



Food and Agriculture
Organization of the
United Nations



Hand-in-Hand
Initiative



Tonga Hand in Hand Initiative (HHI) Investment Plan

Hand-in-Hand Initiative Investment Forum 2026





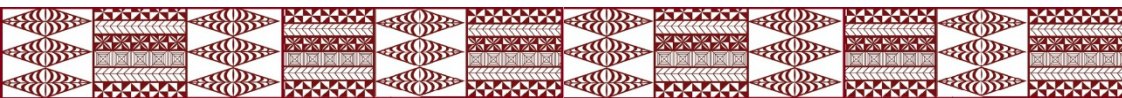
CONTENTS

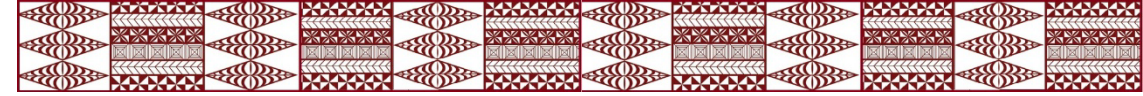
Objective: Seeking investment to transform Kava, Cassava and Pele sector value chains for food and nutrition security and income generation for the people of Tonga.

A Overview

B Enabling environment

C Investment plan and opportunity





Geography

- Area: 748 sq. km
- Cropland: 29,000 ha (48.61%)
- Soils: Volcanic ash (fertile) Coral sand (poor, dry)
- Risks: Cyclones, tsunamis, volcanoes, flooding

Climate

- Temp: 23–28°C
- Humidity: ~75%
- Rain: 1,600 to 2,400 mm (North to South drop)

People

- Population: 101,179 (2021)
- Poverty: 20.6% total 24% multi-dim
- Location gaps: 'Eua: ~33% Rural: 21.1% Urban: 13.3%

Economy

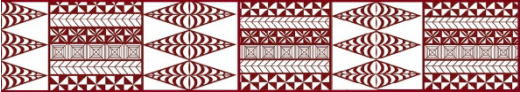
- GDP: USD 508.74M
- Per capita: USD 4,863.76 (WB: \$5,651)
- Jobs: 26.29% in ag/fish/forest

Agriculture

- GDP share: 16% - 18.7%
- Export share: 44%
- Type: 95% subsistence or semi-sub
- Crops: Root crops, fruits, mixed systems
- Rural impact: 75% of rural homes rely on ag/crafts
- Land tenure: Hereditary, noble-led

A. Tonga: Overview





A. Tonga Poverty Map

National Poverty rate- 20.6% (HIES 2021)

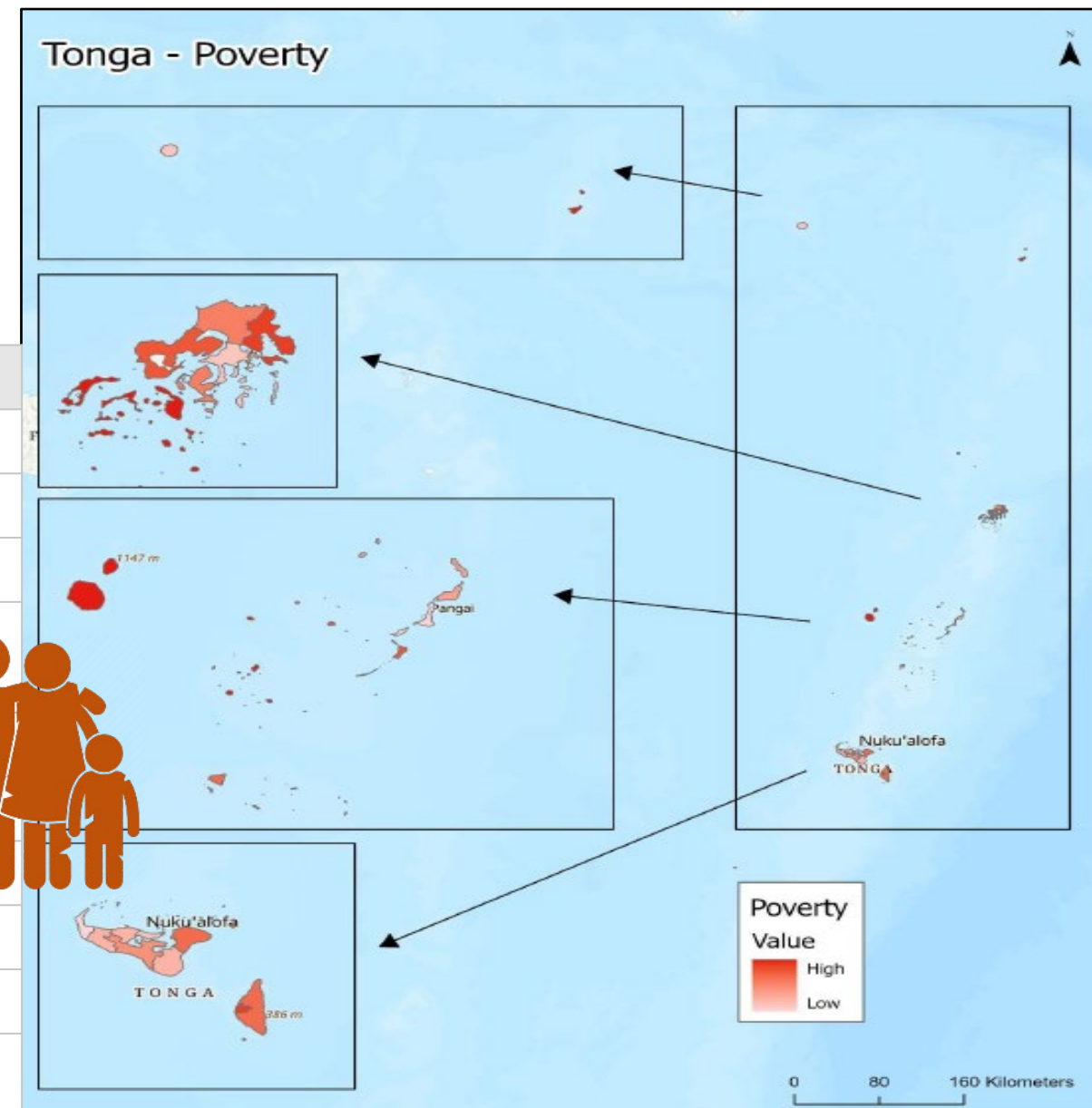
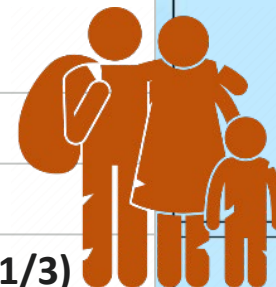
Multidimensional poverty: 24% (HIES 2021)

Poverty headcount- 2,339 (HIES 2022)

Inequality: Gini index 27.1 (WBG 2021)

Poverty Rates by District and Area

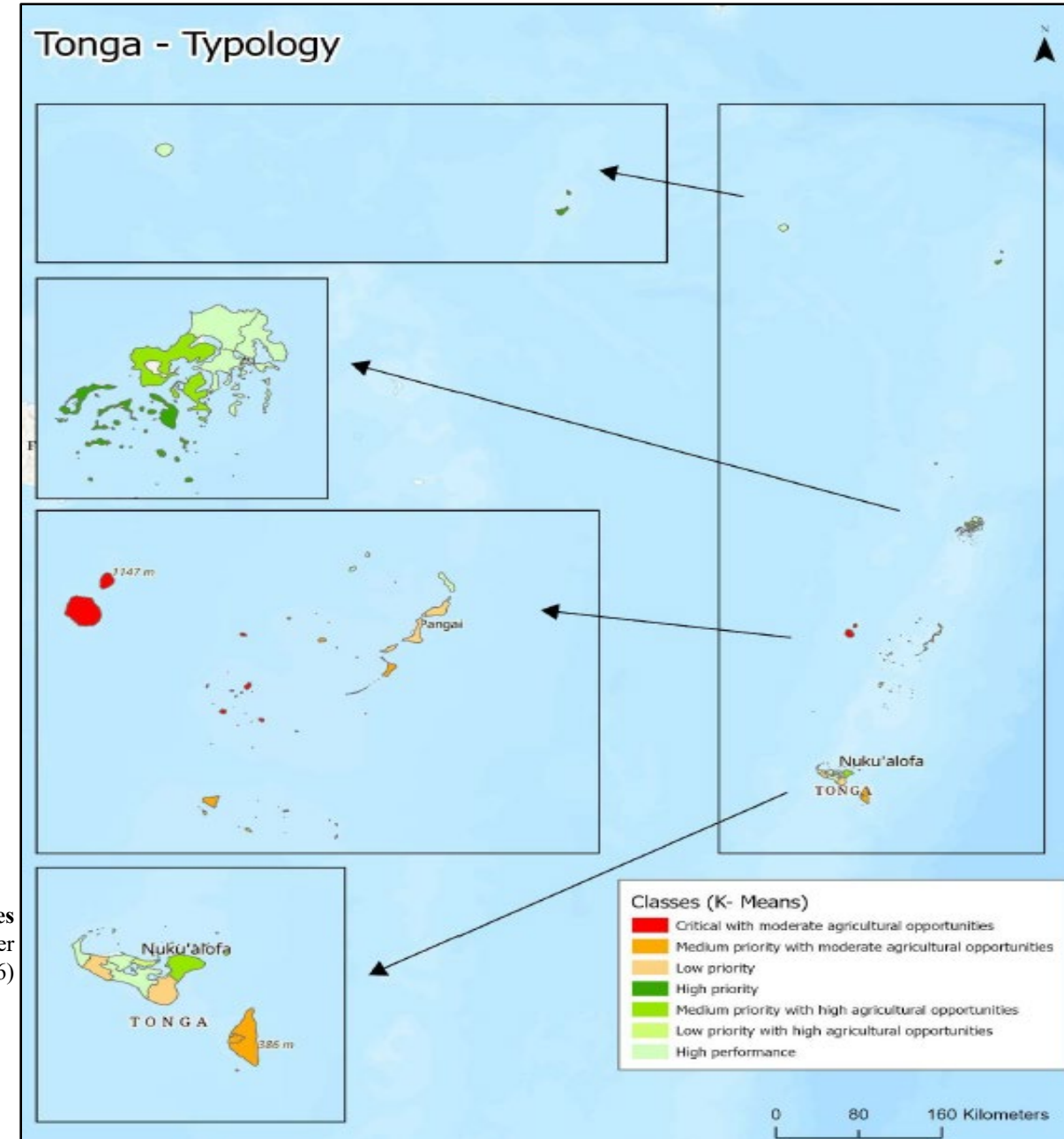
Division / District	Sector / Area	Poverty Rate (%)
National Average	Combined (Total)	20.6%
	Urban Areas	13.3%
	Rural Areas	21.1%
Tongatapu (Main Island & Capital)	Combined	19.4%
	Urban (Greater Nuku'alofa)	13.3%
	Rural Tongatapu	21.1%
'Eua	Rural Sector	33.3% (Nearly 1/3)
Vava'u	Rural Sector	22.8%
Ha'apai	Rural Sector	24.1%
Ongo Niua / Niuas (Niuafu'ou & Niuatoputapu)	Rural Sector	27.5%



Map source: Tonga Statistics
Department, 2021

A. Typology Map of Tonga Showing Key Investment Location

Agricultural Typologies
Map source: Stochastic frontier
analysis FAO-HIH task force (2026)



B. Ease of Doing Business – Global Rankings

103rd

Eases of Doing Business

World Bank Rank

14th

Dealing with Construction Permits

The process requires 11 procedures and 77 days, costing 1.9% of the warehouse value. It features a high building quality control index of 12 out of 15.

44th

Getting Credit:

Lenders and borrowers have high legal protections (scoring 10 out of 12), though credit information sharing remains limited (scoring 3 out of 8).

55th

Starting a Business:

Launching a business legally takes 4 procedures and 16 days. The official cost is 6.8% of income per capita, with no paid-in minimum capital requirement.

64th

Getting Electricity:

Tonga Power Ltd requires 5 procedures and 42 days for a warehouse connection, costing 85.9% of per capita income with a 4/8 reliability index.

80th

Paying Taxes

Medium-sized businesses make roughly 30 tax payments and spend 200 hours annually filing corporate taxes, which total 30.1% of commercial profits.

92nd

Enforcing Contracts

Resolving a commercial dispute through Tonga's Land Court takes 350 days and costs 30.5% of the claim value, with a court quality index of 4.5 out of 18.

100th

Trading Across Borders

Export border compliance takes 52 hours (\$201), while importing takes 26 hours (\$330) per shipment.

123rd

Protecting Minority Investors

Tonga ranks 123rd in safeguarding minority shareholders with a protection index score of 4.5 out of 10, scoring 3 out of 10 for corporate disclosure.

156th

Registering Property

Transferring property titles takes 4 procedures and 112 days, costing 15.1% of the property value (mostly a 15% consumption tax).

Banking Sector:

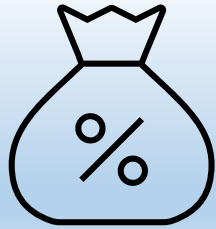
A small, foreign-dominated banking sector limits credit for households and SMEs, leaving over 60% of adults unbanked. The National Reserve Bank's FinTech Sandbox aims to boost inclusion.

Geographic Isolation:

While remoteness and island dispersion present natural logistics hurdles, they provide distinct competitive advantages for developing niche agriculture, high-value tourism, and authentic eco-cultural experiences as infrastructure expands.



B. Tonga investment climate



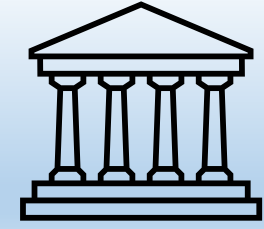
- Moderate corporate and income taxes
- Tonga's tax system includes standard individual and corporate tax rates (20% and 25% respectively), and the overall tax burden is moderate relative to GDP.
- Repatriation of capital and profits permitted
- Tax incentives and exemptions available in some circumstances



- Government has prioritized investment in Agrifood Sector.
- Low government involvement in private sector for **foreign investors**.
- Improved access to overseas markets through trade and regional agreements
- High reliance on external aid, remittances, and imported goods

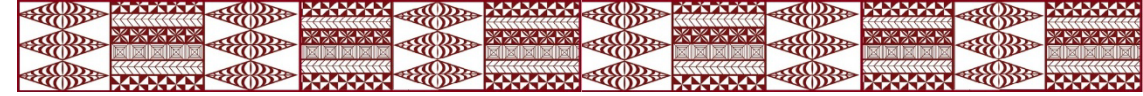


- Land is owned by traditional nobles and leased under long-term agreements
- As in most Polynesian societies, land in Tonga cannot be sold. Investors lease land from traditional owners, with terms and conditions varying depending on location, type of activity, and negotiated arrangements.



- Membership in regional cooperation frameworks





B. Development Planning Framework and Agriculture Sector Plan



Regional Strategy:

- **2024 - 2028 Regional KAVA Development Strategy,**
Kava production, quality, and standards
Trade and export development
Farmer livelihoods and cultural protection
Level: Regional (Pacific-wide), led by Pacific Islands Forum + SPC
Purpose: Develop kava as a key economic and cultural commodity

National Framework

- **Tonga Strategic Development 2015 – 2025 (TSDF II)**
The country's overarching national planning framework guides all ministries, sector plans and initiatives within.
Lead: Ministry of Finance and National Planning (MoFNP)



- **Tonga National Soil Strategy**
- **Tonga National Forest Policy**

Agriculture Development Plans

- **Tonga Agriculture Sector Plan 2016-2020 (TASP 1)**
Draft - Tonga Agriculture Sector Plan (TASP 2)
Supports food security, resilient livelihoods
- **Kava Bill 2020**
- **Tonga Kava Standards**



Food Security Strategies

- **Food Act 2020**
Regulates food-safety, standards, and import compliance.
Tonga Food Road Map 2014-2064
WHO/FAO Food Security Strategic Actions
Lead: MAFF (production) + MOH (nutrition)

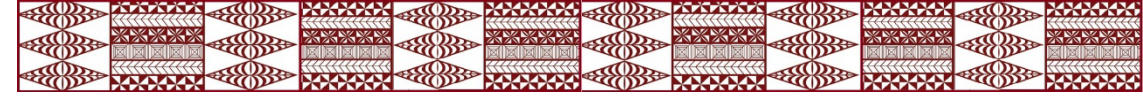
- **Draft National Food Policy**
- **Draft National Livestock Policy**
- **National Food Guidelines**



Climate Change & Environment

- **Low Emission Development Strategy 2021-2050**
Reduce greenhouse gas emissions, Transition to renewable energy and promotes sustainable land and resource use
Lead: Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC)
- **JNAP 2**
- **Nature Based Solution**



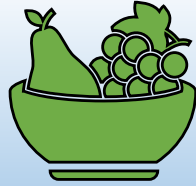


B. Tonga Government Priorities



• Investment areas align with Government Priorities:

Tonga prioritizes agriculture, fisheries, tourism, MSMEs, climate resilience, and infrastructure, focusing on food production, value-addition, and maritime connectivity.



• Market Demand & Shipping Needs:

Rising demand for agricultural and fisheries products is driving efforts to improve transport logistics and inter-island shipping reliability.



• Support for Sustainable Practices:

The government promotes climate-smart agriculture, traditional knowledge, and sustainable resource management to build resilience in agriculture and fisheries, alongside climate adaptation, environmental protection, and skills development.



• Enhancing Market Access:

Investments improve market access for agriculture, fisheries, and tourism while upgrading ports, ferries, and logistics to strengthen supply chains.



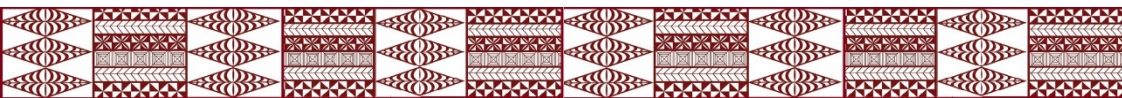
• Empowering Local Farmers:

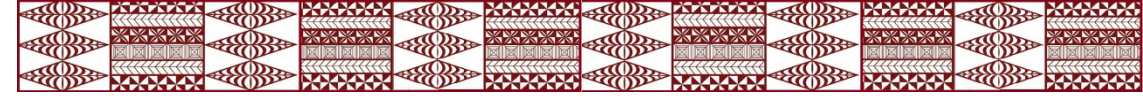
The government promotes commercialization of agriculture, fisheries, and small-scale manufacturing to improve productivity, food security, and incomes, supported by training like the Tonga Skills initiative to build vocational and entrepreneurial skills.



• Climate-Resilient Agriculture:

Tonga focuses on strengthening climate-resilient farming to protect crops and livelihoods from natural disasters and climate shocks through adaptive practices, risk reduction, and resilient infrastructure.





B. Infrastructure Development

95–98%

of imports via main wharf



Shipping

Queen Sālote International Wharf; 2022–25 upgrades expanded berthing and climate resilience.

100%

electricity access



Energy

Diesel ~91%, renewables ~13.3% and growing via solar mini-grids on outer islands.

1,200 km

road network



Roads

94% are rural routes, climate-resilience upgrades under national and World Bank support are ongoing

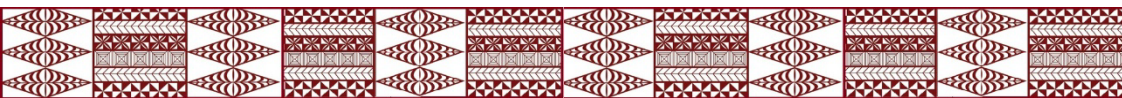
100%

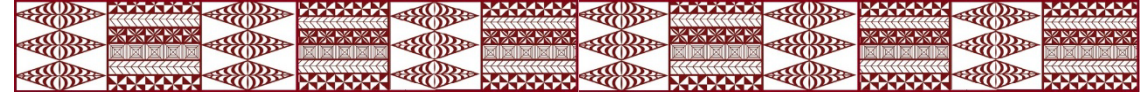
electricity access



Communication

Diesel ~91%, renewables ~13.3% and growing via solar mini-grids on outer islands.

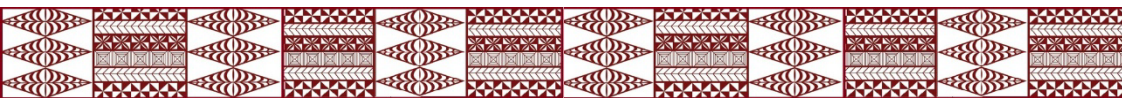




C. Investment Case – 1: Kava

• Kava Market Demand and Production

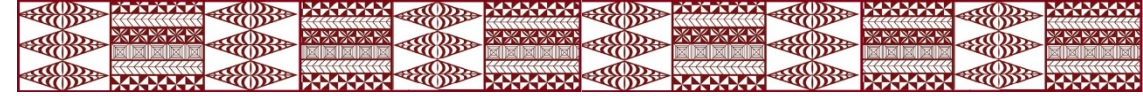
- **Geography:** Kava is cultivated across Tonga, with key production areas including Vava'u, 'Eua and other islands.
- **Livelihood importance:** Kava is an important cash crop for rural households and contributes to household income, cultural practices and local trade.
- **Production potential:** In 2022, Tonga's ~1,100 acres and ~280,000 plants yielded 207 tonnes of kava, valued at ~US\$3 million at farmgate price.
- **Quality:** The Tonga Kava Quality Standard (2020) regulates noble varieties, maturity, drying, moisture, hygiene, packaging, and traceability.
- **Market demand:** Strong domestic consumption drives farmgate demand, while export opportunities exist in regional, diaspora, and specialty markets.
- Kava exports rose from 128 tonnes in 2019 to 292 tonnes in 2022 (valued at TOP 20.4 million), continue rising to 304 tonnes in 2023. (MAFF, Quarantine Export Data). MAFF aims to expand cultivation by 1,500 acres to reach 4,800 tonnes of production and a 1,600 – tonne (~US\$60 million) export target, primarily focusing on New Zealand, Australia and the US.





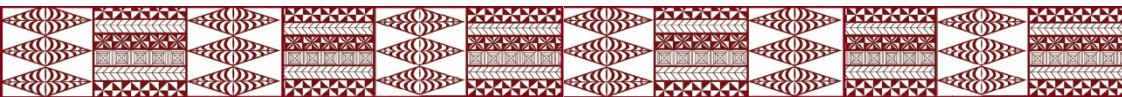
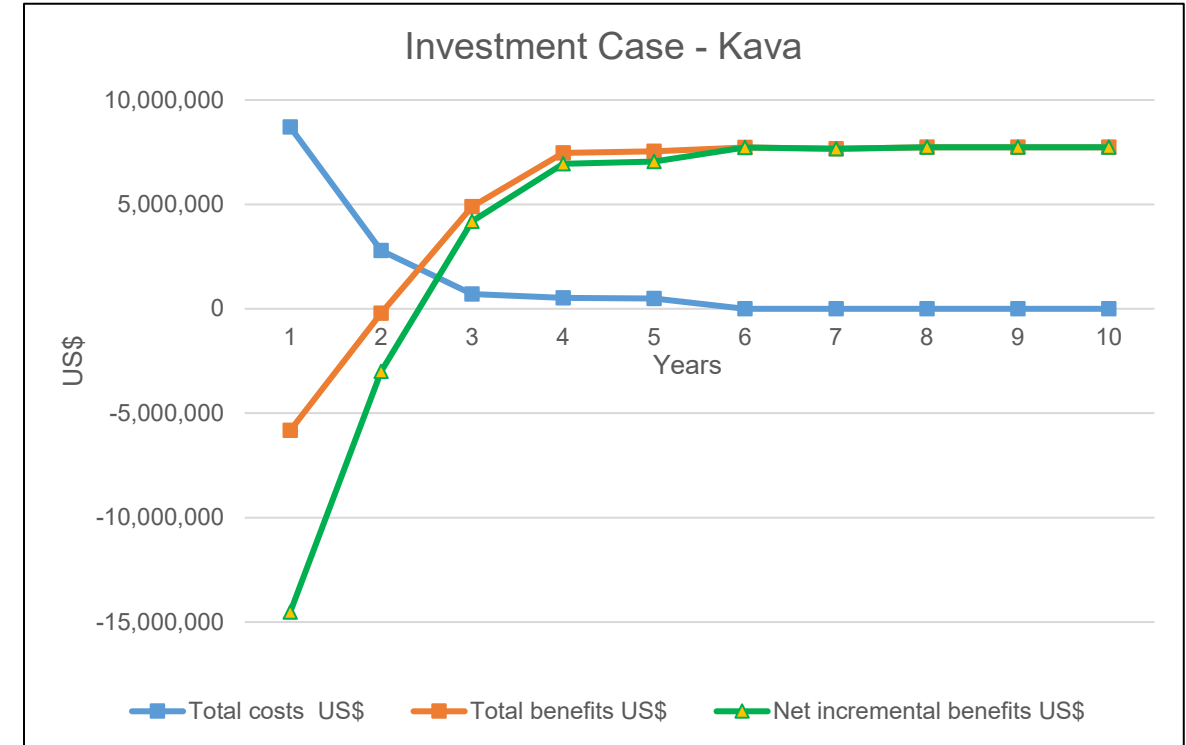
C. Investment Case – 1: Kava

Key Bottlenecks	Key Investments	Risks and Mitigation Measures
Production constraints • Long crop cycles, limited planting materials, and climate shocks constrain rapid expansion. • Labor shortages and fragmented smallholder production hinder harvesting and post-harvest handling. Post-harvest and quality constraints • Substandard drying, storage, and grading increase the risk of product rejection. • Weak farmer and batch-level tracking limit access to premium buyers. Market access constraints • Fragmented aggregation and expensive inter-island logistics reduce market competitiveness. • Accessing high-value powder and extract markets requires stronger testing and certification.	A. Kava production and cluster development (Public: US\$ 5.1 million, 1,500 farmers) • Establish 1,500-acre kava production clusters in priority areas using improved planting materials. • Support land prep, drainage, mulching, shade/windbreaks, soil fertility, and climate-resilient practices. • Provide seeds and inputs for peanut intercropping and GAP to support income during the first two non-harvest years. B. Kava processing and market facility (Public – US\$ 1.4 million, Private – US\$ 3.4 million) • Establish PPP market access facilities in Vava'u and 'Eua. • Supply equipment for washing, slicing, drying, milling, packaging, storage, and lab quality/export testing. • Capacity: 2 tons dry kava/day per unit (Public: US\$ 0.48M, Private: US\$ 1.14M). C. Soft investments (Public - US\$ 0.94 million) • Train 1,500 farmers on cultivation, harvesting, drying, and safety SOPs (Public: US\$ 0.5M). • Support market development, trials, testing, business planning, and "Tonga Kava" branding (Public: US\$ 0.29M). • Build MAFF capacity through export compliance SOPs, internal audits, and training (Public: US\$ 0.15M).	Key Risks and Mitigation measures Pests & diseases → improved planting material & monitoring Climate shocks → drainage, mulching, windbreaks, resilient practices Long crop cycle → phased planting, intercropping, bridging support Quality / compliance → controlled drying, grading, SOPs & certification Price volatility → value-add, buyer trials & "Tonga Kava" branding.



C. Investment Case – 1: Kava

- **Total investment required:** US\$ 10.9 million (Public: US\$ 7.5 million, private: US\$ 3.4 million in PPP mode)
- **IRR:** 26.1%
- **NPV:** US\$ 9.4 million
- **Direct beneficiaries:** 1,500 farmer HHs
- **Indirect beneficiaries:** 7,500 people
- **Jobs created:** 1,130 FTE (220 days per year)





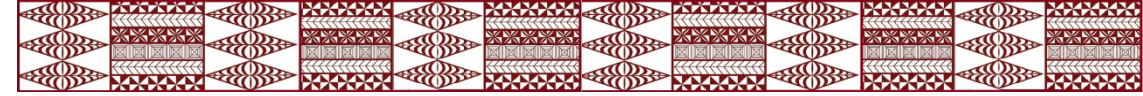
C. Investment Case – 2: Cassava

• Cassava Market Demand and Production

- Annual production of 7,100 tons from over 10,000 ha of cultivate areas – most widely consumed and produced root crop in the country
- **Export Performance:** In 2024, Tonga exported approximately \$4.15M worth of cassava (fresh and Frozen), ranking it as the 39th largest exporter globally.
- **Primary Current Export Destinations:** New Zealand (\$2.49M) and Australia (\$1.54M) are the leading destinations for Tongan cassava exports, reflecting strong demand from Pacific diaspora and regional food markets; United States (\$113k) remains a potential niche market
- **Growth Trends:** Between 2023 and 2024, exports to New Zealand grew by \$1.59M (176%), while exports to Australia increased by \$292k indicating rising market demand and an opportunity to strengthen supply consistency, quality and processing capacity

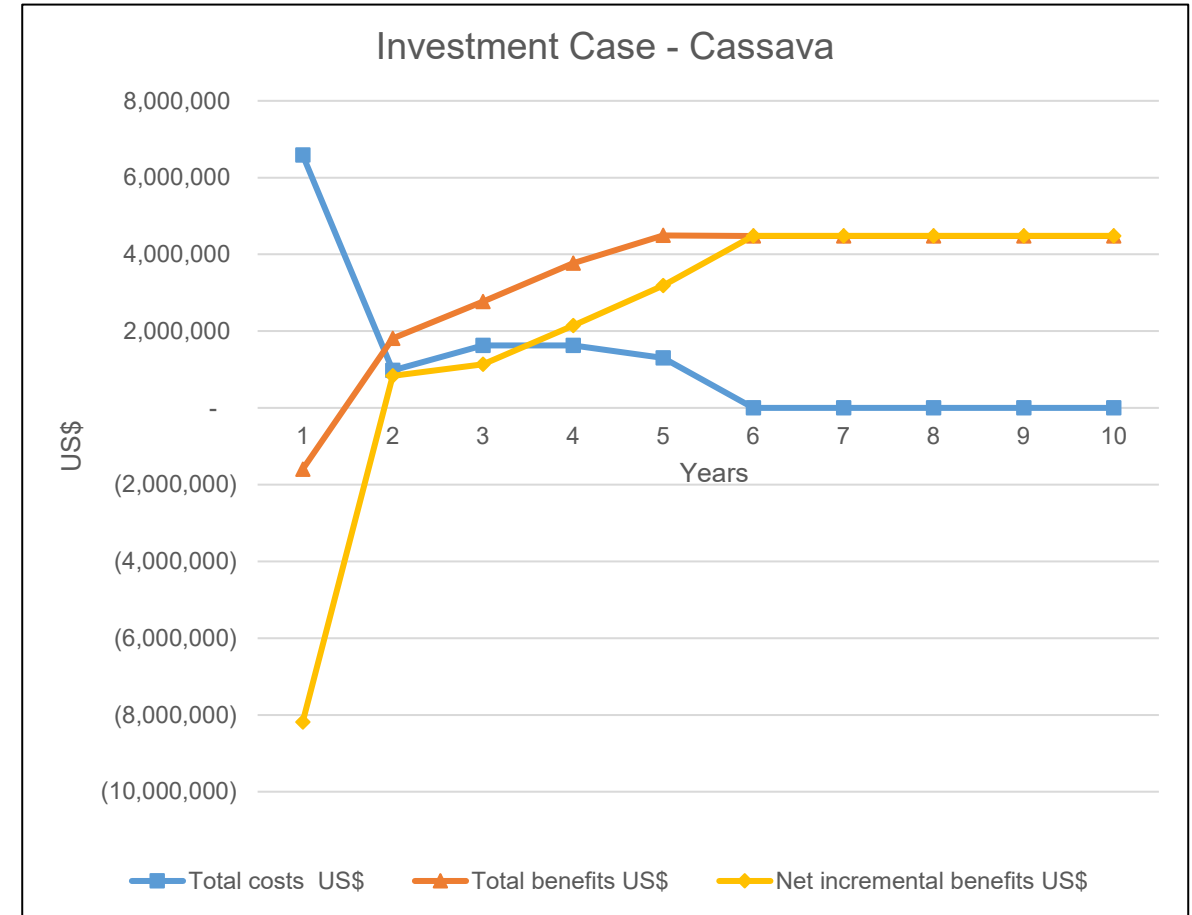


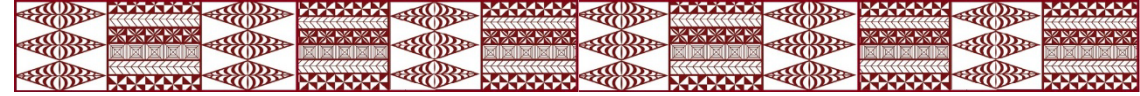
Key Bottlenecks	Key Investments	Risks and Mitigation Measures
Inconsistent Quality and Supply High Perishability: Seasonal, fragmented smallholder supply hinders meeting consistent volume, size, and quality demands. Standardization: Non-standard root size, variety, and maturity lower processing recovery and export quality. Production Constraints Planting material: Scarce clean planting material and inconsistent agronomy reduce productivity. Soil Depletion: Repeated cultivation without rotation or restoration risks declining soil fertility. Mechanization Gaps: Labor-intensive planting, weeding, and harvesting limit sector expansion. Export Logistics High Freight Costs: Bulky cargo drives up transport costs, reducing margins for farmers and exporters. Limited Infrastructure: Insufficient cold-chain and processing capacity limits entry into high-value markets.	A. (3,095) Cassava production and cluster development (Public: US\$ 5.6 million, 3,095 farmers) - Establish Production Clusters: Cover 3,095 acres with improved planting materials and supply agreements. - Agricultural Support: Fund land prep, soil fertility, drainage, and climate-resilient practices. B. (02) Cassava packhouse and frozen processing facility (Public US\$ 2.8 million, Private : US\$ 2.0 million) Product Output: Produce frozen peeled cassava, chunks, and fries for local and export markets. Infrastructure: Supply processing, cold storage, HACCP safety, and traceability equipment. Per unit Capacity – 8 tons fresh cassava per day (Public US\$ 1.4 million, Private : US\$ 1.0 million) C. (02) Cassava processing pilot facility (Private - US\$ 0.79 million) Waste Reduction: Process surplus/off-grade cassava into chips, flour, and snacks. Equipment: Provide slicing, drying, milling, frying, and packaging machinery. Capacity: 2 tons of fresh cassava/day (Private: \$0.4M). D. Soft investments (Public - US\$ 0.49 million, Private US\$ 0.41 million) Farmer Training: Train 3,095 households on production, harvesting, and scheduling (<i>Public: \$0.16M</i>). Mechanization: Set up machinery hiring centers for land prep and collection (<i>Private: \$0.4M</i>). R&D & Marketing: Support new product development, trials, and marketing (<i>Public: \$0.32M</i>).	Key Risks and Mitigation measures R: Damage to planting materials, crop establishment, and root quality. M: Supply better planting materials, strengthen monitoring, and train farmers in sanitation/early detection. R: Climate shocks, Damaged production and supply chain disruptions. M: Promote improved agronomic practices (soil restoration, drainage, mulching, production scheduling). R: High post-harvest losses Short shelf life of cassava and limited handling infrastructure. M: Invest in sorting, grading, rapid transport, packhouse handling, freezing and cold storage. R: Price volatility in New Zealand, Australia and regional markets Reduced returns for farmers and processors. M: Diversify into value-added products (frozen peeled cassava, chunks, fries, chips, flour, and snacks). R: Food safety and compliance risks may limit formal market access. M: Invest in certifications, SOPs, traceability, hygiene training, testing, and export documentation systems. 



C. Investment Case – 2: Cassava

- Total investment required: US\$ 12.1 million (Public: US\$ 8.9, private: US\$ 3.2 million)
- IRR: 26.7 %
- NPV: US\$ 7.9 million
- Direct beneficiaries: 3,095 farmer HHs
- Indirect beneficiaries: 15,475 people
- Jobs created: 770 FTE (220 days per year)





C. Investment Case – 3: Pele

• Pele Market Demand and Production

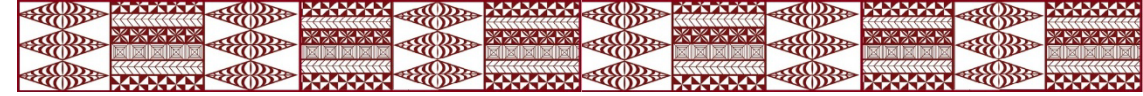
- Pele / island cabbage is a locally important leafy vegetable in Tonga, grown mainly by smallholders and backyard gardeners.
- Current production is largely domestic-market oriented
- Fresh Pele is highly perishable, making rapid harvesting, sorting, shade, cooling and transport important.
- Frozen Pele has better export potential than fresh leaves; Tonga has precedent of small frozen leaf exports to New Zealand
- The investment opportunity is to strengthen Pele production clusters and establish a small blanching and freezing pilot unit for domestic and diaspora markets





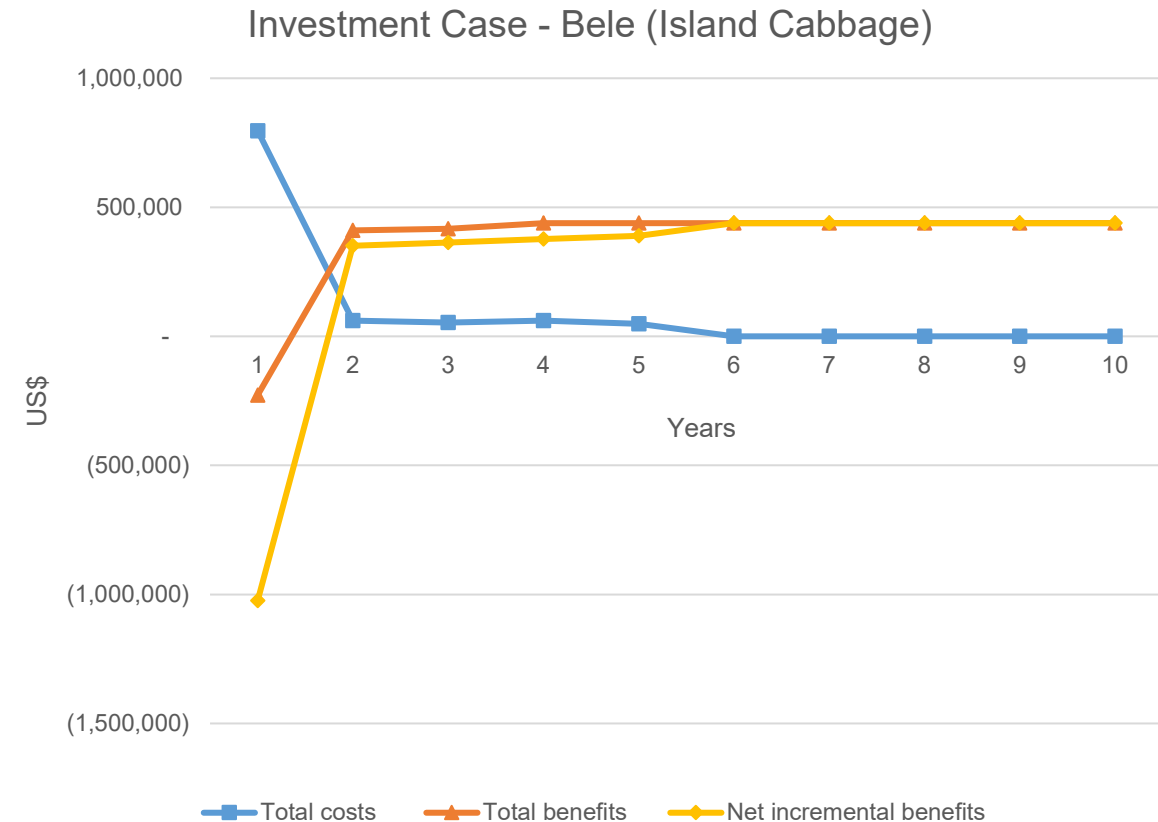
C. Investment Case – 3: Pele (island cabbage)

Key Bottlenecks	Key Investments	Risks and Mitigation Measures
Production Constraints Labour intensive: Regular harvesting, sorting, bundling and handling are labour intensive, especially for women and smallholder growers Planting material : Limited organized supply of healthy planting material affects uniformity, productivity and expansion Inconsistent Quality and Supply Fragmented Production: mostly grown by smallholders, backyard gardeners and small market-oriented growers, making supply volumes irregular High Perishability: Fresh Pele wilts quickly after harvest, requiring rapid harvesting, shade, sorting, cooling and transport. Quality variation: Leaf size, maturity, tenderness and freshness are not always standardized, affecting both fresh market sales and suitability for freezing Post harvest constraints Limited capacity: Tonga has limited small-scale facilities for blanching, freezing, packing and storing Pele for longer shelf life.	A. Fifty-eight (58) Pele production and cluster development (Public: US\$ 0.11 million, ~60 acres) - Establish pele production clusters with increased planting density - Support land preparation, soil fertility management, drainage and climate-resilient practices. B. Three (03) Pele blanching and export facility (Public: US\$ 0.98 million, Private : US\$ 0.63 million) - Produce frozen pele for regional and export markets. - Provide equipment for washing, sanitising, blanching, cooling, dewatering, packing, freezing and frozen storage - Per unit Capacity – 250 kg of green pele leaves per day C. Soft investments (Public - US\$ 0.27 million) - Design and deliver training for ~100 farmer households on improved pele production, and harvesting (Public: US\$ 0.12 million) - Support in market development activities and innovative packaging solutions for increased shelf life of pele leaves (Public – US\$ 0.14 million)	Key Risks and Mitigation measures R: High post-harvest losses due to rapid wilting and poor handling of fresh leaves. M: Invest in harvesting protocols, shaded collection, crates, sorting, grading, clean washing and rapid delivery to fresh markets or the blanching/freezing unit R: Climate shocks, including cyclones, drought, heat stress and heavy rainfall, may affect regular Pele supply. M: support climate-resilient production through, drainage, shade support, composting and staggered planting schedules R: Fresh export faces phytosanitary and handling barriers, limiting direct market access. M: Focus initially on blanched and frozen Pele products, supported by food-safety procedures, traceability, shelf-life testing and buyer trials. 



C. Investment Case – 3: Pele

- Total investment required: US\$ 1.98 million (Public: US\$ 1.37, private: US\$ 0.63 million)
- IRR: 34.9 %
- NPV: US\$ 0.98 million
- Direct beneficiaries: 58 farmer HHs
- Indirect beneficiaries: 300 people
- Jobs created: 42 FTE (220 days per year)





Tonga Investment Summary

Summary

US\$ 22.95 million

Govt. Budget for 15 Years

US\$ 25.0 million

Total Investment Required

27.09%

Overall - Average IRR

US\$ 18.28 million

Total NPV

**4,653 HH's
23,275 people**Total Beneficiaries
Direct Beneficiaries: 4,653
Indirect Beneficiaries: 23,275**US\$ 4,148**Annual Income Increase
per Household**-83,526 tCO2-eq**Total Emission Reduction
Potential in 20 years

KEY INVESTMENTS

Intervention

Kava Sector

Cost - US \$10.9 million**IRR - 26.1%****NPV - US \$9.4 million****TOTAL – \$ 10.9 million USD**

Sustainability Benefits

Direct beneficiaries: 1,500 farmers HHs**Indirect beneficiaries: 7,500 people****Annual increase in income from unit: US\$ 7,878****Emission reduction potential over 20 years:****-63,808 tCO2eq (implementation + capitalization phase)**

Intervention

Cassava Sector

Cost - US\$12.1 million**IRR - 26.7%****NPV - US\$ 7.9 million****TOTAL – \$ 12.1 million USD**

Sustainability Benefits

Direct beneficiaries: 3,095 farmer HHs**Indirect beneficiaries: 15,475 people****Annual increase in HH income from project: US\$ 2,101****Emission reduction potential over 20 years:****-21,708 tCo2eq (implementation + capitalization phase)**

Intervention

Pele Sector

Cost - US\$2 million**IRR - 34.9%****NPV - US\$ 0.98 million****TOTAL – \$ 2 million USD**

Sustainability Benefits

Direct beneficiaries: 58 farmer HHs**Indirect beneficiaries: 300 people****Annual increase in HH income from project: US\$ 16,919****Net increase in emissions over 20 years:****+1,990 tCo2eq (implementation + capitalization phase)**