Sustainable Tropical Fruit Production; farmer support in the Pacific

Nick Roskruge (PhD);
Institute of Agriculture & Environment,
Massey University, Palmerston North, New Zealand.
Email: N.Roskruge@massey.ac.nz

In recent years the impacts from climate events, technology advances and social change has affected Pacific fruit and vegetable producers

Cyclones have devastated longstanding plantations; especially cocoa in Samoa, mango, coconut and banana in the Fiji Islands.

Technology has bypassed many traditional producers in economies such as Papua New Guinea where investment from offshore producers now impacts local production.

Pacific production systems

- Geographically specific
- Many are local market only little value addition
- Producers face many issues:
 - Soil, Climate, Environment, and Labour issues
- Markets exist
- Quality assurance needs
- Training and skill development important

More noticeably however, the succession of the next generation as producers is becoming fraught through urbanisation.

Crop issues such as pest and disease vulnerability, biosecurity threats and changing consumer expectations also commonplace.

What support is needed to ensure tropical fruit production meets the quality and quantity thresholds from local and international markets to guarantee farmer incomes?

Many farmer support programmes exist across the Pacific, essentially as aid programmes.

The future for fruit producers requires ongoing training in crop husbandry and market drivers to optimise production opportunity

Investment in the future — technology for example in diagnosing plant health issues or for crop responses to climate change e.g. through breeding programmes.

Examples of producer support through external programmes can be seen in recent work funded from New Zealand

- Papua New Guinea to support existing producers to grow their local market presence,
- Cocoa plantation restoration in Samoa to meet a burgeoning international market demand,
- Farmer training in Niue,
- Response work in Fiji following Tropical Cyclone Winston.



PAPUA NEW GUINEA FRESH PRODUCE SECTOR





- Improving farm systems to meet market expectations
- ☐ Pest/disease issues
- Recognising produce suited to regions such as highlands Vs coastal regions
- ☐ Securing markets
- ☐ Improving postharvest systems
- ☐ Farmer training and skill development
- Women farmers and marketers

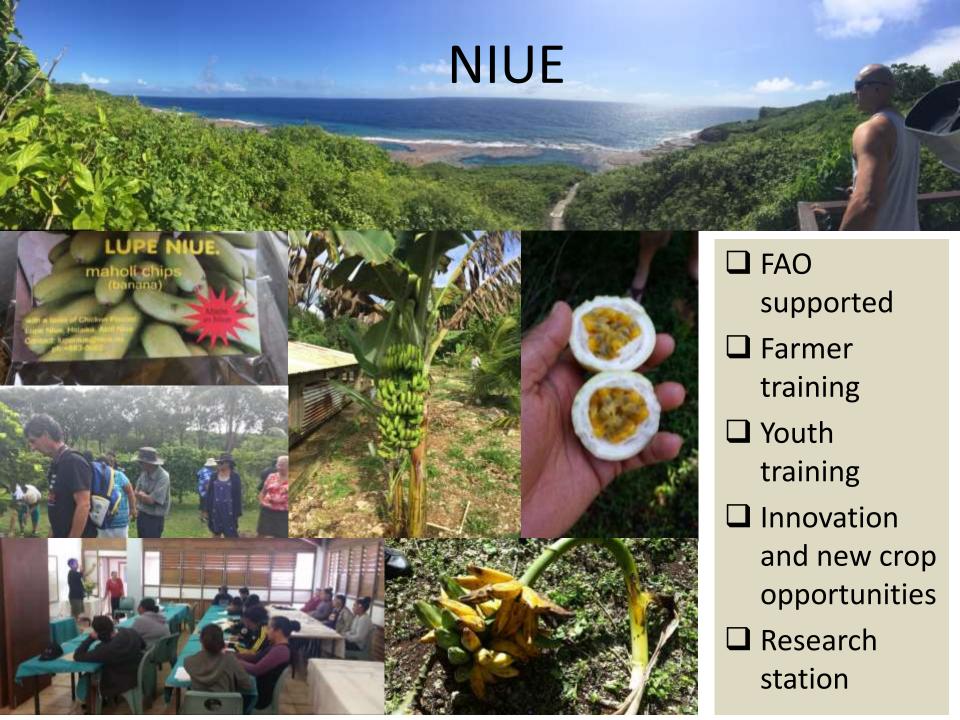


WESTERN SAMOA
COCOA DEVELOPMENT PROJECT





- Plantation restoration
- Nursery development
- Grafting of trees
- Mixed production
- Farmer training
- Postharvest
- Export markets



- These are examples of ongoing investment from the aid community as a response to climate and climate change, technology advances and social pressures.
- Food security is a popular catch phrase at this time but it will only ever be achieved if:
 - local responses to the pressures on food production in the Pacific are realised through investment in the producers themselves
 - Investment is aligned to the systems they manage through education, skill development and succession
 - technological advance is real and accessible, and
 - market alignment is at the forefront......

Role for science & technology

- Science can inform & support the process
 - Germplasm collections
 - Species selection for climate factors
 - Systems inputs for crop issues
 - New tools and responses
- Technology can also support the process
 - Shared experiences
 - Post-harvest crop management and logistics
 - Knowledge management
 - Education processes support packages
 - Preparation for the future

The Pacific – kotahitanga – as one

- Germplasm collections to include traditional varieties and indigenous knowledge as resilience factors
- Support for the small farmer/s collectively to build their capability in the market place
- Sharing knowledge and information between island states to further the resilience against future threats.

Nga mihi atu – he patai

