

BEST PRACTICE GUIDE

Organic Farming

Introduction

Growing crops well and looking after our forests is important for the health of people, animals and our landscape in the Solomon Islands. The Solomon Islands has faced rapid loss of forests. It also faces the loss of valuable topsoil. High-value agriculture production is needed to reduce the economic incentive for logging, and to manage soils and keep them productive.

Sustainable land management, or 'woakem land kam up gud fala', means using the land we have in healthy ways so that we can keep using it in the future. Organic farming practices contribute to the health of the soils, land and people, and also provide access to high-value export markets with strong consumer demand. Organic agriculture means agriculture that does not use synthetic agriculture inputs in the production and processing phases. This means it is a way to enhance soil fertility and manage pests, weeds and diseases with inputs that do not include chemicals. The Solomon Islands and other Pacific island nations have a natural advantage for organic agriculture production, since there is already limited use of synthetic inputs.



Story of Shane's farm

Shane manages Zai & Tina Organic Farm ZNT, an organic farming operation started in 1992. It was established to demonstrate and train farmers in sustainable, traditional, natural and organic farming practices. The late Joini Tutua, the founder of ZNT, realised these practices needed to be shared across the Solomon Islands, resulting in the establishment of the Kastom Gaden Association (KGA). KGA provide extension services to many communities across the Solomon Islands, including the Sup-sup garden programme, and are experts in organic agriculture.

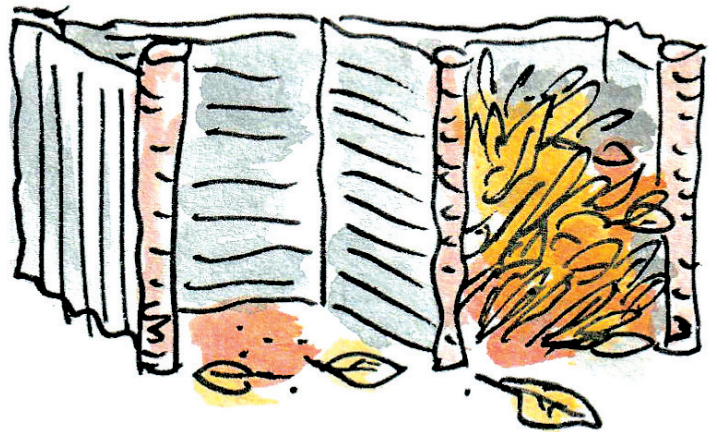
Shane and ZNT have used a range of organic and sustainable land management practices since the beginning of the farm, such as composting and mulching. They have also integrated new techniques through the years, including agroforestry – incorporating trees into the farm – and using biogas for energy and biochar for fertilisation.

What practices are used in organic farming?

“Sustainable land management practices are important in Solomon Islands to maintain and conserve our land resources. Our organic farm is an example of sustainable land management through soil fertility management as we use the same piece of land continuously.”

ZNT uses a range of sustainable land management practices, such as:

- composting
- crop rotation and mixed cropping
- legume cover cropping
- mulching
- crop residue retention
- minimum tillage
- integrating animals for manure and liquid fertiliser
- vetiver grass barriers to maintain permanent beds.



These practices can be used individually but are particularly beneficial when used together.

Covering the soil with mulch and cover crops improves soil fertility and reduces water loss, while crop rotation and mixed cropping also help soil fertility and protect from weeds. Mulch can be made by breaking down left-overs from harvested crops and other dead plant material, preventing wastage and mess. Seeds can be planted directly into this heavy mulch, making tilling and digging less necessary. This helps the soil retain water and prevents soil erosion, while also decreasing the chance of a pest invasion.

Together, these practices are considered conservation agriculture. ZNT uses all these practices and others to increase the long-term sustainability of their farm, their food security and help cope with climate change and extreme weather.

What are the benefits?

“Without sustainable land management, we would already have stopped operating.”

Shane and ZNT have seen good maintenance of soil health and productivity over their several decades of operations. Their organic and conservation-focused practices have seen more reliable yields and better crops, leading to customers preferring their products. They have also seen a lower intensity of pest attacks as their mixed and cover cropping techniques attract ‘good’ bugs and animals, keeping away harmful ones, while also providing added food and financial security in case one crop fails.

What are the challenges?

For Shane, it has sometimes been difficult to access the raw materials for mulching and composting, and the cost of these materials can also be a challenge.

“Suppliers over-priced these materials because they think we make lots of money.”

Organic agriculture inputs, such as fertilisers and pesticides without chemicals, can be difficult to find. This is important for access to export markets. Access to these markets requires organic certification, and this certification requires farmers to demonstrate they have not used synthetic inputs.

Applying these practices can be labour-intensive, despite their overall benefits. There has also been a lack of government policies promoting organic farming practices, meaning limited government support is given for implementing them.

Given the long-term benefits for soil fertility, water retention and climate change adaptation, overcoming these challenges can provide years of benefits.





How could this be scaled up/how could others get involved?

“I think it is easy, because most of these technologies are low cost and easily applied by farmers. Raw materials might be a challenge in some locations, but many farmers are creative in the rural areas and can source alternative raw materials.” — Shane

A good aspect of organic farming is that farmers can use their creativity to re-use materials and organise the land to make use of natural means of pest control and fertilisation. Farmers do not need to rely on paying money for manufactured agricultural inputs to improve productivity.



Farmers can share information of how to reduce synthetic inputs and integrate organic farming practices.

Information can be accessed through **POETCom** (organicpasifika.com/poetcom/) or through **Kastom Gadens** (kastomgaden.org).