

Pacific Horticultural & Agricultural Market Access Plus Program

Supported by Australia and New Zealand

Pacific Export Context Analysis





Pacific Export Context Analysis

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Acronym List

Acronym	Description
ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
CROP Agency	Council of Regional Organisations of the Pacific
DFAT	Australian Department of Foreign Affairs and Trade
DoA	Australian Department of Agriculture
EIU	Economist Intelligence Unit
ENSO	El Niño Southern Oscilation
EU	European Union
FAO	Food and Agriculture Organisation
FFA	Forum Fisheries Agency
FIC	Forum Island Countries
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GNI	Gross National Income
IMF	International Monetary Fund
MFAT	New Zealand Ministry of Foreign Affairs and Trade
NZ MPI	New Zealand Ministry for PRimary Industries
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PHAMA Plus	Pacific Horticultural and Agricultural Market Access Plus Program
PICs	Pacific Island Countries
PIF	Pacific Island Fourm
PIFS	Pacific Island Forum Secretariat
PNG	Papua New Guinea
РРР	Purchasing Power Parity
РРРО	Pacific Plant Protection Organisation
PTI	Pacific Trade Invest
RAMSI	Regional Assistance Mission to the Solomon Islands
RSE	Recognised Seasonal Employers
SPC	Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
SPS	Sanitary and Phytosanitary
TEU	Twenty-foot equivalent unit
UNDP	United Nations Development Programme
USD	United States Dollar
WAHIS	Animal Health Information System
WB	World Bank

1 Executive Summary

The *Pacific Export Context Analysis* has been prepared by the Pacific Horticultural and Agricultural Market Access Plus (PHAMA Plus) program to provide a strategic summary of country progress, on-going constraints and opportunities in export, particularly in relation to the horticulture, agriculture, fisheries, forestry and tourism sectors.

The Analysis includes information on economic indicators relevant to the export environment, trade and export performance, investment levels, business environment information and demography. It also discusses compliance and biosecurity issues, changing climate conditions and the political context. Information is included on the six Pacific Island Countries (PICs) (Fiji, Papua New Guinea {PNG}, Samoa, Solomon Islands, Tonga and Vanuatu) that PHAMA Plus works in as well as at the regional level.

Key findings include the following:

Gross Domestic Product (GDP): Total GDP for the six countries reached USD 29 billion in 2017, 88% came from PNG and Fiji. The contribution of agriculture (including farming, fisheries and forestry) is between 10-20% except in the Solomon Islands where it is much higher (34%) due to forestry and logging.

Gross National Income (GNI): GNI per capita ranges from less than USD 2,000 in Solomon Islands to over USD 8,000 in Fiji. Fiji, Samoa and Tonga are classified as upper middle-income countries and PNG, Solomon Islands and Vanuatu as lower middle income.

Export revenue: The key sources of export revenue for the countries continues to be export commodities, mineral/energy resources and remittances.

Foreign Direct Investment (FDI): Fiji and Vanuatu have strong FDI flows, but FDI for the other countries is limited and volatile.

Remittances: The economic importance of remittances is amongst the highest in the world in Tonga (35% of GDP) and Samoa (16% of GDP) and is also a key source of revenue in Fiji.

Trade Balance: Most countries have trade deficits with imports many times more than exports, especially in Samoa and Tonga. PNG and Solomon Islands experience a net surplus as a result of export earnings primarily from mineral resources and round logs.

Export destinations: The major export destinations are Pacific Rim countries - Australia, Japan, China, New Zealand and USA. Intra-regional trade is limited compared to the larger Pacific Rim markets.

Demography: The total population of the six countries is 10.3 million, of which almost 90% live in PNG and Fiji. All of the countries have young populations, with the median age <30, and face challenges of youth unemployment. Other than Fiji (~44%), countries have over 75% of their population living in rural areas with the majority dependent on agriculture for their livelihoods.

Migration: Fiji, Samoa and Tonga experience consistently high rates of out-migration with large diaspora communities. High emigration rates create opportunities for export of traditional Pacific foods to diaspora communities but also limit agricultural production potential in rural areas.

Effects of climate and natural disasters on export: The Pacific is amongst the world's most vulnerable regions to drought and other natural disasters including hurricanes/cyclones, floods, earthquakes, volcanic eruptions and tsunamis with significant disruption to production and exports of agricultural commodities. It often takes years to recover from these disasters.

Implications for PHAMA Plus

The information gathered for this report and its implications is informing PHAMA Plus intervention planning and approaches to monitoring and results measurement. Some specific examples are (e.g. the need to focus on specialised rather than bulk markets for cocoa) with consideration being included in the intervention and activity plans currently under development.

2 Introduction

The Analysis contains an overview of the socio-economic conditions, highlighting each country's economic indicators that are relevant for the export environment, trade and export performance, investments, regulatory conditions and business environment, compliance and biosecurity issues, demography, climate conditions, global prices, development assistance and other issues that are critical for Pacific Island exporters. Information is included on the six Pacific Island Countries (PICs) (Fiji, Papua New Guinea {PNG}, Samoa, Solomon Islands, Tonga and Vanuatu) that PHAMA Plus works in as well as at the regional level.

The Pacific Export Context Analysis has been prepared for use by the Australian Department of Foreign Affairs and Trade (DFAT) and the New Zealand Ministry of Foreign Affairs and Trade (MFAT) in their policy dialogue with partner governments and regional organisations and other stakeholders (public and private). It will also inform the planning and implementation of interventions under PHAMA Plus. The analysis is based on monitoring and collation of existing information sources drawing on macro-economic data and other relevant research (see Annex 3). An annual Pacific Export Context Analysis will be prepared to provide updates and to incorporate the most recent information available and will include detail gathered from the monitoring of PHAMA Plus interventions.

The *Pacific Export Context Analysis* is reliant on the collation of macro-economic data available across the Pacific countries PHAMA Plus works with. Inferences are drawn based on those aggregate figures, as necessary for comparability purposes.

Effort was made to source sex and spatially disaggregated data that was also comparable across the countries. Where readily available it has been included but due to the challenge in sourcing this type of data it is anticipated that future versions of the *Pacific Export Context Analysis* will incorporate more data that is gathered from monitoring PHAMA Plus interventions.

2.1 Regional Context

2.1.1 Regional frameworks

PHAMA Plus is a multi-country, rather than regional program, but in practice the regional context in which these six countries exist is very influential on export opportunities and performance. This includes the various regional organisations that receive donor funding for core operations and provision of mandated services. These organisations provide technical and other advisory services to member countries, and represent member country's interests in international negotiations and other forums. An overview of the six regional organisations that are most relevant to the export environment is provided in Annex 1. Membership of these organisations is consistent across the six PHAMA Plus countries except for one case.

Another key characteristic is the existence of multiple regional and sub-regional trade agreements influencing trade within and from the Pacific region (see Annex 1). For example, the Melanesian Spearhead Group (MSG) Trade Agreement, Pacific Agreement on Closer Economic Relations (PACER) Plus Agreement, Cotonou Partnership Agreement and European Union Economic Partnership Agreement (EPA). With these agreements influencing trade through the opportunities (e.g. duty-free access) and challenges (e.g. implementing rules of origin requirements) presented and the associated financial assistance mechanisms.

2.2 Regional Economic Context

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The PHAMA Plus countries are positioned in an economically powerful hemisphere. The Pacific Rim countries of USA, China, Japan, Australia and New Zealand comprise almost half of global GDP, with USA and China contributing 80% of this. The outstanding change over recent decades has been the expansion of China in the region. China's share of GDP among the five Pacific Rim trade partners grew from 7% in 2000 to 32% in 2017. Australia and New Zealand's share has grown from 2.8% to 4.0% over the same period.

The larger Pacific Rim countries have such a large appetite for imported food and agricultural commodities relative to the Pacific's capacity to supply, that changes in economic conditions are likely to have a smaller

impact, except for the globally traded commodities for which they are large consumers. However, in the smaller Australian and New Zealand markets economic conditions may affect demand for some items, e.g. through unemployment rates among diaspora communities affecting their demand for imported produce from the Pacific.

The IMF World Outlook is generally positive for the Pacific Rim countries. China's strong economic growth is expected to ease in the coming years. In 2019 IMF expects growth to weaken slightly in Australia but accelerate in New Zealand.

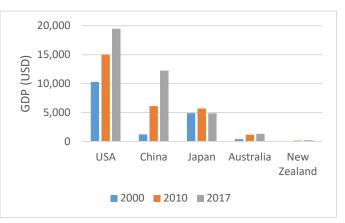


Figure 1. GDP (USD) of Major Trading Partners

The table below shows the percentage of export and import from Pacific countries within and outside the Pacific region.

Inter and Intra-regional Trade (Percent)										
	Year	Within Pacific	Pacific to/from Asia	Pacific to/from rest of the world						
Percent of exports	2017	6.9	61.4	31.7						
	2016	7.9	66.1	26.0						
Percent of imports	2017	6.2	54.7	39.1						
	2016	6.9	55.3	37.8						

Table 1. Inter and Intra-regional Trade to/from the Pacific Source: Adapted from the Asia-Pacific Trade and Investment Report, 2018

There are cases of intra-regional trade, such as kava exports from Vanuatu to New Caledonia and Kiribati, but generally exports go to the much larger markets around the Pacific Rim. Given the commonality in commodities and export markets, there are areas of competition between the Pacific Island countries, for example root crop exports from Fiji, Samoa and Tonga to New Zealand. In the following years, the Pacific Export Context Analysis will elaborate on intra-regional trade and competitiveness issues as the program gathers additional information through its monitoring and results management (MRM) system.

2.2.1 Donor engagement in the region

A comprehensive analysis of development assistance to the Pacific was published in 2017 and concluded that the region is one of the most aid-dependent in the world (Dornan and Pryke 2017). For example, with higher official development assistance (ODA) on a per capita basis than any other region and 10 of the 25 countries where ODA is highest as a proportion of national income are in the region¹. Based on review of available Organisation for Economic Co-operation and Development (OECD) data, the analysis found that Australia was the major donor to the region but with considerable variation between countries. Also noting that the funding to non-independent territories wasn't included and that loan repayments were subtracted from the ODA that is provided which particularly impacted flows from donors such as the Asian Development Bank (ADB) and Japan.

Another source of analysis of development assistance to the Pacific region is the Pacific Aid Map produced by the Lowy Institute² which attempts to capture data on traditional and non-traditional (e.g. China and India)

¹ Matthew Dornan and Jonathan Pryke (2017). Foreign Aid to the Pacific: Trends and Developments in the Twenty-First Century. Asia & the Pacific Policy Studies 4(3) pp. 386–404. https://onlinelibrary.wiley.com/doi/epdf/10.1002/app5.185 ² https://pacificaidmap.lowyinstitute.org/

⁹ Pacific Horticultural and Agricultural Market Access Plus (PHAMA Plus) Program Pacific Export Context Analysis – August 2019

donors as available from a range of sources since 2011. Based on available data (considered accurate to 2016 but incomplete for 2017 and 2018) the analysis found that Australia is the leading donor to the region (~45% of the total amount), followed by China, New Zealand, the USA and Japan (~6-9% each); with the ADB and the World Bank Group ~4-5% each; European Union (EU) institutions (i.e. European Development Fund, EDF) ~7% and smaller contributions from specialist agencies including the United Nations Development Program (UNDP), United Nations Children's Fund (UNICEF), Food and Agriculture Organisation (FAO), and International Fund for Agricultural Development (IFAD).

When assessed by sectorial allocation (using OECD definitions), 24% of the total funding was for governance followed by transport (14%), health (13%) and education (11%) with the other eight sectors (including "agriculture, forestry and fishing") between 2-7% each.

The clear implications for PHAMA Plus being that **the economies and dynamics within the Pacific region are significantly influenced by donor engagement** and on-going attention is needed to coordinate at the regional as well as bilateral level. It is also necessary to hold realistic expectations on the potential for private sector investment.

See section 4.1 for further data on development assistance in the region.

2.2.2 Political context

The program operates in a dynamic political environment that influences the agriculture sectors and broader trade environment. Several Pacific leaders have recently spoken of a greater emphasis on agriculture as a source of revenue and export earnings. An outline of recent relevant political developments in the six PHAMA Plus countries follows.

Fiji: The ruling government was returned in general elections in November 2018, after which there were changes to appointments for the Ministers responsible for Agriculture, Waterways and Environment; Industry, Trade and Tourism; and the addition of a second Assistant Minister responsible for Agriculture. The policy framework for agriculture and trade has remained largely consistent.

PNG: There has been a change of Prime Minister (PM) in PNG with James Marape replacing Peter O'Neill in May 2019. The Ministry of Agriculture and Livestock now has a Minister and three new Vice Ministers responsible for coffee, tree crops and livestock. The PM has expressed the intent to shift the PNG economy away from its reliance on extractive industries and to become a more agricultural export oriented economy as a "food bowl for Asia".

Samoa: The Samoan Government has been in power for over 34 years. In the last 12 months there has been no change to key government positions and policy directions have been consistent.

Solomon Islands: After the Solomon Islands national election in April 2019, Manasseh Sogavare was elected to his fourth non-sequential term as PM. The new government of Solomon Islands has spoken of moving away from round log exports. The Governor of the Central Bank of Solomon Islands (CBSI) has identified agriculture and tourism as foundations for an inclusive, broad-based economy. In the forestry sector the government is promoting downstream processing and development of the local timber industry.

Tonga: In the past 2 years, Tonga has had two Ministers for Agriculture, Food and Forests and similarly two Ministers for Trade and Economic Development. In the same period the CEO for the Ministry of Trade and Economic Development has changed twice (October 2017 and December 2018) which also brought changes to policies and focus areas.

Vanuatu: In November 2018, new Director Generals were appointed for 7 Ministries in Vanuatu, including the Ministry of Trade and the Ministry of Agriculture. The Minister for Agriculture has changed twice in November 2018 and June 2019. In March 2019, the Minister of Agriculture and the Minister of Trade signed the *Le Life Lonoc Framework of Cooperation* to facilitate better collaboration between these two Ministries.

PHAMA Plus will consider these developments and engage with national governments where appropriate to help contribute to the achievement of program priorities.

3 Economic Overview

3.1 GDP growth and composition

The six PICs that PHAMA Plus works in experienced strong economic growth from 2002 until 2012, except for a pause during the global financial crisis (GFC), as shown in Figure 1. However, growth has been limited and volatile

since 2012 due to multiple factors including natural disasters, commodity price fluctuations, fiscal constraints, trade agreements, demographic changes, exchange rate fluctuations, etc.

Total **Gross Domestic Product (GDP)** of the six countries reached USD 29 billion in 2017 of which 88% came from PNG and Fiji. Since 2010 GDP growth has been strongest in Solomon Islands (during recovery from civil unrest and substantial aid flows).

Estimates suggest a continued growth of 3% in 2017 in Fiji rising from a significant dip of 0.7 in 2016 due to Cyclone Winston. Contributions from agriculture, construction, forestry and continued growth in tourist arrivals supported the growth trajectory. GDP growth in PNG was weak at 0.2% in 2018 but

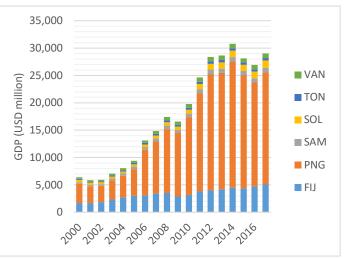


Figure 2. GDP (US million) across 6 PHAMA Plus program countries Source: Adapted from World Bank data, 2018

is expected to rise in 2019 as a result of a number of major resource projects such as the Liquefied Natural Gas (LNG) project, investments in telecommunications, etc.

Samoa, Tonga and Vanuatu experienced modest economic growth rates over the years. Among other things, declines in agriculture and fisheries and closure of a key manufacturing enterprise contributed to a slump of GDP growth in Samoa to 0.9% in 2018. Both Vanuatu and Tonga experienced drops in GDP as a result of natural shocks. Vanuatu experienced some economic recovery in 2018 through growth in services (particularly tourism) and investments in construction/infrastructure; but growth was lower than in 2017 as a result of Tropical Cyclone (TC) Hola in March 2018 and the volcanic eruption in Penama Province. Tonga experienced a drop in GDP growth between 2017 and 2018 as the economy took a significant hit from the TC Gita in February 2018.

Figure 2 shows the composition of agriculture, industry and service sectors to GDP across the six countries. Up to 75% of the population live in rural areas (with the exception of Fiji). However, the contribution of agriculture (including farming, fisheries and forestry) is mostly between 10% and 20% of GDP, reflecting subsistence farming, low productivity levels and exposure to volatile weather patterns and natural disasters in the sector compared to industry and services.

With the exception of Solomon Islands, where the contribution of agriculture is much higher relative to other countries (attributed to forestry and logging), industry and services sectors are the key contributors to GDP. Much of the growth is driven by public expenditure, mineral resource extraction and the services sector (e.g. wholesale, retail and tourism). However, agriculture continues to be an important

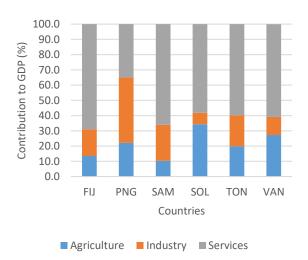


Figure 3. Sectoral Contribution to GDP (%) Source: CIA World Factbook, 2018

sector considering the need for economic diversification and the involvement of a significant proportion of the population.

3.2 Gross National Income

Gross National Income (GNI) per capita measures the aggregate income of an economy generated by its production less the amount paid for the use of factors of production, expressed in constant USA at purchasing power parity (PPP). GNI (in 2011 dollars) ranges from less than USD 2,000 in Solomon Islands to over USD 8,000 in Fiji.

While Fiji, Samoa and Tonga are classified as upper middle-income countries, others are lower middle income. Expressing GNI in purchasing power parity terms allows for differences in the purchasing power of income between countries.

VAN TON SOL SAM PNG FIJ 0 2,000 4,000 6,000 8,000 10,000 GNI per capita, 2017 (USD 2011 PPP)

Figure 4. Gross National Income per capita, 2017 Source: UNDP 2017

2016

Years

Figure 5. Inflation rates, 2018

Source: ADB 2018

2017

2018

FIJ

PNG

SAM

SOL

TON

VAN

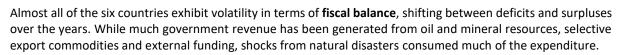
3.3 Fiscal Balance

The following graph shows the volatility in inflation across the six countries between 2013 and 2018. As of 2018, the inflation rates across all countries have been above 2% with Fiji, Vanuatu, Solomon Islands and Samoa experiencing a rise.

The inflation rate in Fiji rose to 4.1% in 2018 due to an increase in duties in products such as beverages and alcohol and a decrease in kava production.

Samoa and Solomon Islands also experienced price increases as a result of duties on selective imported goods such as nonalcoholic beverages and fuel.

Domestic food prices in Tonga were affected due to TC Gita.



8.0

6.0

4.0

2.0

0.0

-2.0

2013

per year)

Rates (%

nflation

Although Fiji's fiscal deficit fell from 2017, as a result of improvement in service industries, particularly tourism, Fiji experienced the largest fiscal deficit amongst the six countries in 2018. The fiscal deficit in PNG improved from 2016. Revenues have mostly been generated from improved tax collected from the minerals and energy sector but the deficit continued as a result of heavy debt servicing costs. Similarly, Solomon Islands has been struggling with years of deficit, but the fiscal balance improved in 2018 particularly due to increased revenue from log exports, tourism and external budget support.

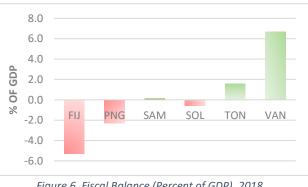


Figure 6. Fiscal Balance (Percent of GDP), 2018 Source: ADB, 2019

On the contrary, Vanuatu experienced a fiscal surplus which is tied to increases in non-tax revenue by 79.5% from 2017 (a key source being sale of honorary citizenship through the VDSP and VCP). VAT increased from 12.5% to 15% and the trade balance is supported by tourism and exports of kava and cocoa. Similarly, after several years of fiscal deficit, Samoa experienced a small surplus in 2018 which was largely achieved through external development support and tightening of government expenditure. Tonga's fiscal balance improved from

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-0.4 percent in 2017 to 1.6 % in 2018; much of the expenditure has been invested in reconstruction and rehabilitation.

3.4 Debt-Service Ratio and Exchange Rates

All PHAMA Plus countries face debt servicing challenges, mainly due to weak export revenues from which to finance principal and interest payments. These are most severe in PNG with the debt service ratio (DSR – percent of export revenue required to service debt) being above 25% in 2016 and 2017, apparently reflecting heavy borrowing to finance mining and energy investments.

Weaker national currencies make exporting more profitable but also increase the cost of imported goods. However, currently most agricultural production in the PHAMA Plus countries use limited amounts of imported products so softer currencies are a net positive for agricultural exporters and their suppliers. Figure 7 shows that most PICs saw stronger currencies between 2010 and 2013, followed by weakening since then. The PNG Kina and Fiji Dollar are both significantly weaker than a decade ago relative to the US Dollar.

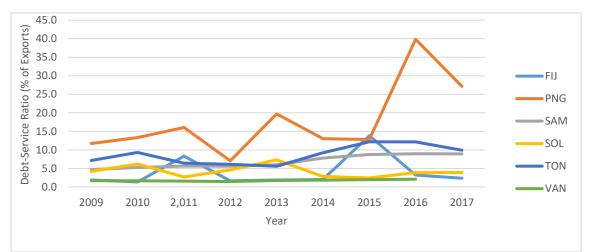


Figure 8. Debt Service Ratio, 2017 Source: World Bank 2018

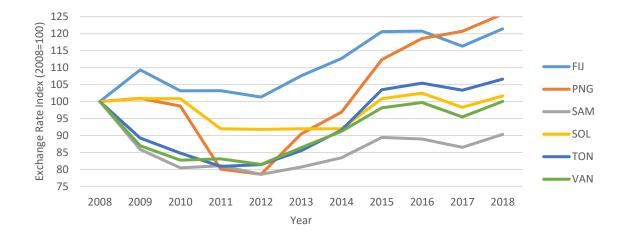


Figure 7. Exchange Rate Index, 2008-2018 Source: IMF 2019

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4 Revenue and Trade

4.1 Foreign Direct Investment, Remittances and Development Assistance

The key sources of export revenue for the Pacific Islands continue to be export commodities, mineral/energy resources, and remittances. Foreign direct investments (FDI) and development assistance also contribute to the current account balance.

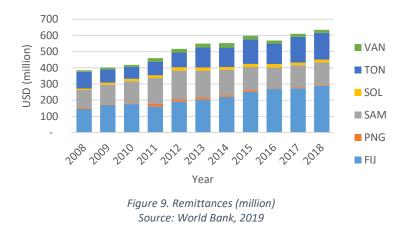
While Fiji and Vanuatu experienced strong **FDI flows**, inward investment in other countries has been limited and volatile. Fiji has attracted strong inward investment particularly in the areas of tourism, mining and construction. Investment in Fiji is also linked to its role as a regional hub including air transport and transhipment. Although Fiji's FDI flow has been strong relative to other countries in the region, it has fluctuated between 6% and 11% of GDP over the past decade.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average
FIJ	9.6	5.6	11.3	10.7	9.5	6.3	7.8	7.1	6	5.9	8.0
PNG	-0.3	3.6	0.2	-1.7	-0.3	0.1	-0.1	1	-0.2		0.3
SAM	7.1	1.8	-0.2	1.2	1.7	1.7	2.8	3.3	0.3	_	2.2
SOL	12.4	8.1	24.4	12.9	2.2	4.7	1.8	2.8	3	2.8	7.5
TON	1.7	0.1	2.4	0.9	0.4	1.5	2.4	2.7	2.2		1.6
VAN	6.2	5.3	9	7.7	7.7	7.4	1.6	4.2			6.1

Table 2. Net Inflows (Percent of GDP)

Vanuatu has a relatively strong FDI flow. An accommodative tax system, limited exchange controls and a proactive FDI promotion agency are often seen as key reasons for attracting investment. Australia is the major source of foreign investment in Vanuatu (USD 77.8 million in 2017, according to DFAT) with a focus on tourism, finance and construction, followed by Japan and New Zealand.

On the other hand, due to policy uncertainties, including foreign exchange controls, PNG struggled to sustain FDI flows, including a number of investments being put on hold (World Investment Report, 2018). However, credit to the private sector grew by 7% in 2018. In Solomon Islands the spike in FDI in 2010-11 may reflect the reconstruction investments during the post-tension recovery period.



Remittances are a key source of foreign exchange for some of the PHAMA Plus countries. Remittance flows are confined mainly to Fiji, Samoa and Tonga, although Vanuatu has growing remittance flows. Total recorded remittances increased from USD 385 million in 2008 to USD 635 million in 2018. The economic importance of remittances is amongst the highest in the world in Tonga (35% of GDP and Samoa (16% of GDP). True figures may be even higher due to un-recorded cash transfers. Although remittances are a major source of revenue for some countries, they are correlated with high emigration rates, which can also inflate domestic labour costs (more is discussed in sections below).

Aid receipts, as measured by **Official Development Assistance (ODA)** as a percentage of GNI, is another key source of resources to finance development expenditure. Table 2. *Net Inflows (Percent of GDP)* shows that ODA

is particularly high in Samoa, Solomon Islands, Tonga and Vanuatu. Solomon Islands received very high levels of ODA support during the Regional Assistance Mission to the Solomon Islands (RAMSI) post tension period and has now reverted to levels similar to Samoa, Tonga and Vanuatu.

There is an increasing amount of ODA support aimed at private sector development (PSD) which the OECD categorises as 'investment climate', 'physical infrastructure' and 'productive capacity'. As of 2013, a total of USD 105 billion was disbursed globally as PSD support but there is insufficient recent data to disaggregate how much of the support in the Pacific is geared towards private sector development.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average
FIJ	1.3	2.3	2.5	2.1	2.8	2.2	2.2	2.4	2.4	2.2
PNG	2.7	3.7	3.9	3.6	3.3	3.3	2.6	3	2.8	3.2
SAM	6.8	14.1	23.7	13.7	15.3	14.6	12.1	11.9	11.4	13.7
SOL	4 3.6	47.3	68.6	5 <mark>0</mark> .5	32.8	27.6	18.2	17	15.6	35.7
TON	7.2	11.4	18.5	21.5	16.1	17.6	18	15.5	19.7	16.2
VAN	15.2	16.9	16	11.8	13.9	11.5	12.3	25.9	16.5	15.6

Table 3. Net Inflows (Percent of GDP)

4.2 Trade

4.2.1 Trade Balance

Although there are significant differences in trade patterns across the six countries, most PHAMA Plus countries are experiencing consistent trade deficits (as can be seen from Figure 24 in Annex 1), especially Samoa and Tonga where imports are many times more than exports. Tonga has particularly been affected as a result of increased import of food stock post TC Gita. PNG and Solomon Islands experience a net surplus as a result of export earnings from mineral resources, round logs and tourism, respectively (Pacific Monitor, ADB 2019). While the graphs in Annex 1 show the trend of trade balance between 2008 and 2017, the following table shows the trade balance as a percentage of GDP in 2018.

Country	Trade Balance
Fiji	-21.5
Papua New Guinea	30.3
Samoa	-31.8
Solomon Islands	5.4
Tonga	-37.3
Vanuatu	-25.8

Table 4. Trade Balance (% of GDP), 2018 (ADB 2019)

The principal imports include manufactured items, fuel, food and beverages. Food and beverage imports by the PHAMA Plus countries in 2016 were worth USD 1.4 billion, 32% more than the total value of food and beverage exports (excluding exports of bottled water from Fiji and logs from Solomon Islands) and the trend continues in 2018 (as per central bank data of each country). The pattern of food and beverage imports is fairly consistent across the region and focuses on commodities such as cereals.

Although there has been volatility between years the total value of exports has shown a gradual uptrend for most countries as illustrated in Figure 9 and Figure 10.

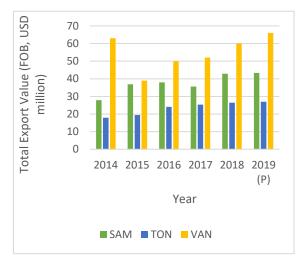


Figure 10. Total Export Value of Samoa, Tonga and Vanuatu Source: IMF 2018

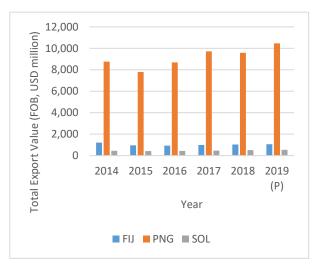
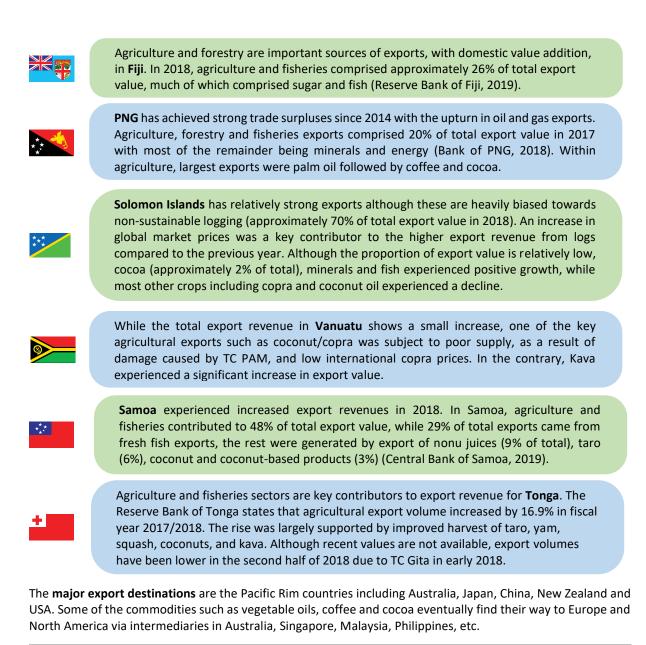


Figure 11. Total Export Value of Fiji, PNG and Solomon Islands Source: IMF 2018



	FIJI	PNG	SAM	SOL	TON	VAN
Australia						
Japan						
China						
New Zealand						
USA						
UK						
Singapore						
American Samoa						
Tokelau						
Italy						
Switzerland						
India						
Fiji						
New Caledonia						

Table 5. Major Export Destinations

Imports destined for the Pacific Islands are also derived mainly from Pacific Rim countries. China and Singapore are the main sources of manufactured goods and fuel. Australia and New Zealand are the main sources of food and beverage imports, not surprising because they are among the world's largest exporters of cereals, meat and dairy products. Here again, intra-regional trade is much smaller.

	FIJ	PNG	SAM	SOL	TON	VAN
China						
Singapore						
Australia						
New Zealand						
USA						
Malaysia						
Vietnam						
France						

Table 6. Major Sources of Import

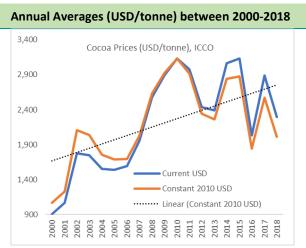
4.3 Commodity Prices

In addition to climatic variation the key agricultural export commodities from the Pacific such as coffee, cocoa, copra, coconut oil, palm oil, etc. are subject to price volatility common amongst internationally traded commodities. The PHAMA Plus countries are very small exporters in a global scale and the bulk or commodity nature of these exports make them largely "price takers". This highlights the need for Pacific Island countries to consider more specialised markets (i.e. other than bulk commodity) for these products while being realistic on whether the product specifications required by niche markets can be met, and if the returns adequately compensate for the additional effort, risk and high cost structures. For PHAMA Plus, the need to consider specialised markets is particularly relevant for involvement in the coffee (PNG), cocoa (PNG, Solomon Islands and Vanuatu) and coconut products (PNG, Solomon Islands and potentially others over time). This is reflected in the intended interventions focussing on expanding exports into differentiated or otherwise specialised markets, and addressing production and post-harvest issues to improve productivity and quality.

In real terms the USD prices of the major export commodities show an uptrend over the last 20 years, often with prices strengthening during the first half of that period and softening in the second half, and with very large fluctuations either side of the trend line as illustrated in the graphs below.

Commodity

Cocoa: Over the last decade cocoa prices have fluctuated between USD 2,000 and USD 3,500 per tonne. Over 20 years real cocoa prices have trended upwards, but in 2018 were about 25% below the trend line.



Coffee: Arabica coffee prices tripled between 2000 and 2011 but have declined since then. In real terms coffee prices in 2018 were 25% below the long-term trend line.

Coconut Products: Copra and coconut oil prices move in tandem with copra prices averaging 67% of the price of coconut oil. In the last decade copra prices have fluctuated between about USD 600 and USD 1,400 per tonne. In real terms prices for coconut oil and copra are in long-term uptrend.

Palm Oil: Palm oil prices increased to over USD 1,200 per tonne in 2010 but have delined steadliy since

Annual Averages (USD/tonne) between 2000-2018 Coffee Prices (USD/tonne)

> Current USD - Constant 2010 USD

6,000

USD prices of major Pacific export commodities 2000 - 2018

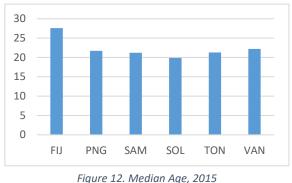
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then.

5 Demography

5.1 Population

The total population of the six PHAMA Plus countries is 10.3 million, of which almost 90% live in PNG and Fiji. Population densities are generally highest in the smaller countries such as Tonga and Samoa. Population growth is around 2.0% per annum in PNG, Solomon Islands and Vanuatu and less than 1% in Fiji, Tonga and Samoa.



This is also reflected in the median age data. Fiji's higher Source: UNDP 2018

median age reflects its declining birth rate. The other countries all have median ages between 20 and 22 years which means that they face bigger challenges of youth unemployment, especially considering the large percentage of the population resident in rural areas where job opportunities are very limited.

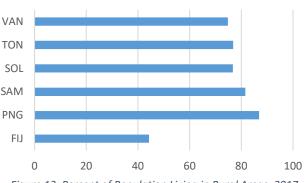


Figure 13. Percent of Population Living in Rural Areas, 2017 Source: UNDP 2018

All countries other than Fiji have over three quarters of their population living in rural areas as illustrated in Figure 14. The proportion of population living in the rural areas is highest in PNG while, Fiji has the highest rate of urbanisation. This is consistent with Fiji's more advanced stage of development as shown by GNI/capita. With the exception of Fiji and Solomon Islands, the proportion of population in rural areas in all the other countries have been fairly consistent over the past years. The majority of the rural population is dependent on agriculture for their livelihood, which has relevance to the PHAMA Plus program in relation to the key agricultural export commodities.

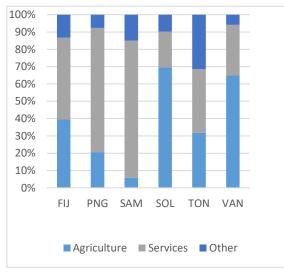


Figure 14. Share of employment, 2017 Source: UNDP 2018

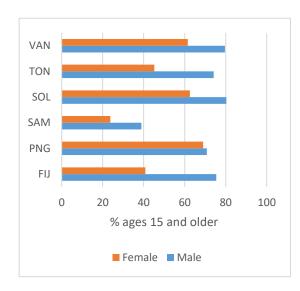


Figure 15. Labour force participation, 2017 Source: UNDP 2018

In 2017, labour force participation was the highest in Solomon Islands, followed by Vanuatu and PNG. Across all countries, female participation in the labour force is lower than male as depicted by Figure 15. The service sector is the key employment generator except in Solomon Islands and Vanuatu where the agriculture sector takes priority. However, these figures do not account for informal or unpaid family labour and subsistence production where women are significantly involved.

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5.2 Labour Force

5.3 Migration

Migration rates also have significant demographic implications. Fiji, Samoa and Tonga are experiencing consistently high rates of out-migration with large diaspora communities. As of 2015, (in the absence of later data) PNG and Vanuatu have small net inward migration rates.

High emigration rates create opportunities for export of traditional Pacific foods to diaspora communities. However, it also limits agricultural production potential in rural areas where large numbers of the most productive

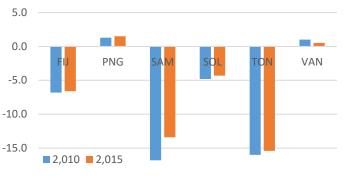


Figure 16. Net Migration Rate (migrants per 1000 people) Source: UNDP 2018

individuals are emigrating putting pressure on labour availability and cost. A shrinking rural workforce and increasing agricultural wages suggest a need to look for labour/cost-saving options such as forms of mechanisation to maintain competitiveness.

Seasonal migration schemes hosted by Australia and New Zealand are popular among younger people and therefore affect the availability of labour in rural areas of some PHAMA Plus countries. The New Zealand Recognised Seasonal Employers (RSE) Scheme was established in 2007 and has grown steadily to reach 11,078 arrivals in 2017-18. In 2017-18 84% of participants came from PHAMA Plus countries, predominantly from Vanuatu, Samoa and Tonga. The numbers are especially significant for Tonga and Vanuatu with participation rates of 18 and 16 persons per 1,000 respectively and Samoa with 10 persons per 1,000. Australia hosts two schemes for Pacific workers – a seasonal scheme (up to nine months per year) and a three-year scheme for Pacific Island workers which was launched in June 2018. The number of participants in these schemes is unclear, but general immigration statistics show that there are consistently high rates of immigration from Fiji and Samoa.

Based on analysis³ done to-date and anecdotal commentary, the seasonal migration schemes are significantly influencing the primary sectors (e.g. availability of labour and skills), incomes and investment, and social dynamics more broadly. Further consideration of these schemes and their impacts will be required for the design and implementation of PHAMA Plus interventions especially where the availability of labour and skills has already been identified as an issue (e.g. productivity of root crops in Fiji, Samoa and Tonga; all sectors in countries with relatively high levels of participation in the schemes such as Vanuatu). This is intended to be done through greater collaboration and information sharing with other programs (e.g. Pacific Labour Facility) and incountry stakeholders.

6 Business environment and compliance in relation to trade

6.1 Business processes and cost of trade

The World Bank's Ease of Doing Business Index ranks 190 countries in terms of a composite index assessing various attributes of the business enabling environment. As per the data for 2018 shown in Table 7. Ranking of countries in relation to different categories in 2018, New Zealand is ranked No 1 (best) in the world and Australia 18th. Fiji, Samoa, Tonga and Vanuatu are in the mid-range of countries. Solomon Islands and PNG are somewhat lower in the rankings. Countries above (i.e. worse than) the mid-range (95th) for different elements of the rankings include the following (as detailed in the table below):

- Starting a Business: Fiji, PNG and Vanuatu.
- Dealing with Construction Permits: Fiji, PNG and Vanuatu
- Registering Property: PNG, Solomon Islands and Tonga
- Getting Credit: Fiji, Samoa and Solmon Islands

³ For example: World Bank. 2018. Maximizing the Development Impacts from Temporary Migration: Recommendations for Australia's Seasonal Worker Programme. Washington, DC: World Bank; The Pacific Labour Scheme and Transnational Family Life: Policy Brief (2018). <u>https://www.sprc.unsw.edu.au/media/SPRCFile/PLS Policy Brief FINAL June 2018.pdf</u>

²¹ Pacific Horticultural and Agricultural Market Access Plus (PHAMA Plus) Program Pacific Export Context Analysis – August 2019

- Trading Across Borders: PNG, Samoa, Solomon Islands, Vanuatu and Australia
- Enforcing contracts: Fiji, PNG, Solomon Islands and Vanuatu

Rank out of 190 countries	FIJ	PNG	SAM	SOL	TON	VAN	AUS	NZE
Ease of doing business	101	108	90	115	91	94	18	1
Starting a business	161	143	41	98	58	132	1	7
Dealing with construction permits	102	124	90	53	16	147	9	6
Getting electricity	93	72	65	92	90	107	52	45
Registering property	57	121	65	154	163	79	50	1
Getting credit	161	44	112	99	44	32	8	1
Protecting minority investors	99	89	83	110	140	110	64	2
Paying taxes	98	111	74	38	100	58	26	10
Trading across borders	79	140	151	160	94	147	103	60
Enforcing contracts	97	173	86	156	94	136	5	21
Resolving insolvency	96	142	140	144	137	98	20	31

Table 7. Ranking of countries in relation to different categories in 2018 Source: World Bank, 2019

The cost of trading across borders is a key issue for Pacific countries and particularly influences export competitiveness. Over the past few years, World Bank has developed a metric for measuring trade cost between countries. This is used to show the trade performance and competitiveness in relation to cost. The metric termed as 'ad valorem' which is the bilateral trade cost expressed in percentage of the value of goods. It includes international shipping and logistics costs, tariff and non-tariff costs, including indirect and direct costs associated with trade procedures and regulations and costs from differences in language, culture and currencies (ESCAP 2015).

The high cost of trade is indicated by the ESCAP-World Bank Trade Cost Database (2016) in Table 8. Intra and Extra-Regional Trade Costs (2011-2016) expressed as percentage. The numbers are expressed in percentages. It illustrates that the cost of trade is significantly higher for Pacific Island countries. Percentage changes in trade costs between 2005-2010 and 2011-2016 (shown in brackets) indicate that cost structures are improving in most cases; yet it is very high relative to other countries and even within the same region.

	ASEAN-4	East Asia-3	North & Central Asia-4	Pacific Islands	SAARC-4	AUS-NZL	EU-3
ASEAN-4							
(Indonesia, Malaysia, Philippines,							
Thailand)	76.2						
East Asia - 3							
(China, Japan, Republic of Korea)	77.6	53.3					
North & Central Asia- 4							
(Georgia, Kazakhstan, Kyrgyzstan, Russia)	342.2	170.1	115.4				
	167.6	166.1	367.4	127.5			
Pacific Islands (Fiji and PNG)	(-9.6)	(-4.9)	(24.8)	(-7.3)			
SAARC - 4							
(Bangladesh, India, Pakistan, Sri Lanka)	131.6	123.3	304	289.5	119.4		
AUS-NZL	101.2	86.8	357.2	83.8	136.7	54.1	
EU- 3 (Germany, France, UK)	105.1	84.7	149.2	197.7	113.6	107.4	42.1
USA	86.7	64.3	176	159.8	113.1	100.9	66.9

 Table 8. Intra and Extra-Regional Trade Costs (2011-2016) expressed as percentage
 Source: Adapted from the Asia-Pacific Trade and Investment Report, 2018

The World Trade and Investment Report (2019) suggest that such costs can be reduced in a number of ways including, modernising ports, upgrading logistics systems, simplifying customs procedures and introducing automated clearances. The recently completed upgrading of the Lapetasi Wharf in Port Vila, Vanuatu is an example of this in practice, where the costs of moving a TEU has decreased by around 15%.

The cost of exporting shown in figure 18 reveals large differences between countries with Samoa being the worst and Tonga the best. In Samoa its documentation and border compliance costs for a 15-tonne shipping container amount to almost USD 1,600 (excluding land and sea freight). In Tonga the same costs USD 270. Australia and New Zealand also have high import costs (USD 639 and 447 per container respectively) compared to Singapore (USD 260).

Data on shipping costs (containerised or in other formats) within the Pacific region that allows comparison of different routes and formats (e.g. 20 or 40 foot container, refrigerated containers, bulk) over time is not readily available from public or user-pays sources. Various stand-alone surveys or other forms of manual data collation are done but significant further effort and cooperation would be required to more routinely capture and make available reliable data.

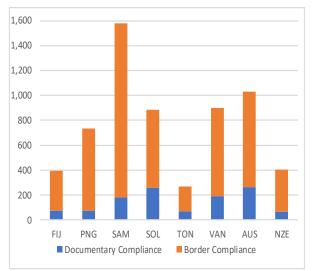


Figure 17. Cost (USD) of exporting a 15-tonne container Source: World Bank Ease of Doing Business Index

In addition to the World Bank's Ease of Doing Business Index, another relevant reference for considering the trade context in the Pacific region is the *Export Dynamics in the Pacific Islands* reports prepared every two years by Pacific Trade Invest (see Annex 2 for extracts from the 2018 edition). These reports provide more detailed analysis within the Pacific region including perceptions on barriers to export (e.g. finance, transport & fuel costs, capacity and labour constraints), assistance needed to increase exports (e.g. more competitive transport, introductions to customers, marketing, grants and trade finance) and awareness of trade agreements (less than 60%).

6.2 Biosecurity compliance

This overview of major developments or events relating to biosecurity and trade is based on information gathered by PHAMA Plus, the reporting provided through the Pacific Plant Protection Organisation (PPPO) and the publicly accessible online interface of the OIE (World Organisation for Animal Health) World Animal Health Information System (WAHIS).

Across the Pacific, limited capacity to comply with biosecurity and sanitary and phytosanitary (SPS) issues means that producers and traders are unable to take advantage of market access opportunities, resulting in reduced or lost export revenues. Many PICs continue to face major SPS capacity gaps and challenges. These challenges include:

- Inadequate capacity to implement food safety management systems based on international standards to
 ensure the safety and quality of exports many PICs either do not have food standards or lack the
 resources to implement and monitor them. PHAMA Plus continues to investigate cost effective options for
 developing more sustainable and efficient food safety management systems through local service
 providers.
- Reoccurring non-compliance issues for fresh produce exports to importing countries. Fresh produce
 exports to Australia and New Zealand are regularly found to be non-compliant due to suspected pests and
 diseases of quarantine concern, despite having a phytosanitary certificate issued by the exporting
 authority to certify that the consignment has been inspected and found free from pests and diseases of
 quarantine concern.
 - The program is working with New Zealand Ministry of Primary Industries (NZ MPI), the Australian Department of Agriculture (DoA) (formerly Department of Agriculture and Water Resources) and the Australian Centre for International Agricultural Research (ACIAR) to establish a pilot program with Biosecurity Authority Fiji to improve certification standards for fresh produce exports to Australia and New Zealand.
 - PHAMA Plus will collaborate with the ACIAR Pacific Plant Biosecurity Partnership program which is developing a regional collaborative platform for plant biosecurity officers to build upon existing skills, increase inter country collaboration, improve export compliance and increase the ability to
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detect and respond to exotic pests and diseases. The collaboration will be through shared monitoring and evaluation resources.

- The ACIAR program is monitoring a trial of the web-based *Generic ePhyto National System (GeNS)* to produce, send and retrieve certification documentation required for the trade in plant-based products (*Phytosanitary Certificates* and associated documents *ePhytos*), currently underway in Samoa. The aim being to facilitate trade through having a web-based system which allows countries without a national system or with limited information technology to exchange ePhytos with their trading partners.
- The inability to detect and respond to exotic pests such as coffee berry borer (detected in PNG in 2017) and the continued spread of Coconut Rhinoceros Beetle-Guam variety (CRB-G) (detected in PNG in 2009, Palau in 2014 and the Solomon Islands in 2015) threatens food security and economic livelihoods, as well as the unique natural environment and ecosystems of the Pacific.
 - PHAMA Plus is working with the Solomon Islands quarantine authority, the Pacific Community (SPC) and consultants to assist with the response to CRB-G management within the Solomon Islands and will investigate methods to limit the spread to nearby countries.
 - PHAMA Plus is also now working with Biosecurity Vanuatu and partners to support the response to the recently detected CRB (not Guam variety) incursion in Vanuatu, including facilitation of information transfer from Solomon Islands and leveraging on private sector support.
- Limited SPS negotiating capacity and scientific capacity, which results in long delays in the processing of market access requests for fresh agricultural products by importing countries. With bilateral negotiations between PICs and more developed country export destinations, there is limited capacity to better understand importing country requirements and negotiate improvements to existing pathways.
 - PHAMA Plus will seek to reinvigorate and strengthen regional bilateral discussions (with appropriate technical support) to facilitate increased trade.
- Countries recognise the importance of managing biosecurity risks (e.g. soil, snails, insects) associated with the movement of sea containers within and from the region while also facilitating trade.
 - Consideration is to be given on how to strengthen the use of the Sea Container Hygiene System (SCHS) and its principles across the Pacific region with initial workshops held in Fiji during May 2019.
- Not only do PICs have difficulty in accessing new markets but trade in a range of products has stagnated and in some cases declined due to the imposition of more onerous market access protocols and standards for products that were historically traded with relative ease.
 - PHAMA Plus is working to identify all current market access protocols that exist for PHAMA Plus countries to Australia and NZ (first report of the *Review of Existing Access for Horticultural Product, Fisheries and Sawn Timber* now under consultation with stakeholders with further work to progress during 2019/20). Once all protocols have been identified the program will work with exporters and governments to identify which of the protocols are currently used, identify reasons why others are not being used and hopefully assist to implement changes to activate some of the unused protocols.

7 Effects of climate and natural disasters on export

The vulnerability of the PHAMA Plus countries to climate change is well understood and calls for purposeful adaptation and mitigation measures for the foreseeable future. The variability of climate around these medium/long-term climate trends also presents challenges, and there is the ever-present risk of natural disasters calling for stronger disaster preparation and recovery measures.

Climate variability in the Southern Pacific is strongly influenced by the El Niño Southern Oscillation (ENSO), a cyclical phenomenon which can be measured and forecast. El Niño events occur when the Southern Oscillation Index (SOI) is negative for three months or more. These events are usually (but not always) associated with dry years or droughts in the Southern Hemisphere. There have been two El Niño events, one prolonged, in the last decade which is around the long-term average. This included a period from mid-2009 to mid-2010 and an intense two-year El Niño from mid-2014 to mid-2016 which caused severe drought in many Pacific countries. The ENSO Index currently suggests the possibility of a new El Niño developing later in 2019.

Apart from droughts, which will continue to occur from time to time, the Pacific Islands are amongst the most vulnerable to other natural disasters including hurricanes/cyclones, floods, earthquakes, volcanic eruptions, tsunamis, etc. Moreover, there is evidence that the frequency and severity of such events is on the increase. Experience has shown that such disasters can disrupt production and exports of many agricultural commodities, sometimes taking years to recover. All the PHAMA Plus countries are vulnerable to natural disasters, especially Fiji, PNG and Vanuatu. Eight tropical cyclones formed in the 2018-19 cyclone season (1 November to 30 April) which is one below the long-term average; affecting Fiji, PNG, Samoa, Solomon Islands, Tonga and Vanuatu (as well as Australia, Nauru, New Caledonia, Tuvalu and Niue. Recovery efforts continue in PNG from the magnitude 7.5 earthquake that struck the Southern Highlands Province in February 2018 and parts of Vanuatu (e.g. Ambrym) continue to be affected by volcanic activity and associated displacement of people.

Median economic damage from natural disasters ranges from 1% to 20% of GDP but can be much higher as can be seen from Table 9. Probability *and Impact of Natural Disasters* below. Storms (hurricanes, cyclones) are the most damaging in economic terms but droughts affect the most people as has been experienced by the countries before (refer to table 10).

	FIJ	PNG	SAM	SOL	TON	VAN
Likehood a/	70.3	81.1	27.0	51.4	29.7	5 <mark>6.8</mark>
Median damage (% of GDP)	1.3	0.1	21.0	8.0	4.9	18.0
Maximum damage (% of GDP)	20.2	1.3	161.8	14.0	28.2	131.2
Median population affected (%)	0.8	0.4	1.6	1.1	3.4	5.3
Maximum population affected (%)	39.7	32.7	6.7	53.0	100.0	87.0

a/ Probability of at least one disaster in a given year

Table 9. Probability and Impact of Natural Disasters Source: Lee D, Zhang H and Nguyen C (2018)

	Estimated		Population		
	Damage		Affected		
	(USD m)		(000)		
Storm	6	<mark>2.</mark> 5		36.6	
Drought	45.0			290.9	
Flood	2	6.8		27.2	
Earthquake	2	1.0		3.9	
Others a/	7	0.8		10	

Table 10. Impact of Pacific Islands Natural Disasters by Type (1980-2016) Source: Lee D, Zhang H and Nguyen C (2018)

Annex 1: Key Regional Trade Agreements and Organisations

Melanesian Spearhead Group Trade Agreement (MSG TA)Free trade agreement between Fiji, PNG, Vanuatu and Solomon Islands (New Caledonia is an observer). Established in 1993. Due to the size of these economies the majority of intra-regional trade is under MSG TA rather than PICTA.Pacific Agreement on Closer Economic Relations Plus Agreement (PACER Plus)Regional Free Trade Agreement covering goods, services and investment. Negotiations concluded in 2017 will come into force when 8 signatories ratify the agreement.Pacific Islands Trade Agreement (PICTA)Establishes a free trade area (goods only) among the 14 Forum Island Countries. Came into force in 2003.European Union Economic Partnership Agreement (EPA) and Cotonou Partnership AgreementNegotiations on economic partnership agreements between PICs and the EU commenced in 2018 in preparation for the expiry of the Cotonou Partnership Agreement in 2002. The Cotonou Partnership Agreement began in 2008 and outlinines relations between the ACP countries in Africa, the Caribbean and the Pacific (including all six countries where PHAMA Plus works) and the EU. Mainly financed by the European Development Fund (EDF) which has contributed significant funds both nationally and regionally.South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA)Nonreciprocal trade agreement under which Australia and New Zealand offer duty free or concessional access to most products originating in Forum Island Countries. SPARTECA came into effect in 1981		
Economic Relations Plus Agreement (PACER Plus)Negotiations concluded in 2017 will come into force when 8 signatories ratify the agreement.Pacific Islands Trade Agreement (PICTA)Establishes a free trade area (goods only) among the 14 Forum Island Countries. Came into force in 2003.European Union Economic Partnership Agreement (EPA) and Cotonou Partnership AgreementNegotiations on economic partnership agreements between PICs and the EU commenced in 2018 in preparation for the expiry of the Cotonou Partnership Agreement in 2008 and outlinines relations between the ACP countries in Africa, the Caribbean and the Pacific (including all six countries where PHAMA Plus works) and the EU. Mainly financed by the European Development Fund (EDF) which has contributed significant funds both nationally and regionally.South Pacific Regional Trade and Economic CooperationNonreciprocal trade agreement under which Australia and New Zealand offer duty free or concessional access to most products originating in Forum	· · ·	(New Caledonia is an observer). Established in 1993. Due to the size of these economies the majority of intra-regional trade is under MSG TA rather than
Agreement (PICTA)Countries. Came into force in 2003.European Union Economic Partnership Agreement (EPA) and Cotonou Partnership AgreementNegotiations on economic partnership agreements between PICs and the EU commenced in 2018 in preparation for the expiry of the Cotonou Partnership Agreement in 2020. The Cotonou Partnership Agreement began in 2008 and outlinines relations between the ACP countries in Africa, the Caribbean and the Pacific (including all six countries where PHAMA Plus works) and the EU. Mainly financed by the European Development Fund (EDF) which has contributed significant funds both nationally and regionally.South Pacific Regional Trade and Economic CooperationNonreciprocal trade agreement under which Australia and New Zealand offer duty free or concessional access to most products originating in Forum	Economic Relations Plus	Negotiations concluded in 2017 will come into force when 8 signatories
Partnership Agreement (EPA) and Cotonou Partnership Agreementcommenced in 2018 in preparation for the expiry of the Cotonou Partnership Agreement in 2020. The Cotonou Partnership Agreement began in 2008 and outlinines relations between the ACP countries in Africa, the Caribbean and the Pacific (including all six countries where PHAMA Plus works) and the EU. Mainly financed by the European Development Fund (EDF) which has contributed significant funds both nationally and regionally.South Pacific Regional Trade and Economic CooperationNonreciprocal trade agreement under which Australia and New Zealand offer duty free or concessional access to most products originating in Forum		
and Economic Cooperation offer duty free or concessional access to most products originating in Forum	Partnership Agreement (EPA) and Cotonou Partnership	commenced in 2018 in preparation for the expiry of the Cotonou Partnership Agreement in 2020. The Cotonou Partnership Agreement began in 2008 and outlinines relations between the ACP countries in Africa, the Caribbean and the Pacific (including all six countries where PHAMA Plus works) and the EU. Mainly financed by the European Development Fund (EDF) which has contributed significant funds both nationally and regionally.
	South Pacific Regional Trade	
Agreement (SPARTECA) Island Countries. SPARTECA came into effect in 1981	and Economic Cooperation	offer duty free or concessional access to most products originating in Forum
	Agreement (SPARTECA)	Island Countries. SPARTECA came into effect in 1981

Regional Trade Agreements

Table 11. Key regional trade agreements

Regional Organisations

Pacific Islands Forum (PIF)	Headquarters: Secretariat (PIFS) Suva (Fiji)
Number of Member States: 18	www.forumsec.org

• Founded in 1971 as the region's overarching political and economic policy organisation.

- The Forum's Vision is for a region of peace, harmony, security, social inclusion and prosperity, so that all Pacific people can lead free, healthy, and productive lives.
- The Forum works to achieve this by fostering cooperation between governments, collaboration with international agencies, and by representing the interests of its members.
- PIFS acts as Secretariat and permanent chair of the Council of Regional Organisations in the Pacific ٠ (CROP)

Secretariat of the Pacific Community (SPC)	Headquarters: Noumea, (New Caledonia),
	Secretariat in Suva (Fiji)
Number of Member States: 27	www.spc.int
SPC is a regional technical and development o	organisation.

- SPC implements programs to develop the technical, professional, scientific, research, planning and management capability of Pacific island people.
- The agency has three main divisions: land, marine and social.

	(Solomon Islands)
Number of Member States: 17 www.ffa.int/	

- FFA was established to help countries sustainably manage their fishery resources that fall within their 200-mile Exclusive Economic Zones (EEZs).
- FFA is an advisory body providing expertise, technical assistance and other support to its members who make sovereign decisions about their tuna resources and participate in regional decision making on tuna management through agencies such as the Western and Central Pacific Fisheries Commission (WCPFC).
- Since 1979, FFA has facilitated regional cooperation so that all Pacific countries benefit from the sustainable use of tuna worth over \$3 billion a year and important for many Pacific people's livelihoods.

The South Pacific Regional Environment Programme (SPREP)	Headquarters: Apia (Samoa)
Number of Member States: 21	www.sprep.org
 SPREP's charter is to strengthen the canacity of 	Pacific island members to plan and manage their own

- SPREP's charter is to strengthen the capacity of Pacific island members to plan and manage their own national environmental programs and to enhance regional cooperation to deal more effectively with issues that are transboundary in nature or which require interventions at the global level.
- The work of the organisation covers nature conservation, pollution prevention, climate change and economic development.

South Pacific Tourism Organisation (SPTO)	Headquarters: Suva (Fiji)
Number of Member States: 14	www.soutpacificislands.travel

- SPTO is mandated to promote the Pacific Islands as a tourist destination.
- Established in 1983 as the Tourism Council of the South Pacific, SPTO is the mandated organisation representing Tourism in the region.
- SPTO's objectives, through tourism are: strengthening regional cooperation; contributing to sustainable development; promoting global awareness of the region; enhancing the resources of the region; and promoting the cultural diversity of the region.

University of the South Pacific (USP)	Headquarters: Suva (Fiji)		
Number of Member States: 12 www.usp.ac.fj			
USP is the leading provider of tertiary education in the Pacific region and an international centre of			

- Ose is the leading provider of tertiary education in the Pacific region and an international centre of excellence for teaching, research, consulting and training on all aspects of pacific culture, environment and human resource development needs.
- Three faculties: Faculty of Arts, Law and Education; the Faculty of Business and Economics; and the Faculty of Science, Technology and Environment.
- Each faculty comprises of a number of schools which offer a wide range of academic programs and courses at the undergraduate and postgraduate levels.

Membership of Council of Regional Organisations of the Pacific (CROP) Agencies

Organisation \rightarrow	SPC	SPREP	SPTO	PIF	FFA	USP	No of
	PHA	AMA Plus Cou	Intries				Orgs
Fiji							6
PNG							5
Samoa							6
Solomon Islands							6
Tonga							6
Vanuatu							6
		Other PICs					
American Samoa							3
Cook Islands							6
FSM							5
French Polynesia							4
Guam							2
Kiribati							6
RMI							6
Nauru							6
New Caledonia							4
Niue							6
Northern Marianas							2
Palau							4
Pitcairn Islands							1
Tokelau							4
Tuvalu							6
Wallis and Futuna							3
Total PIC Members	22	21	17	16	15	12	
	N	on-PIC Meml	bers				
Australia							4
China							1
France							2
New Zealand							4
Timor Leste							1
UK							1
USA							2
Total Non-PIC Members	4	5	2	2	2	-	
Total Members	26	26	19	18	17	12	

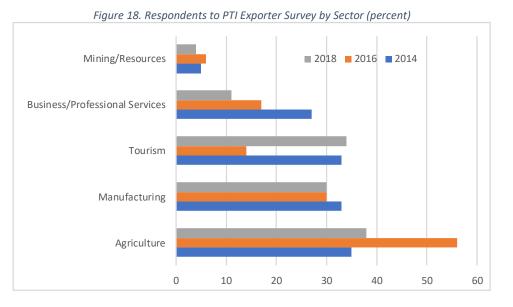
FFA	Forum Fisheries Agency
SPC	Secretariat of the Pacific Community
SPREP	South Pacific Regional Environmental Programme
SPTO	South Pacific Tourism Organisation
USP	University of the South Pacific
PIF	Pacific Islands Forum

A number of other CROP agencies exist which are not as relevant to PHAMA Plus including: Fiji School of Medicine, Pacific Aviation Safety Office, Pacific Islands Development Programme, and Pacific Power Association.

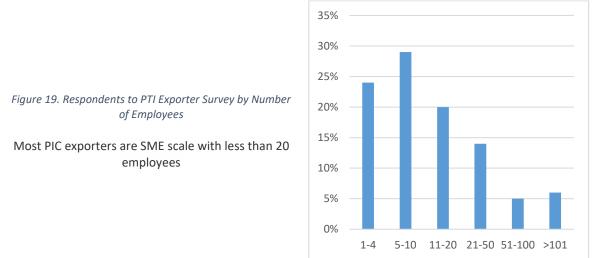
Annex 2: Extracts from Pacific Islands Export Survey 2018 – Export Dynamics in the Pacific Islands

As sourced from: https://www.pacifictradeinvest.com/media/1296/full-report-pti-australia-pacific-islands-export-survey-2018_web2.pdf

PTI Exporter Survey 2018



The number of PIC agricultural exporters exceeds those in any other sector.



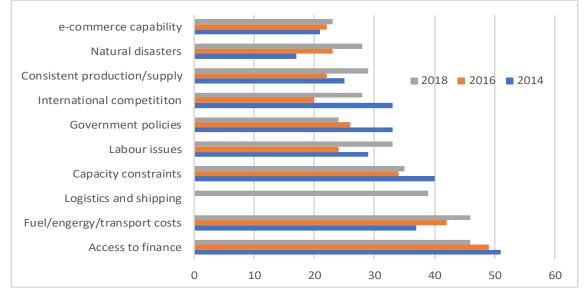


Figure 20. Top ten Barriers to Exporting (percent of exporters)

The leading barriers to exporting include access to finance, transport costs, logistics and capacity constraints.

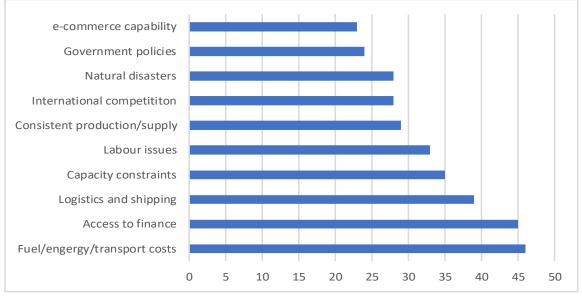


Figure 21. Top ten Barriers to Exporting - Agricultural Exporters (percent of exporters)

Among agricultural exporters the principal barriers are much the same as for exporters in general.

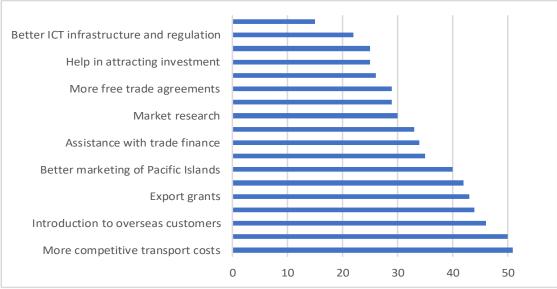


Figure 22. Assistance Needed to Increase Exports - Agricultural Exporters (percent of exporters)

The nature of assistance sought by exporters provides useful guidance for PHAMA Plus.

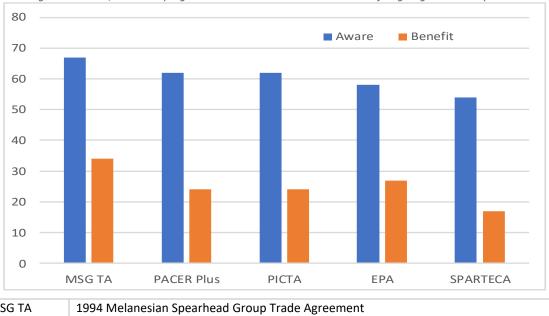


Figure 23. Trade/Partnership Agreements: Percent Awareness and Benefiting - Agricultural Exporters

MSG TA	1994 Melanesian Spearhead Group Trade Agreement
PACER plus	2017 Pacific Agreement on Closer Economic Relations
ΡΙCTΑ	Pacific Islands Trade Agreement
EPA	European Union Economic Partnership Agreement
SPARTECA	1981 South Pacific Regional Trade and Economic Cooperation Agreement

Less than 60 of PIC exporters are aware of the major trade agreements and only 20-30 percent consider them to be beneficial.



Annex 3: Trade Balance and Value of Exports

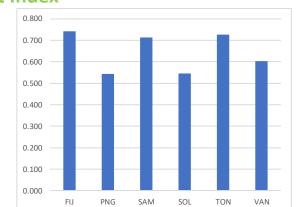
Countries	2014	2015	2016	2017	2018	2019 (P)
FIJ	1,206	966	923	987	1,029	1,070
PNG	8,758	7,800	8,683	9,710	9,576	10,460
SAM	28	37	38	36	43	43
SOL	455	420	432	462	508	537
TON	18	19	24	25	26	27
VAN	63	39	50	52	60	66

Table 12. Value of Exports (FOB, USD million)

Annex 4: Human Development Index

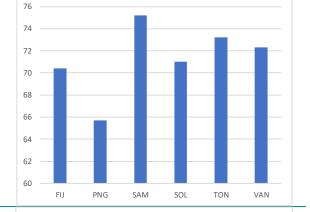
Human Development Index, 2017

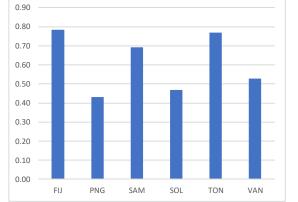
- Fiji, Samoa and Tong are classified as high human development countries.
- Vanuatu is classified as a medium human development country.
- PNG and Vanuatu are at the top of the low human development range.



Life Expectancy at Birth, 2017 (years)

- Life expectancy in PNG is well below the other Pacific countries.
- All the countries other than Samoa have life expectancies at least ten years less than the most developed countries.
- In all Pacific countries life expectancy has increased over the last decade.





(based on average years of schooling)

Education Index, 2017

• Fiji, Samoa and Tonga rank above PNG, Solomon Islands and Vanuatu in education.

Poverty Rates (Percent)

- Data on poverty rates are sparse and incomplete.
- Extreme poverty (income < \$1.90/day) is rare except in PNG and Solomon Islands.
 Somewhat higher poverty rates are estimated relative to national poverty lines.

	FIJ	PNG	SAM	SOL	TON	VAN
< USD 1.90/day (2011 PPP)	0.2	14.8	0.1	6.8	0.2	3.2
Year	2013	2009	2013	2013	2015	2010
National Poverty Line	9.9	15.7	No data	3.2	No data	No data
Year	2008	2009		2013		

Figure 25. Human Index Information Source: UNDP Human Development Report

Annex 5: Data Sources

References	Website				
World Bank WDI Database	https://datacatalog.worldbank.org/dataset/world-development-indicators				
CIA World Factbook	https://www.cia.gov/library/publications/the-world-factbook/				
UNDP Human Development	http://hdr.undp.org/en/data#				
Report					
EIU Quarterly Reports April	https://www.eiu.com/home.aspx				
2019					
Norld Bank http://www.worldbank.org/en/topic/migrationremittancesdiasporaise					
	ation-remittances-data				
IMF Database	https://data.imf.org/?sk=4C514D48-B6BA-49ED-8AB9-52B0C1A0179B				
EIU Quarterly Reports April	https://www.eiu.com/home.aspx				
2019					
2015					
UNDP Human Development	http://hdr.undp.org/en/data#				
Report					
NZ RSE Arrivals	https://www.immigration.govt.nz/documents/statistics/statistics-rse-arrivals.pdf				
Australian Net Migration by	http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3412.02016-				
country of birth	17?OpenDocument				
IMF Database	https://data.imf.org/?sk=4C514D48-B6BA-49ED-8AB9-52B0C1A0179B				
FAO Agrostat	http://www.fao.org/faostat/en/				
-					
EIU Quarterly Reports April	https://www.eiu.com/home.aspx				
2019					
2015					
World Bank Doing Business	http://www.doingbusiness.org/en/data				
Index Mundi	https://www.indexmundi.com/commodities				
IMF World Economic	https://www.imf.org/en/Publications/WEO/Issues/2019/03/28/world-economic-				
Outlook	outlook-april-2019				
Freightos Baltic Index	https://fbx.freightos.com/				
Australian Bureau of	http://www.bom.gov.au/climate/influences/timeline/				
Meteorology	https://www.pacificmet.net/products-and-services/climate-bulletin (issued 6 May				
Climate and Oceans Support	2019)				
Program in the Pacific					
(COSPPac) Bulletin					
IMF Working Paper	Lee D, Zhang H and Nguyen C (2018). The Economic Impact of Natural Disasters in				
Climate and Oceans Support	Pacific Island Countries: Adaptation and Preparedness. IMF Working Paper 18/108				
Program in the Pacific	https://www.pacificmet.net/products-and-services/climate-bulletin (issued 6 May				
(COSPPac) Bulletin	2019)				
ReliefWeb	https://reliefweb.int/				
Biosecurity narrative	PHAMA Plus team member expertise				
	Pacific Plant Protection Executive Committee – minutes of March 2019 meeting				
	OIE World Animal Health Information Service (WAHIS) interface:				

Asia-Pacific Trade and	https://www.unescap.org/sites/default/files/publications/APTIR%202018 4Jan19 0.
Investment Report 2018	<u>pdf</u>
Foreign Trade Report,	https://www.cbs.gov.ws/index.php/statistics/foreign-trade-report/
Central Bank of Samoa	
Bank of Papua New Guinea	https://www.bankpng.gov.pg/statistics/quarterly-economic-bulletin-statistical-
	tables/
Reserve Bank of Fiji	https://www.rbf.gov.fj/Statistics/e-GDDS
Basic Statistics 2019, ADB	https://www.adb.org/sites/default/files/publication/499221/basic-statistics-
	<u>2019.pdf</u>
World Investment Report,	https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf
2018, UNCTAD	
ESCAP-World Bank Trade	https://www.unescap.org/sites/default/files/01-ESCAP-
Cost Database – A Brief	WB%20Trade%20Cost%20database-Yann%20Duval.pdf
Introduction, 2015	
Pacific Islands Export Survey	https://www.pacifictradeinvest.com/media/1296/full-report-pti-australia-pacific-
2018 – Export Dynamics in	islands-export-survey-2018 web2.pdf
the Pacific Islands	