD2,112) by selling them for FJD100 (AUD64) a bag at the farm gate. Also, when I compared it to the other cucumber I was growing, there was a big difference. With the other cucumber, I got one harvest but with this East-West variety, it was a prolonged harvest. I never expect that kind of harvest in Fiji. I mean who is going to expect that kind of harvest during the heavy rain and cyclone season?!

Joseph Hill,
Farmer



Navnit Nitesh Chand, a farmer from Nasau in Nadi, also had a positive experience with more resilient seed varieties. Chand first heard about East-West seeds at the 2021 Agricultural Show in Nadi. He conducted a trial on his farm, planting six lines of the distributor's 'ridge' gourd seed variety alongside 12 lines of the gourd seed he had been planting before.



The gourd seeds I normally planted were not growing well. The leaves were getting brown. But with East-West ridge gourd- we can plant that during rainy season and during the dry season. I also tested it during the dry season, and I saw a big difference.

Navnit Nitesh Chand

Despite using the same inputs and planting on the same plot of land, the East-West 'ridge' gourd produced double that of the other seed variety. Chand filled six crates with harvest from the six lines of the more resilient seed, while the 12 lines of the other gourd variety also filled six crates. Additionally, the harvest period from East-West seeds lasted around four months - twice as long as the other gourd variety.

"So now, I'm planting the ridge gourd, Platinum tomatoes, watermelon, iceberg lettuce and capsicum - all East-West seeds," Chand said. "In six weeks, I get the East-West 'Platinum' tomatoes, but with the other tomatoes, it takes about two months or two and a half months to grow.

In addition to maturing faster than traditional varieties, the East-West seeds also yield higher harvest volumes, much more than Chand expected, "So now I will plant more," says Chand. "From my side, I'm 101 per cent sure. I can see East-West is the best."

Following successful trials in 2018 by the Ministry of Agriculture's Sigatoka Research Station, KK's Hardware began importing a variety of East-West seeds in October 2020. The company also established on-farm demonstrations with lead farmers to demonstrate the quality of the seeds. Interest quickly grew as farmers began reporting higher yields from using the more resilient seeds due to higher germination rates and the ability to grow several seed varieties in the off-season, which resulted in higher prices for their vegetable produce. In 2021, 164 farming households benefitted from using the improved seeds and many of these are recorded in farmer testimonials on the East-West social media platform.

Farmer testimonials

Click/scan to watch.



Varsha
Vandhana



Ranjeet
Singh