

# Para Ika: Whānau Innovation in Action

**Mana mai, mana atu, mauri mai, mauri atu, tapu mai, tapu atu, tiaki mai, tiaki atu**

**Whānau Innovation solves food waste problem and creates fish fertilizer using traditional tīpuna techniques.**

**By Ranui Maxwell**

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A whānau legacy of fishing, hunting and gardening has mobilised whānau innovation in creating fish fertilizer with the discarded parts of the fish like the skin and fish bones.

Mamera Patchett and her husband Mark come from generations of fisherman, hunters and gardeners. Through a love of mahinga kai and community, Mamera and Mark share the kai they catch or gather with friends, whānau and the community of Ōpōtiki.

During the 2021 COVID-19 lockdown restrictions Mamera, started to reasearch on how she could use or dispose of the fish parts more sustainably. Through reasearch, trial and error she found a way of creating a fish fertilizer. Utilising the rau pokepoke (leaf mould) in combination with the discarded fish parts to create the fertilizer. A practice that can be traced back to traditional techniques our tīpuna undertook.

The fish fertilizer prototype is combination of of using traditional tīpuna techniques and untilsing modern resources such as plastic buckets and a mechanism that allows the mixture to ferment in the bucket, and locks most of the smell in the bucket.



Mamera is Healthy Families East Cape's Communications Innovator who came up with the innovation before starting in the team. The team saw an opportunity to backbone this prototype as part of our Mahinga Kai area of activation, co-designing and co-creating kai security across the East Cape. The kaupapa also seeks to create soil resiliency while evidencing tīpuna techniques particluary with creating kai secure communities and

Healthy Families East Cape Rautaki Māori Jade Kameta coined the name Para Ika to acknowledge our wāhine atua Parawhenuamea, born from the union of Tāne and Hinetūparimaunga. Parawhenuamea is the muddy, fertile soil on Papatuanuku, as well as the earth's waters, springs, streams, and rivulets, that run off the hills and mountains. And Ika are the children of Tangaroa.

There are many benefits to this innovation, repurposing food waste, participating in regenerative agriculture, growing more nutrient dense kai and testing and evidencing our tīpuna techniques.

**Healthy Families East Cape acknowledges the mahi that people and organisations who are already championing kaupapa around kai and soil resiliency. We have drawn on some of their insights and knowledge to inform our direction and focus for this kaupapa.**

Dr Jessica Hutchings founder of Papawhakaritorito Trust: Kaitoke. and co-researcher and author of He Whenua Rongo report: Elevating Māori soil and kai resiliency (2022)

speaks to how broken the food system is here in Aotearoa. We produce enough kai to feed 50 million people but many of our 5 million people are going hungry primarily Māori and Pacific peoples. “There is much money to be made in the broken food system, which is being driven by free trade agreements, corporate interests, and an intellectual property rights regime that views nature as a commodity to be patented and exploited, denying nature’s sacred rights as atua (deity) within an interconnected woven universe”.



**Para Ika: Lettuce**

***“What we know is that food prices are increasing, we are in the midst of a cost of living crisis so creating kai-security for our whānau is a top priority for us”. Tomairangi Higgins , Healthy Families East Cape, Manager.***

The cost of food remains at a 13-year high, with new statistics showing annual prices were up 8.3% in September compared with the same time in 2021.

That’s the same price hike seen in August 2022 and comes as living costs and inflation remain sky high. Stats NZ said grocery prices were the primary contributor to the movement – up 7.7% overall – with fruit and vegetables up 16% on the past year. Meat, poultry and fish prices were up by 6.7%.

“Increasing prices for yoghurt, two-minute noodles, and tomato-based pasta sauce were the largest drivers within grocery food,” consumer prices manager Katrina Dewbery said.

“The global food system displaces small-scale farmers and prevents Indigenous peoples from eating and cultivating our cultural landscapes as daily acts of food and soil sovereignty while also growing and concentrating corporate control and power through the reduction of the food system to a near monoculture that produces nutritionally empty food. There is a link between the loss of biodiversity in our landscapes and the diversity in our diets”. Hutchings, J., Edwards, P., Edwards, H., & Smith, J. (2022). He Whenua Rongo Summary Report: Elevating Māori soil and kai resiliency. Papawhakaritorito Trust: Kaitoke.

For small communities like Ōpōtiki where there is access to one supermarket. But where fishing and hunting are common practice for many whānau in the region. The prototype is an exciting opportunity to address food waste, create soil resiliency and evidencing tīpuna techniques.

# PARA IKA



*“We began with a lower concentration to monitor plants for any signs of overfertilization and adjusting the ratio depending on how many veggies we plant”  
says Mamera*

*“There have been so many learnings which has allowed us to really understand the power of the fertilizer, a lot goes along way”  
laughs Mark*

Mamera and Mark have been using the Para Ika fish fertilizer for just over year and observed and recorded the following insights:

- When we used our Para Ika Fish Fertilizer, we didn't add any water, and this resulted in the tomato's not surviving
- Our learnings are that the current ratio for our small maara (garden) approx 1200 x 900 18 root vegetables is 1- table spoon of concentrated fish fert to 1 litre of water

- Adjusting the ratios have benefited my strawberry plants
- healthy foliage lush green colour
- increased fruit production
- taste – big, red and sweet, successful strawberry harvest last year.

We look forward to sharing more insight as we test and gather data and insights on the Para Ika Fish Fertilizer.

If you are interested in knowing more about this kaupapa, email Mamera Patchett:  
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