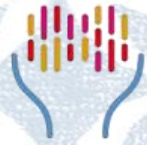




Food and Agriculture
Organization of the
United Nations



Hand-in-Hand
Initiative



Samoa Hand in Hand Initiative Investment Plan





CONTENTS

Objective:

- Seeking investment to transform Cocoa, Coconut and Taro Value Chains in Samoa

1 Overview

2 Enabling environment

3 Investment plan and opportunity



SECTION 1:

Overview

Samoa: overview

- **Country area:** 2,830 sq. km
- **Population:** 205 557
- **GDP:** 2.3 billion USD (SBS 2023)
- **Poverty rate:** 21.9%
- **Cropland** approx. 15% of land area
- **Soil type:** primarily volcanic, rich in nutrients, and well-drained
- **Natural Disasters:** Cyclones, Earthquakes, Tsunami
- **Climate:** tropical climate; warm temperatures, high humidity, and a distinct wet and dry season.
- **Three farming systems:**
 - subsistence agriculture ,
 - semi-commercial (cash crops, livestock)
 - commercial (plantations, livestock)
- **Agriculture** made up to 11% of GDP (SBS, 2023)
- **Land access:** 79% of land parcels in Samoa are customary land
- **Sectorial employment:** 30% of working population in agriculture sector





Samoa Poverty Statistics



Poverty rate 21.9% (WB, 2020)

Poverty headcount 43,600 people

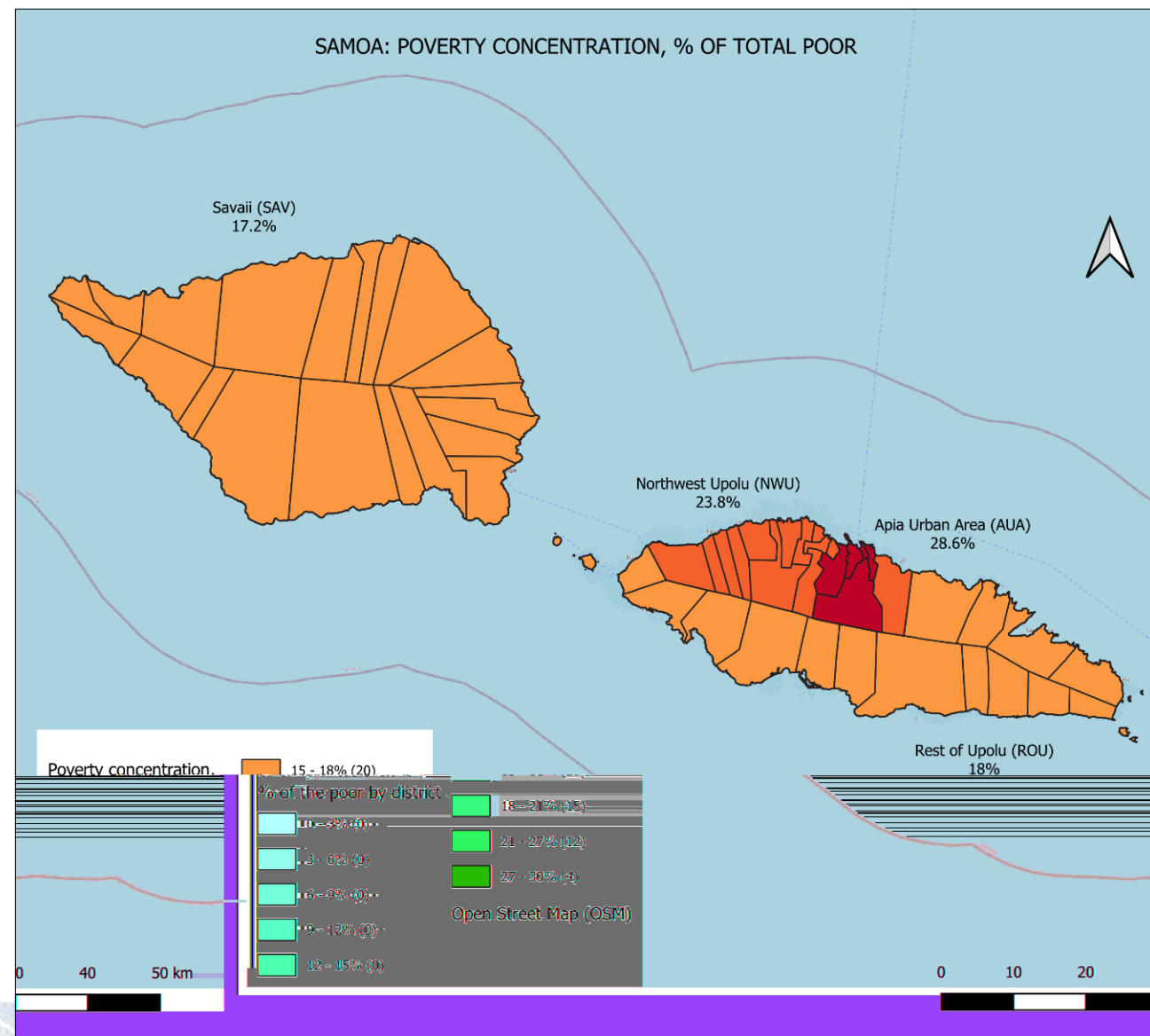
Poverty HC & concentration, by region

Northwest Upolu 16,800 people (23.8%)

Apia Urban Area 10,800 people (28.6%)

Rest of Upolu 8,400 people (18.0%)

Savaii 7,600 people (17.2%)





Overview of Production and Agro Processing Facilities



Cocoa Value Chain

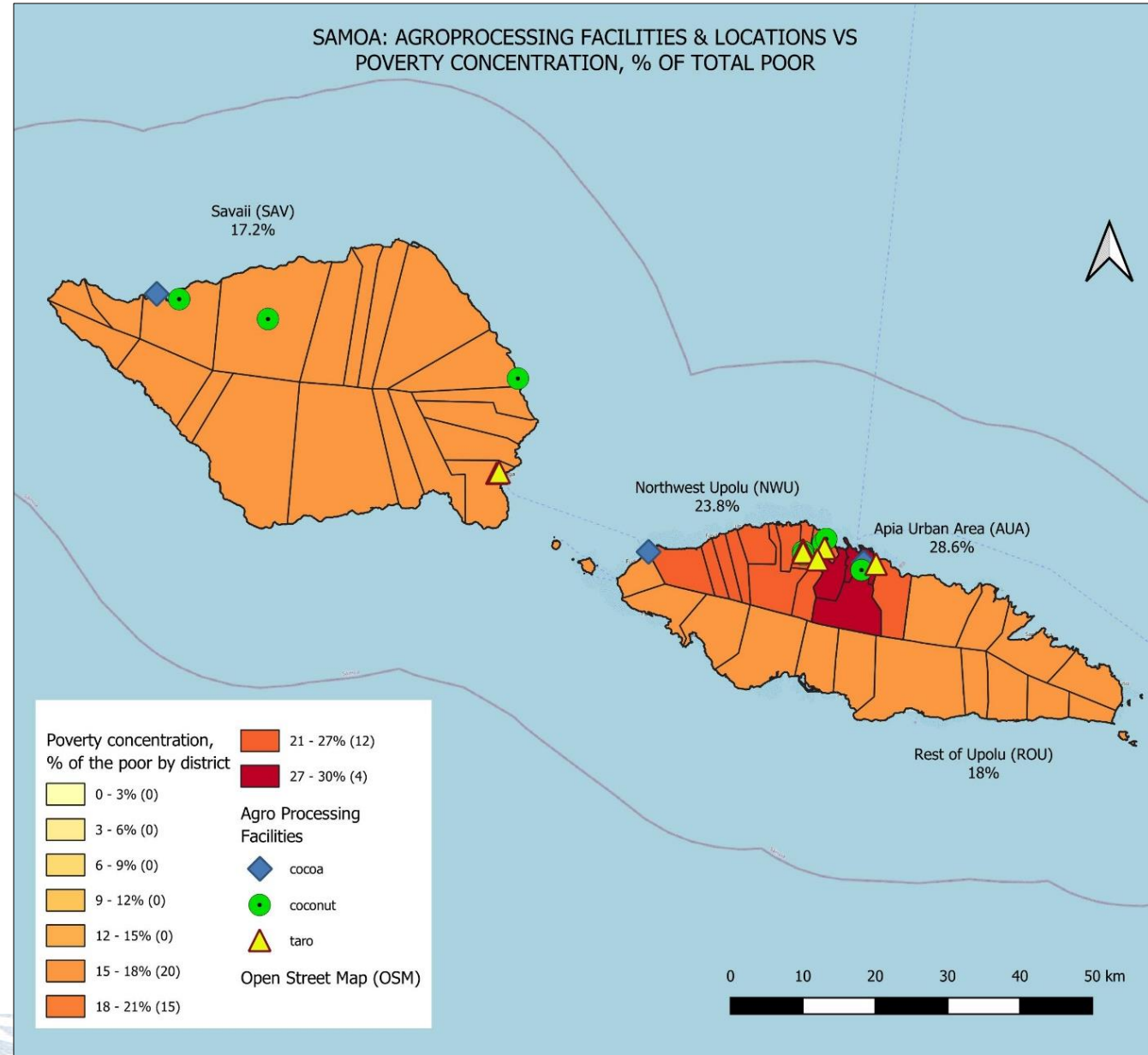
- Samoa Koko Industry Association (SKIA), Mulifanua (inactive) & Vaisala, Savaii (2 sites).
- Wilex Chocolate factory

Coconut Value Chain

- Serendi Coco Ltd, Women In Business Development (WIBDI), Samoa Coconut Cluster, Mailelagi Ltd, Krissy Company Savaii Popo, Samoa Agro Market

Taro Value Chain

- 5 Private Pack Houses: Ah Liki is the major one with 4 minor privately owned packhouses.
- 2 Govt owned packhouses: Atele Packhouse and Salelologa MAF office
- **Agro-Processing Facilities more concentrated around urban area with a few widespread across islands**
- **Facilities require refurbishment and upgrades to meet growing demand**



SECTION 2: ENABLING ENVIRONMENT

- Policy and governance factors
- Economic factors

Doing Business 2020

Samoa

<p>Ease of Doing Business in Samoa</p>	Region	East Asia & Pacific	DB RANK	DB SCORE
	Income Category	Upper middle income	98	62.1
	Population	196,130		
	City Covered	Apia		

Rankings on Doing Business topics - Samoa





- Relatively **low corporate & income taxes**
- **Free repatriation** of capital and profits
- **Tax incentives, breaks, and exemptions** available for agricultural investments (*machinery tax exemptions for agriculture investments - under Code 121 and 131*)



- Low government involvement in private sector for **foreign investors**.
- Strong market access to overseas markets through existing **trade agreements**
- **Stable financial environment** with **low inflation rate**, a balanced budget and international reserves



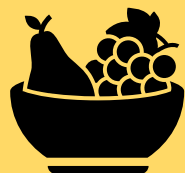
- **Competitive wage rates:** Current minimum wage is \$4 WST per hour (\$1.5 USD)
- **Experienced labor force:** Young and growing labor force with low-cost, low-skill workers, and seasonal workers with overseas agribusiness experience.
- **Skilled workforce** with good English proficiency and diverse tertiary qualifications.
- **Compliance with international standards:** Employment conditions are regulated under the Labour and Employment Relations Act 2013



- Samoa is a **Member** of the **World Trade Organization**
- Government lands are **leased with varying terms and rates**, with some leases extending up to **60 years**.
- **Govt Annual Contribution:**
- USD 5.5 Million allocation to increase production and to improve food security



Government Priorities



- **Government Priorities Align with Investment Areas:** Samoa's agriculture sector transformation aligns with government priorities to boost local production of cocoa, coconut, and taro, ensuring food security and economic resilience.

- **Market Demand for Cocoa, Coconut, and Taro:** The increasing market demand for locally produced and processed cocoa, coconut, and taro drives the government's focus on enhancing value chains and export potential.
- Demand is high, but supply is limited, so increasing production is essential.

- **Support for Sustainable Practices:** The government's strategies include promoting sustainable agricultural practices and traditional knowledge, ensuring the long-term viability of cocoa, coconut, and taro production.

- **Enhancing Market Access:** Investment areas are designed to strengthen market access for Samoan cocoa, coconut, and taro, both locally and internationally, contributing to Samoa's economic growth.

- **Empowering Local Farmers:** By focusing on the commercialization of agriculture, the government supports local farmers in increasing their productivity and income through improved resources and infrastructure.

- **Climate-Resilient Agriculture:** The government prioritizes building climate-resilient agricultural practices for cocoa, coconut, and taro, ensuring that these crops can withstand environmental shocks.

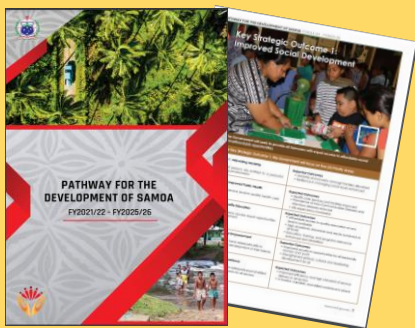




Development Planning Framework and Sectoral Strategy



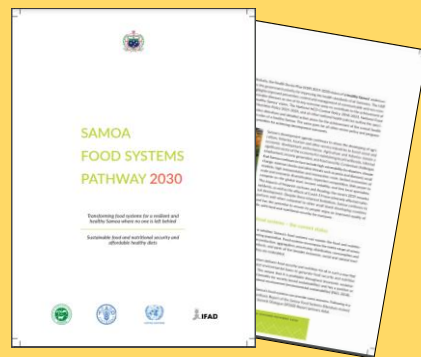
Pathway for the Development of Samoa (PDS) 2021/22 – 2025/26



PDS is the overarching policy document outlining Samoa’s **long-term development objectives** and contextualizing Sustainable Development Goals (SDGs).

Lead: Ministry of Finance (MoF)

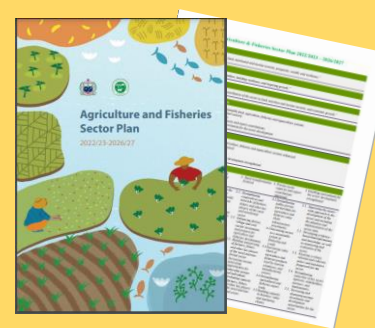
Samoa Food Systems Pathway 2030



FSP is crucial for achieving **sustainable and resilient food systems**, ensuring food security, and promoting economic growth.

Lead: Ministry of Agriculture and Fisheries (MAF)

Agriculture and Fisheries Sector Plan 2023-2027



AFSP establishes a decisive strategy to **ensure food security** while promoting **sustainable growth**, and enhancing economic resilience in the agriculture and fisheries sector

Lead: Ministry of Agriculture and Fisheries (MAF)

Trade, Commerce & Manufacturing Sector Plan 2024/25-2028/29



TCMSP is crucial for achieving **sustainable production, trade, commerce**, and manufacturing for growth and a resilient and vibrant economy,

Lead: Ministry of Commerce, Industry, and Labour (MCIL)

- **Shipping:** Samoa has one major deep-sea port in Apia and two smaller ones on Upolu and Savaii Islands. The major port handles large ships, while the smaller ports manage inter-island shipping and ferries.
- **Energy:** 99% of Samoa's population has electricity, with 45% from renewable sources and 55% from diesel. Samoa's energy infrastructure includes seven hydro plants, one solar farm, two wind turbines, and four solar-based Independent Power Producers (IPPs).
- **Roads:** 95% of Samoa's 1,350 km road network is sealed, mostly in coastal areas. Agricultural access roads are often unpaved and located inland.



SECTION 3: INVESTMENT PLAN & OPPORTUNITIES

- **Cocoa Value Chain**
- **Coconut Value Chain**
- **Taro Value Chain**



Cocoa value chain



Current Industry Situation	Key Bottlenecks
<ul style="list-style-type: none"> • The main cocoa varieties in Samoa is ‘Criollo’. Samoa has a unique and rare high-quality bean known as “Samoan Trinitario,” locally known as “Koko Samoa”, which is a cross of the Criollo variety. • 56% of all households in Samoa are involved in growing cocoa • Most of Samoa's cocoa is used and sold domestically as cocoa paste, for a national drink called “Koko Samoa.” • More than 200 organic cocoa farms 	<ul style="list-style-type: none"> • Limited market access for smallholder farmers due to Geographic isolation, high transportation costs, and limited market linkages • Low productivity and quality due to presence of old trees, lack of cultivation knowledge and modern post harvest technologies and resources • Limited access to finance and supply chain inefficiencies Meeting international standards and obtaining certifications (such as organic or fair trade) is challenging for smallholder farmers • Climate change and natural disasters like cyclone, floods and droughts damage crops, disrupt farming activities, and lead to significant losses in cocoa production.





Cocoa value chain



Existing Cocoa Value Addition

- Samoan Trinitario variety is known for its high-quality, fine flavor characteristics, ideal for high-end chocolate products (offering premium quality and flavor).
- Samoan Trinitario variety has a high & robust disease resistance and produces high yield.
- Samoa’s cocoa is exported to two major chocolate manufacturers in New Zealand, Devonport Chocolates and Whittaker Chocolates.
- Favourable agro-climatic condition.

Market and Opportunity

- **Domestic:** Strong domestic market with 56% of Samoan households growing cocoa. Koko Samoa is widely consumed locally. A small cup of cocoa paste, sells for \$10-\$20 WST*.
- Local chocolate manufacturer, Wilex Samoa, produces the KoKo Loa chocolate brand, sold domestically and exported overseas.
- **Foreign Export:** In 2023, a total of 13.2 tonnes of cocoa value-added products, valued at \$35,000 USD, were exported overseas to New Zealand, American Samoa/USA, and Australia, in that order. New Zealand accounts for 85% of the cocoa export market.
- **Huge informal export market** - Many tourists & Samoans abroad purchase cocoa paste during their stay & bring it back overseas for consumption or resell at higher price.
- **Existing and established export relationships** with exporters in NZ, Australia, USA and Asia, as well as top chocolate manufacturers in NZ and Australia.
- E-commerce businesses are revolutionizing convenience by offering cocoa paste in single-serve pods for instant use.



Cocoa Sector Investment

Investments

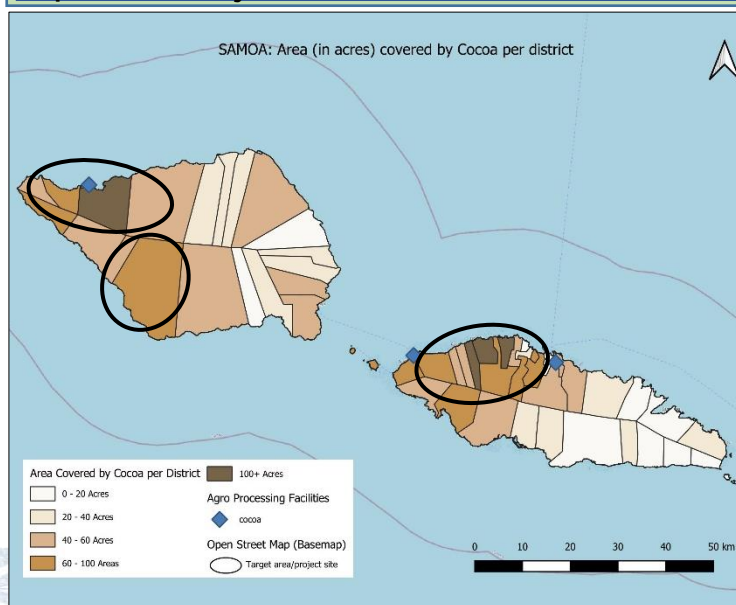
Investment Pillars	Investment (USD)	NPV	IRR
Increase Production. Improve nursery facilities, provide tools/equipment, climate smart seedlings and support for cocoa plantation enhancement and rehabilitation and harvesting	6m	5m	23%
Post-Harvest. Support establishment of 2 climate smart cocoa processing facilities (improved quality control and processing)	2m	5m	23%
Training. Technical training for lead farmers and extension officers, Increased awareness of biosecurity for cocoa export, Demo plots for advanced grafting and improved varieties, Video materials & social media campaigns to attract youth			1 million
Market Access: International exposure through cocoa awards, Annual summits for all cocoa farmers, exporters, and producers, Develop a National GI system for Samoa cocoa.			0.9 million

Impacts

- **4,800 households** will receive support and training on cocoa cultivation.
- **1,758 hectares** of cocoa plantations supported with rehabilitation, rejuvenation & enhancement
- **Increased volume of cocoa export** due to improved fermentation and drying facilities & mechanization.
- **15,000 households** will be impacted with increased cocoa production & productivity.

Risks & Mitigation

- **Risk-1:** Loss of Samoa Trinitario cacao gene pool due to climate events.
- **Mitigation-1:** Establish a secure gene bank facility
- **Risk-2:** Lack of local labor.
- **Mitigation-2:** Invest in cocoa mechanization & marketing campaign to attract youth into cocoa
- **Risk-3:** Inadequate Infrastructure for fermentation and drying
- **Mitigation-3:** Use of solar dryers and improved fermentation and drying facilities.
- **Risk-4:** Lack of understanding of quality requirements
- **Mitigation-4:** Educate farmers on export quality standards and requirements.



**TOTAL REQUIRED
INVESTMENT: \$9.9m USD**



Existing Coconut Value Addition

- Savai'i Coconut Farmers Association (SCFA) has Fairtrade ANZ Certification, this certification positions Samoa's coconut as a leader in the ethical market.
- Samoa has six known coconut processing facilities: Women in Business Development (coconut oil, cosmetics), Serendi Coco Ltd/Pacific Oils Ltd. (coconut oil), Samoa Coconut Cluster (copra, coconut oil), Mailelani Ltd. (soap, cosmetics for tourism), Krissy Company Savaii Popo (coconut cream) and Samoa Agro Market (copra).

Market and Opportunity

Domestic Market:

- Strong local demand and high domestic sales of coconut value-added products (coconut oil, cooking oil, soap, and coconut cream).
- On average, approx. 4 tonnes of coconut is sold at local markets monthly.
- Copra meal is used for coconut oil production and for livestock feed.
- Coconut water from immature nuts is enjoyed by locals and visitors.

International Market

- In 2023, approx. 711 tonnes of copra, valued at \$210,000 USD, were exported overseas to New Zealand, USA and Cook Islands. NZ accounts for 51% while USA accounts for 48% of the copra export market.
- 2 Main exporters of coconut value-added products.
- Coconut value-added products are mainly exported to New Zealand, USA, Australia, Japan and Europe (in that order).



Coconut value chain



Current Industry Situation

- 67% of all households in Samoa grow coconuts mostly for consumption. A few farmers sell at market and for export.
- Approx 37% of coconut trees are senile.
- Total land area planted with coconuts spans 20,153 hectares, mostly around coastal and low-lying areas.
- Government has implemented two replanting schemes through two Stimulus Package Programs as well as Intercropping and Livestock Integration programs to rehabilitate senile trees and grow coconut production.
- 3 large-scale coconut farms are organically certified for virgin coconut oil processors

Key Bottlenecks

- Low productivity and yields due to aging trees, suboptimal farming practices, and limited use of improved planting materials.
- Limited processing capacity due to shortage of modern processing facilities in Samoa to add value to coconuts and converting them in high value products like virgin coconut oil, coconut cream, or desiccated coconut, and other food items.
- Limited market access and supply chain inadequacies
- Limited extension support training, and research which hinder the adoption of best practices and innovations in the coconut value chain.
- Market Volatility with prices fluctuating based on global supply and demand dynamics.





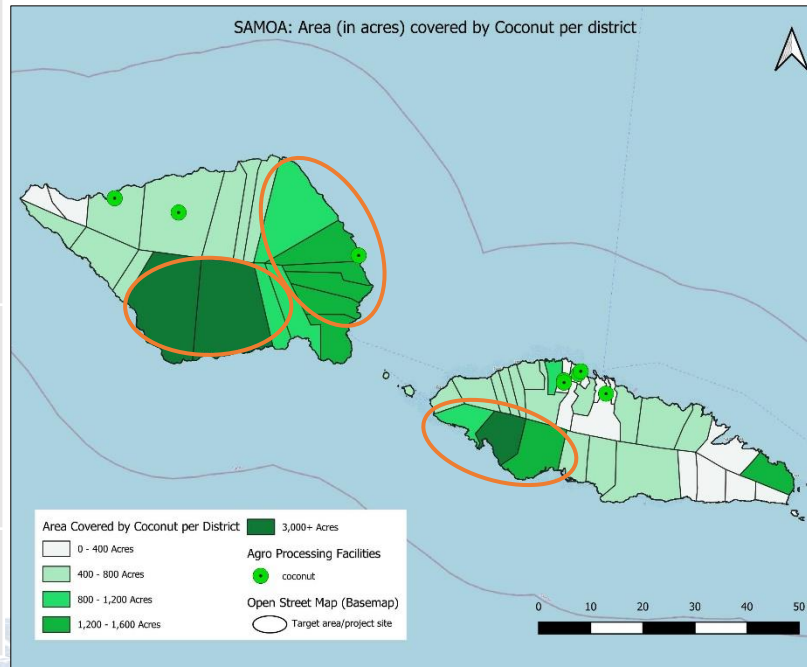
Investments

Impacts

Risks and Mitigation

- **7,500 households** will receive support and training on coconut cultivation.
- **8,000 hectares** of cocoa plantations supported with rehabilitation
- **Increased volume of coconut export** due to improved quality control and expanded market reach.
- **10,000 households** will be impacted with increased coconut production & productivity.

- **Risk-1:** Price volatility of coconut in international markets
- **Mitigation-1:** Diversification and value addition
- **Risk-2:** Lower production due to senile tree and pest & diseases.
- **Mitigation-2:** Rehabilitation of coconut plantations more than 45 years old.
- **Risk-3:** Market access and quality
- **Mitigation-3:** Provision of training, marketing and trade promotion
- **Risk-4:** Lack of local labor.
- **Mitigation-4:** Invest in mechanization



TOTAL REQUIRED INVESTMENT: \$7.4m USD

Investment Pillars	Investment (USD)	NPV	IRR
Increase Production. Improve nursery facilities, provide tools/equipment to support for coconut plantation enhancement and rehabilitation	4m	13m	21%
Post-Harvest. Expand current government pack house to include climate smart copra processing and enhance existing commercial copra processing facilities.	2m	16m	22%
Training. Technical training for lead farmers, pack house workers and extension officers, Increased awareness of biosecurity for coconut/copra export			0.9 million
Market Access: Develop a National GI system for Samoa coconut.			0.5 million



Existing Taro Value Addition

- Samoan export trade is dominated by a small number of exporters.
- Two distinct export pathways for Samoan root crops: fresh and frozen
- Main taro exporters are New Zealand, USA and Australia (in that order). Taro is exported as fresh and frozen to NZ.
- Samoa is currently unable to export fresh taro to Australia due to quarantine restrictions, but it can export frozen taro.
- Australian biosecurity authorities have agreed to a new high pressure washing/hot water treatment (HPW-HWT) method. This method will allow fresh taro exports to Australia. This method will also increase exports to New Zealand to avoid the fumigation requirement.

Market and Opportunity

Domestic Market:

- Approx. 7-8 tonnes of taro are sold at local markets monthly.
- Strong local consumption and high domestic sales of taro and taro value-added products (e.g., taro chips).

Foreign Export:

- In 2023, approx. 720 tonnes of taro, valued at \$1.5 mil USD, were exported overseas to New Zealand, USA, American Samoa, Australia and Tokelau. NZ accounts for 51% while Am Samoa accounts for 36% of the taro export market.
- Biosecurity export pathways in place to increase taro exports into Australia and New Zealand.



Taro value chain



Current Industry Situation

- 64% of all households in Samoa grow taro, primarily for consumption.
- Colocasia taro is the main type of taro exported from Samoa.
- Samoa has 18,320 taro growers, with an estimated 800 supplying the export market.
- Taro is Samoa's staple food and provides a strong income-earning opportunity in the domestic market.
- Taro is grown throughout Samoa, with the bulk of the export crop produced on the island of Savai'i.
- Samoa has a central packing facility for processing taro and other commodities for export. There are 5 commercial/private pack houses in Samoa for processing taro for export.
- Samoa has good transport infrastructure and lower internal transport costs but face higher international shipping charges.

Key Bottlenecks

- Disease Vulnerability - Taro crops in Samoa are highly susceptible to Taro Leaf Blight-TLB. Despite the development of TLB-resistant varieties, disease management remains a critical challenge for maintaining healthy crops and consistent yields.
- Limited market access and logistical challenge, high transportation costs, and limited infrastructure.
- Quality and quantity consistency issues lead to difficulties in meeting market demands and accessing premium markets. Post-harvest handling facilities are often inadequate.
- High production costs reduces profitability.
- Export barriers - Meeting the strict phytosanitary and quality standards required by international markets are difficult for small-scale producers.



Taro Sector Investment



Investments

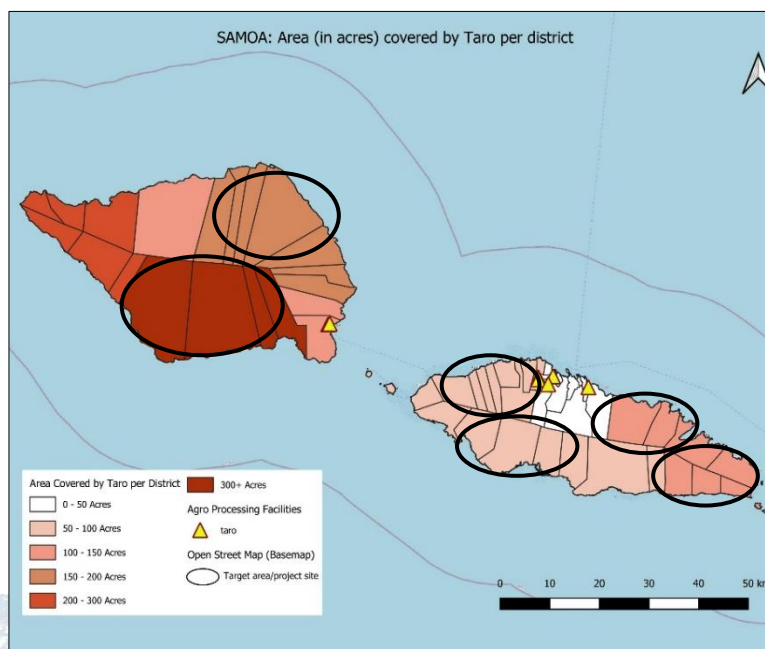
Investment Pillars	Investment (USD)	NPV	IRR
Increase Production. Upgrading and extending both smaller extension and main nurseries, establishing a climate smart tissue-culture laboratory	3m	2.2m	19%
Post-Harvest. Refurbish existing government and private taro pack houses, purchase treatment equipment required for fresh taro export to Australia	5m	9m	20%
Training. Technical training for lead farmers, pack house workers and extension officers, Increased awareness of biosecurity for taro export			0.9 million
Market Access: Annual summits for taro farmers, exporters, and producers, Develop a National GI system for Samoa taro.			0.3 million

Impacts

- **6,000 households** will be impacted leading to increased taro production & productivity.
- **800 commercial taro growers** will be supported to boost taro production & productivity for domestic and export market.
- **Enhanced access to Australia and New Zealand market** – Samoa will be able to export fresh taro to Australia and increase exports in NZ.

Risks and Mitigation

- **Risk-1:** Improper handling of taro
- **Mitigation-1:** Increase training on post-harvest treatments, biosecurity compliance and quality control for taro farmer and packhouse workers
- **Risk-2:** Lack of local labor.
- **Mitigation-2:** Invest in mechanization.
- **Risk-3:** Management of Taro pest
- **Mitigation-3:** Increase farmer training and resource on Integrated Pest Management.
- **Risk-4:** High shipping costs
- **Mitigation-4:** Government to subsidize shipping costs for exporters.



TOTAL REQUIRED INVESTMENT: \$9.2m USD



Samoa Investment Summary



Summary

US\$75 mil

Govt. Budget for 15
Years

US\$ 26.5 mil

Total Investment
Required

20 to 23 %

Overall - Average IRR

18,300

Direct Beneficiaries

US\$ 1,870 to 3,913

Annual Income Increase
per Household

-122,890 tCO2-eq

Total Emission Reduction
Potential in 20 years

KEY INVESTMENTS

Intervention

Cocoa Sector

Cost – US\$ 8 mil

IRR - 23%

NPV – US\$ 9.92 mil

1

Additional investment in:

Training – US\$ 1 mil

Market Access – US\$ 0.9 mil

TOTAL – \$9.9m USD

Sustainability Benefits

Beneficiaries: 4,800 Direct and 31,680 Indirect
beneficiaries

Annual increase in HH income from project NPV:
US\$ 2,066

Emission reduction per ha: -10.41 tCO2eq over 20
years

Intervention

Coconut Sector

Cost – US\$ 6 mil

IRR - 21.5%

NPV – US\$ 29.35 mil

2

Additional investment in:

Training – US\$ 0.9 mil

Market Access – US\$ 0.5 mil

TOTAL – \$7.4m USD

Sustainability Benefits

Beneficiaries: 7,500 Direct and 49,500 Indirect
beneficiaries

Annual increase in HH income from project NPV:
US\$ 3,913

Emission reduction per ha: -12.22 tCO2eq over

Intervention

Taro Sector

Cost – US\$ 8 mil

IRR - 20.9%

NPV – US\$ 11.22 mil

3

Additional investment in:

Training – US\$ 0.9 mil

Market Access – US\$ 0.3 mil

TOTAL – \$9.2m USD

Sustainability Benefits

Beneficiaries: 6,000 Direct and 39,600 Indirect
beneficiaries

Annual increase in HH income from project NPV:
US\$ 1,870

Emission reduction per ha: -2.45 tCO2eq over 20
years