



disaster preparedness

Senior Research & Policy Officer
Jane Muller

Lateral thinking builds cyclone resilience

Lynn and Chris Jahnke had two aims when they moved to north Queensland: to develop a high-value agricultural enterprise and to create a business that was as “disaster-proof” as possible.

Coming fresh into agriculture from a successful on-line fashion retail businesses in Melbourne, the Jahnkes had the luxury of being able to look at things differently. Chris and Lynn investigated a range of horticultural options before settling on cocoa and establishing Charley’s Chocolate Factory at Mission Beach.

“We wanted to avoid what happens to commodity growers. We wanted to be a price giver - not price takers - and we wanted to draw on our retailing background. Cocoa was appealing as it gave us the opportunity to create a vertically integrated business and control the process from end to end,” said Chris.

“The cocoa is grown from seed in shade houses then planted out onto the farm. The cocoa pods are harvested and processed and turned into chocolate in facilities on-site. We sell our chocolate through farm visits and on-line sales which allows us to establish direct relationships with our customers. The final part of the business model is our visitors’ centre that we are developing to create a unique tourist experience around chocolate.

“The tourism side is a key to disaster preparedness. Our business model is strengthened by adding in other pillars,” he said.

“So that’s the business side of it, and we’re fairly confident that that pretty much disaster-proofs us. We are flexible: we have good links with alternative cocoa suppliers in the Pacific Islands and Papua New Guinea and even if the production facility was wiped out, we can readily shift the equipment elsewhere.

“We have thought very carefully about how to do all those things so we could get up and running again within a week. When you’ve been through two major cyclones, you tend to think of those things. If it only happens once every 40 years, it’s probably not on your radar.”

A suite of measures have been implemented on the farm to build cyclone resistance as well.

Chris describes the seedling shade house as ‘collapsible’. It is a simple design, made with inexpensive materials that are highly flexible in strong winds and easy to rebuild.

The cocoa plants are growing on a variation of the open Tatura trellis system, originally developed in the Goulburn Valley in Victoria for stone fruits, apples and pears and ‘tropicalised’ by neighbouring tropical fruit grower, Peter Sellaras.

“It’s a bit of wire and a few posts – it’s not much to look at. But when you understand the engineering that’s gone into its development, you realise there’s a lot more to it!” Chris said.

The trellis works on a triangle principle -one of the strongest geometric structures. The tree acts as an integral part of the structural system and with the tensioning of the wires it becomes self supporting. The system keeps the trees lower to the ground so they will be less impacted by high winds. It also makes management easier and optimises yields because the plant is oriented towards the sun and doesn’t shade itself.

While the initial investment has been high, Chris and Lynn believe the costs will be more than paid for over a reasonable period of time, even if there are no major cyclones in the short term.