

Analysing the Impact of Trade Agreements on National Food Environments: The Case of Vanuatu

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Abstract

Background: The liberalisation of international trade and foreign direct investment through trade agreements have been influential in the changing structure and nature of food systems. They have also contributed to the increased availability of foods associated with the nutrition transition globally. Despite the large body of literature on trade liberalisation and the ways in which trade agreements can affect food systems, the ways in which trade agreements can affect national food environments has been little studied. There is a need for more systematic and objective monitoring of the impacts of trade agreements to better understand its links and impacts on the influx of food imports high in fat, sugar and salt entering a country as this has direct impacts on the availability, nutritional quality and accessibility of foods in national food environments. Using the INFORMAS trade monitoring framework, a systematic analysis of Vanuatu's membership to the WTO under the framework's four domains was undertaken.

Results: The baseline results presented in this paper suggest a strong association between Vanuatu's trade liberalisation and the increased availability of the diverse range of imported products: fats and oils, meat and canned fish, processed dairy products, energy-dense beverages, and processed and packaged foods.

Conclusions: The analysis presented in this paper suggest that Vanuatu's commitments to WTO Agreements do play an important role in shaping their food environment by increasing both healthy and less healthy imports. For all Pacific Island countries, the systematic and objective monitoring of the impacts of these agreements on national food environments remains a significant challenge. There is also minimal data to inform the development of effective, coherent trade and health policy approaches to promote healthier food environments that can contribute to reducing the burden of obesity and related NCDs. Nevertheless, there is scope when developing trade policies and agreements to consider NCDs as part of broader social impact assessment studies. These can be used to identify potential modifications that can be made to trade policies and agreements. These modifications can regulate food environments and reduce the impact of NCDs or ensure that mitigating complementary actions are taken.

Background

Food environments globally and in Vanuatu are dominated by highly accessible and heavily promoted foods that are high in trans-fat, salt and added sugar (1–3). Food environments shape people's food acquisition and consumption within the wider food system and are inextricably linked to noncommunicable diseases (NCDs) (4). Diet-risk factors are a major driver of preventable deaths due to cardiovascular disease – the main killer, accounting for nearly half of all NCD deaths globally (5, 6). A wide range of policies shape food environments, including government policies covering food composition, labelling, marketing, availability and price, across a broad range of sectors: health, agriculture, education and trade. Trade policies regarding liberalisation, export promotion, import substitute measures, protection of domestic industries and support for foreign direct investment have also contributed to the increased availability of foods associated with the nutrition transition.

Throughout the Pacific region, there is some evidence of a correlation between the introduction of free trade/trade agreements and the increasing availability/consumption of foods high in trans-fat, sugar and salt (2, 7, 8). Three key trade-related changes contributing to this are: (i) the opening of domestic markets to international food trade; (ii) increased entry of transnational food companies and greater foreign direct investment; and (iii) intensified global food marketing and promotion (3, 9, 10). Major policy changes are needed to create environments that encourage healthy food consumption. However, the government of Vanuatu remains challenged in this area, as policy processes continue to lack cohesion across multiple sectors and the prioritisation of economic and trade interests above public health (11).

The Pacific NCD roadmap, developed at the request of Pacific finance and economic ministers in 2014, recommended five key strategies for adoption by Pacific countries in their own NCD country roadmaps to intensify response to the Pacific NCD crisis. In line with the Pacific NCD roadmap (12), the *Vanuatu NCD Roadmap 2015–2018* calls for national action to reduce premature NCD mortality by 25% by 2025. The four major NCDs, namely cardiovascular disease, diabetes, cancers and chronic respiratory diseases, are now responsible for approximately 60% of all premature deaths in Vanuatu (1). Vanuatu's mortality target is also in line with the Sustainable Development Goal (SDG) target 3.4 calling for a reduction of premature NCD mortality by a third by 2030 relative to 2015 levels (5, 13) and the World Health Organization NCD global mortality target comprising of a 25% reduction in premature mortality from NCDs by 2025 (14). The presence of these largely preventable diseases and the magnitude of this disease burden has

widespread implications for individuals, families and communities in Vanuatu. Of major concern is the excessive consumption of salt and increased consumption of high fat and trans-fat foods as key contributors to cardiovascular diseases and diabetes.

Given the lack of data to better understand the links and impacts of trade on Vanuatu's food environment, the aim of this study is to establish baseline information on the volume and types of unhealthy imported foods high in fat, sugar and salt, entering Vanuatu as a result of trade commitments. This will better inform and guide trade policies and legislations that promote healthy diets.

Methods

Given the focus of this study on the links between trade and food availability at the national level, the INFORMAS trade monitoring framework and its associated data collection protocol was used to guide the selection of indicators and analysis (10). The first step involved a desktop review to map and record Vanuatu's existing food and trade-related policies, as well as its commitments under the WTO (World Trade Organization) and MSG (Melanesian Spearhead Group) trade agreements that have implications for Vanuatu's national food environment, under the four domains of the INFORMAS framework: (i) trade in goods; (ii) trade in services and foreign direct investment; (iii) domestic protections and support; and (iv) policy space.

Selection of focus foods

Within the 'minimal' version of the INFORMAS trade monitoring framework, a set of focus foods rather than the total food supply was selected. These foods were identified and classified as 'less healthy' based on the suggested focus food categories identified in Box 3 of the INFORMAS trade monitoring framework paper (10) and reflected in Table 1. Specific food categories were selected based on Vanuatu data captured in a shop survey conducted in 2017 (15) and a baseline assessment identifying food items most important to nutrition in Vanuatu (16).

Defining the categories

The food and drink categories listed in Table 1 are typically high in fat, sugar or salt, and yet provide little or no nutritional benefit that is required for a healthy diet. These foods are classified and reported in this assessment as 'less healthy' focus foods that are frequently consumed and have a significant negative impact on diet. They are: edible oil and spreads (including hydrogenated oils used as an ingredient in processed foods); fatty meat products (e.g. turkey tails, mutton-flaps, processed meats); high fat processed dairy products (e.g. processed cheese, ice cream); energy-dense beverages (e.g. carbonated soft drinks); sugars and other caloric sweeteners (including High-Fructose Corn Syrups); savoury ready-to-eat snacks and meals (e.g. potato chips, French fries, instant noodles); and sweet snacks (e.g. biscuits, pastries, confectionary). Table 1 summarises the focus foods and Harmonized System (HS) Codes capturing these food products with the data provided by the Vanuatu National Statistics Office (VNSO).

Table 1
Less healthy focus foods selected with their corresponding HS Code

Unhealthy Focus Food Category	Food sub-category	HS Code	Product		
Edible oils and spreads	Cooking Oil	151110, 151190	Palm Oil		
		151321, 151329			
		15162000, 15119000			
		15152100, 15152900	Corn Oil		
		15152100, 15159000			
	Edible Oil	1501000, 15019000	Hydrogenated fats, lard, dripping		
		1502000, 1503000			
		15162000, 15179010, 15179090, 15179000			
		15180000, 15220000			
	Spread	15171000, 15179000	Margarine		
0403900, 04041000		Butter, Peanut butter			
04051000, 04052000					
04059000, 15171000					
15179000, 1804000					
20071000, 20079900					
20081100, 20081900					
20089900, 20091900					
21069000, 22087010					
Fatty meat products			Processed meats	02031200, 02032200	Sausage, ham, bacon, salami, jerky, cold cuts, chicken nuggets, patties
	02032900, 02071490				
	02089000, 02101100				
	02101200, 02101900				
	02109900, 16010000				
	16021000, 16022000				
	16023100, 16023200				
	16023900, 16024100				
	16024900, 16025000				
	16025090, 16029000				
	16029020, 16029030				
	16029090				
	Canned meat	16010000, 16021000		Corned mutton, corned beef, spam, canned chicken, ham, turkey, etc.	
		16022000, 16023100			
		16023200, 16023900			
		16024100, 16024900			

		16025010, 16025090 16029010, 16029020 16029030, 16029090		
High-fat/processed dairy products	Cheese	04063010, 04062000 04069000	Processed cheese	
	Yoghurt	04031090, 4039000	Fruit-based/Flavoured	
	Ice-cream and edible ices	21050000, 21069000	Ice-cream and edible ices	
Energy-dense beverages	Cordial	20091200, 20091900 20093900, 20097900 20098100, 20098900 20099000, 21069000 22029000	Cordial/Concentrate/Powder	
		Soft drink	22019000, 22021000 22029000, 22029100 22029900	Sugar-sweetened
		Electrolyte drinks	22019000, 22021000 20091200, 20098900 22029900	Sports drinks
Sugar and other caloric sweeteners	Sugar	17011100, 17011200 17011300, 17011400 17019100, 17019900 17021100, 17021900 17022000, 17024000 17026000, 17029000	Natural cane and refined sugar	
Savoury ready to eat snacks	Crisps and snacks	19030000, 19041000 19042000, 19049000	Snack packs, corn chips, potato chips, other (Dried peas etc.)	
	Noodles	19021900, 19022000 19023000, 19041000 19049000	Instant, Flavoured	
Sweet snacks	Confectionary	17041000, 17049000 1801000, 18031000 18040000, 18050000 18061000, 18062000 18062010, 18063100 18063200, 18069000 18069090, 19041000 19049000	Chocolate and sweets (Chocolate based; sugar based) Chewing gum	

Bakery Products	18062000, 18069000	Sweet biscuits
	1905100, 1905200	Cakes and pastries
	19053000, 19053100	
	19053200, 19054000	
	19059000	

Food-related trade indicators

Drawing on the four domains of the INFORMAS monitoring framework, in this analysis, the focus was on the minimal monitoring approach in three of the four domains: trade in goods, trade in services and foreign direct investment, and policy space. In terms of domestic protections and supports, Vanuatu has no programmes or policies that are subject to reduction commitments within the meaning of Article 6 of the WTO Agreement on Agriculture, so this has been excluded. Data were obtained for the following indicators: (i) total food import volume with WTO and Melanesian Spearhead Group Trade Agreement (MSGTA) member countries; (ii) 'less healthy' focus food category import volumes; (iii) actual and bound tariff rates for the 'less healthy' focus food category; (iv) the type and country of foreign-owned food and beverage industries operating in Vanuatu and the monetary value of their foreign direct investment; (v) the type of domestic industries engaged in the food and beverage sector; and (vi) the provisions in WTO and MSGTA trade agreements relating to domestic policy space and governance. For total food import volumes, data were selected by food import categories as defined by the VNSO and the specific Harmonized System (HS) classification codes used to classify these food items. The selection of 'less healthy' foods to monitor for Vanuatu was based on the shop survey and consultation with Vanuatu Ministry of Health officials. Actual and bound tariff rates were provided by the Vanuatu Customs and Inland Revenue Department. Information about each trade policy and agreement was collected from various sources. The trade policies and legislations were accessed from various government ministry websites. Information on foreign direct investment and domestic industries was supplied by the Vanuatu Investment Promotion Authority and the Ministry of Tourism, Trade, Industry, Commerce and Ni-Vanuatu Business respectively. The food and agriculture related WTO trade agreements were collected from the WTO online database (www.wto.org). The scope of the review of the WTO agreements identified general rules that apply to Vanuatu as an LDC (least developed country) member of WTO, and specific commitments were listed as 'schedules of specific commitments. These reflect specific tariff concessions for the goods schedule (General Agreement on Tariffs and Trade – GATT), the specified level of market access and national treatment for the services schedule (General Agreement on Trade in Services – GATS), and specific services commitments that Vanuatu has given in the context of trade negotiations. The MSG trade agreement was accessed via the MSG website (www.msgsec.info/). Data on these indicators were analysed using Microsoft Excel and compared with changes in Vanuatu's WTO commitments and domestic regulations in order to shed more light on the impact of trade. There were 32 major WTO trading partner countries exporting food into Vanuatu in 2019. Details of 'other countries' trading with Vanuatu were not segregated, so only major partners are reflected. The decision regarding the years to monitor food import volumes was based on the escalation of imports prior to Vanuatu joining WTO in 2012 and the trend of import volumes after the ratification and sign-off on WTO and MSGTA agreements and their implementation phases. Detailed food import volume data were collected from VNSO's Automated System of Customs Data, which captures and implements all international standards for trade data by specific HS Code categories.

Results

Summary of WTO commitments and Vanuatu's accession package

At the Eighth WTO Ministerial Conference in December 2011, trade ministers decided to "further strengthen, streamline, and operationalise the 2002 LDC accession guidelines," with the inclusion of benchmarks on goods and services, as well as elements on special and differential treatment, transition periods, transparency, and technical assistance. In Vanuatu's 2012 accession package, Vanuatu committed to:

- Not carry out pre-shipment inspection of imports with no plans to do so;

- Not apply any anti-dumping, countervailing or safeguard measures until it had implemented appropriate laws consistent with WTO agreements;
- Having no intention of being part of the Government Procurement Agreement;
- Submit all notifications required by any agreement;
- Apply an average final bound rate of 39.7% (43.6% for agricultural products and 39.1% for industrial products) and binding all of its tariffs;
- Having no export subsidies applied to agricultural products from 2013 to 2019;
- Applying import duty exemptions for goods imported for agriculture, horticulture, livestock and forestry. These include plant machinery, materials, equipment, spare parts and accessories. In addition to this, agricultural incentives are offered to agricultural producers and aid-financed programmes of domestic support for agriculture within the *de minimis* ceiling of 10 per cent, given Vanuatu's LDC status;
- Undertake specific commitments on 10 service sectors^[1] and 72 sub-sectors; and
- Vanuatu is progressively liberalising its business environment with few restrictions on investment to promote small local businesses.

Total food import volumes

Data on the total volume of food imports into Vanuatu were collected from the 32 major WTO trading partners. The data include volumes of animal products, vegetable products, prepared foodstuffs, miscellaneous food preparations, non-alcoholic beverages, and animal or vegetable oils and fats (HS 01-2501). These food categories excluded variations of products used for pharmaceuticals, animal feeds, live animals, and flower cuttings and seeds not listed as edible. As Figure 1 shows, there were high and increasing levels of food import volumes from these WTO member countries between 2008 and 2019, a slight decline in 2009, 2012 and 2014, and a sharp increase from 2015 to 2018. In 2019, there was a sharp decline. In terms of trade with MSGTA member countries, the total volume of food imports shown in Figure 2 is from three MSGTA member countries: Fiji, Solomon Islands and Papua New Guinea. The total volume import trends for the years 2008 to 2019 was varied, with increases in 2010, 2011, 2013 to 2015 and again in 2017 and 2018; a slight decline in 2009 and 2012; and a sharp decline in 2019.

Less healthy food categories import volumes

Figures 3, 4, 5, 6, 7 and 8 illustrate the changes in import volumes for the various 'less healthy' food categories from 2008 to 2019. Figure 3 shows a marked increase in fatty and other selected meat products, sugar, savoury ready-to-eat snacks and energy-dense beverages between 2016 and 2018.

Acceding LDCs are required to bind all agricultural tariff lines at an overall average rate of 50 per cent and, in line with the WTO agreement on agriculture, all members are required to bind all agricultural tariff lines. On accession to WTO in 2012, Vanuatu bound all its agricultural tariff lines (including food products) at an overall average rate of 43.6%. For non-agricultural products, the WTO decision provides two options: acceding LDCs shall bind 95% of their NAMA (non-agricultural market access) lines at an overall average rate of 35%, or they can undertake more comprehensive binding coverage. Vanuatu agreed to a 100% binding coverage of its NAMA tariff lines at an overall average rate of 39.1%. This decision to apply benchmark ad valorem rates to agricultural and NAMA tariff lines does not, however, prevent LDCs like Vanuatu from negotiating higher rates for sensitive lines, as it does not impose any tariff cap. For instance, Table 2 (see Additional file 1) shows that bound tariff rates for chicken, ice-cream and edible ices, cordials/juices, soft drinks and electrolyte drinks/sports drinks all have tariff peaks that exceed the benchmark. Table 2 also details the variations in tariff rates applied to selected less healthy foods (shown in Figure 3). Tariff rates for these foods remained the same, except for peanut butter, which had a 10% decrease in 2012 and then a 10% increase from 2017; fruit based/flavoured yoghurt, which had a 15% decrease from 2012; and margarine, which had a 10% decrease and tariff reduced to zero from 2017. Tariff rates for these categories are relatively low, compared to the rates for selected 'healthy' focus foods shown in Table 3 (see Additional file 2).

As part of its WTO obligation, Vanuatu grants MFN (most favoured nation) tariff treatment to all its trading partners. There appears to be sufficient policy space for protecting domestic sectors. Vanuatu also applies preferential tariffs to parties of the MSGTA, The

Pacific Island Countries Trade Agreement (PICTA) and, upon ratification, the Pacific Agreement on Closer Economic Relations Plus (PACERPlus). In addition to these, there are two charges affecting food imports, as well as domestic products: VAT and excise duty. VAT of 15% applies to all goods and services unless they are exempt or zero-rated. Imports are VAT exempt if they are valued at VUV 10,000 or less. Until 2017, the VAT rate had been 12.5% but this was increased to support fiscal consolidation. An excise duty applies to items such as alcohol and tobacco products and it is now also applied to sugar-sweetened beverages. In 2015, a specific excise tax was applied to both imported and locally produced sweetened beverages (HS 2202). The tax rate is 50 vt/L, but for imported sweetened beverage products, there is an additional 75% tariff applied (see Table 2 in Additional File 1).

Tariff rates for ice-cream and edible ices, savoury ready-to-eat snacks (crisps and snacks, noodles) and sweet snacks (bakery products – sweet biscuits, confectionary) remained the same from 2008 to 2019 (see Table 2 in Additional File 1). Despite this, there have been increases in the import of ice cream and edible ices (See Figure 4), while the import of bakery products and confectionary increased from 2009 to 2011 and there was a sharp increase in the import of crisps and snacks and noodles from 2016 to 2018 (see Figure 5).

As shown in Figure 6, from 2008 to 2019, Vanuatu consistently imported more canned fish than processed meat and canned meat. With applied tariffs on processed meat and canned meat imports remaining unchanged between 2008 and 2019 (with the exception of a 10% increase in the tariffs on imported ham, bacon, salami, jerky, cold cuts and chicken nuggets from 2012 to 2019), there have been no marked increases. An additional excise duty of 20% (from 2014) and VAT of 15% (from 2017) applies to these food categories.

Figure 7 shows an increase in soft drink and cordial imports from 2016 to 2018, despite a high applied tariff of 75% on soft drinks and the applied tariff on cordial imports remaining unchanged from 2008 to 2019 at 20% per cent. The 75% per cent tariff applied to soft drinks and electrolyte/sports drinks is in addition to the specific excise tax rate of 50 vt/L applied since 2015 as alluded to earlier.

Sugar and caloric sweetener imports (HS 1701 and 1702) into Vanuatu over the period 2008 to 2019 was varied (see Figure 8). While the applied tariff on sugar and caloric sweetener imports remained unchanged at 10% from 2008 to 2019, an additional excise duty of 20% (From 2014) and VAT of 15% (From 2017) applies to these HS category codes.

Trade in services and foreign direct investment

Following its accession to WTO in 2012, Vanuatu agreed to undertake specific commitments

on 10 service sectors and to progressively liberalise its business environment, with few restrictions on investment in order to promote small local businesses. In accordance with the GATT Article III on national treatment, and paragraphs 1 to 3 in Article XVII of GATS, Vanuatu has applied no limitations on market access and no limitations on national treatment for foreign investors. Only normal government approval and registration is required for all foreign investors under Vanuatu's Foreign Investment Act No.15 of 1998 and its amendments.

Type and country of origin of foreign-owned industries operating in Vanuatu

Table 4 (see Additional file 3) shows foreign-owned transnational corporations engaged in food and beverage production in Vanuatu from 1998 to 2019. While there are no available FDI (foreign direct investment) data specific to their investment in domestic food production, processing, retail and advertising sectors, the available data show that there were 49 foreign-owned companies engaged in food production, processing, wholesale and retail in Vanuatu

in 2019 (see Additional file 3). These companies are mainly associated with food manufacturing and processing and the production of coffee, bakery products, confectionary, food preservatives, fish, local food products and meat, as well as the manufacturing, processing and packaging of palm oil, coconut oil, cooking oil, water, cordial juice, flavoured juices, soft drinks and alcoholic beverages. The production of these is largely for local consumption. As indicated in Table 4 (see Additional file 3), there are several breweries/distilleries, bakeries, cafes, restaurants and takeaway services with significant investment that are also operating in-country.

Type and country of domestic industries in the food and beverage sector in Vanuatu

Vanuatu's domestic food and beverage industries also play an important role in shaping Vanuatu's food environment. Data provided by the Ministry of Industry and Trade show 32 locally owned food and beverage companies registered since 2014 (see Table 5 in Additional file 4). Of the 32, five sell confectionary, ice cream and frozen dessert products; one is engaged in the production of peanut oil; one sells flavoured juices/soft drinks; five are breweries/distilleries/liquor businesses; three sell bakery products and ready meals; one sells sweet savoury snacks; and nine sell meats, of which one specifically sells canned meats only and eight sell fresh and processed meats. The remaining seven companies are engaged in other business ventures, producing and selling water (2), fruit juices and frozen fruit delights (1), coffee (1), frozen root crops (1), dried spices, fruits and vegetables (1), and manioc flour (1).

Discussion

A variety of drivers and policies (or the lack thereof) influence food systems and shape food environments. Globally, food systems have been challenged by population growth, globalisation, urbanisation and climate change and have been altered by agricultural, economic, trade, environmental and international development policies. These create incentives and disincentives which ultimately determine the production of particular types of food. These coupled with rural development, urban planning and transport policies determine the affordability of food and what food reaches which consumers (4). Consumers' dietary behaviours are also affected by several other factors that range from the personal – such as culture, knowledge, skills, dietary preferences, and time for food preparation – to economic and political – such as the cost or availability of food. Information about food, whether through education or marketing also influences food choices. Marketing, labelling and policies that have an impact on price all affect consumer demand. Marketing has become so extensive and billions of dollars are spent annually marketing foods high in fat, sugar and salt. Food marketing to children are also widespread across all the world and most of the marketing targeted at children focus on foods with a high content of sugar, fat or salt (17). Consequently, today's food systems are flooded with unhealthy foods with salt, sugars, trans-fats and saturated fats and these have become cheaper and more widely available (18). Diet-related NCDs remain a significant contributor to the global prevalence of adult obesity which has nearly tripled since 1975, and a ten-fold increase of childhood overweight and obesity over the same period (19).

To better understand the links and impacts of trade on Vanuatu's food environment, the baseline results presented in this paper suggest a strong association between Vanuatu's trade liberalisation and the increased availability of the diverse range of imported products: fats and oils, meat and canned fish, processed dairy products, energy-dense beverages, and processed and packaged foods. While liberalisation and commitments under WTO and MSGTA trade agreements have changed the food availability and nutritional quality of Vanuatu's food environment, there are several important and interesting caveats to note. The main points for discussion in this section focus on a series of liberalisation processes based on Vanuatu's WTO and MSGTA commitments accompanying the changes in food imports and how these have contributed to shaping Vanuatu's food environment by increasing less healthy food imports.

Structural adjustment reforms: The use of tariffs and excise duties

As a WTO signatory in 2012, Vanuatu agreed to binding all its tariffs. While there has been an influx of less healthy food imports, the relationship is not straightforward. For some food categories, such as ice-cream and edible ices, savoury ready-to-eat snacks and sweet snacks, tariffs have remained unchanged, but the percentage import volumes of these foods has been increasing for a number of years. In the case of soft drink and cordial imports, despite a high applied tariff of 75% on soft drink imports and a 20% tariff on cordial imports remaining unchanged since 2008 at 20%, these imports still recorded an increase from 2016 to 2018. The additional excise duty and VAT applied to some of these food categories are likely to have contributed to the fluctuating trends in total food import volumes of these foods.

Many Pacific Island countries, including Vanuatu, have implemented excise taxes as a way to reduce consumer demand for unhealthy choices, but these need to be supported by other, complementary actions. In many instances, with the minimal increases in taxes and the ad hoc implementation of these, the intended impact on consumer behaviours has fallen short. Further to this, recent developments have also shown that the focus of excise tax increases has been on revenue generation rather than changing

consumer behaviour and hardly any Pacific Island country (Vanuatu included) dedicates any of the excise tax revenue on targeted unhealthy products to the health sector.

Vanuatu's WTO commitments: WTO agreements on pre-shipment inspection, import prohibition and anti-dumping, countervailing or safeguard measures

To regulate the sale and availability of processed foods and sugar-sweetened beverages in Vanuatu's food environment, various WTO agreements provide grounds for technical regulations to be prepared, adopted or applied by member states to protect human health and safety. Vanuatu has yet to maximise the general safeguards in line with these agreements and has only imposed import prohibitions on beef imports originating in Europe since the late 1990s. This is in accordance with GATT Article XIII on Non-Discriminatory Administration of Quantitative Restrictions, Article XI, 2(c) on Quantitative Restrictions that allows for "import restrictions on any agricultural or fisheries product, imported in any form, necessary to the enforcement of governmental measures which operate" and pursuant to Vanuatu's Customs (Prohibited Import) Regulations Order No.115 of 2014. Regarding the Agreement on Preshipment Inspection, Vanuatu does not carry out any preshipment inspection and has no laws, regulations or procedures and criteria in place to put this agreement into force. Moreover, Vanuatu has no intention of doing so as per their schedule of specific commitments. However, to ensure that the quality of goods shipped has complied with quality measures during the production process, it becomes important for countries to opt for pre-shipment inspection. Vanuatu should re-consider this commitment, as pre-shipment inspection can help reduce the risk of receiving poor-quality food products that are non-compliant with Vanuatu's food related regulations.

To ensure fair trade and to protect against the dumping of goods and its trade distortive effects, the WTO Antidumping Agreement allows governments to act against dumping where it is hurting domestic industries or to cope with a sudden surge of foreign goods. While Vanuatu agreed to not applying any anti-dumping, countervailing or safeguard measures until it had implemented appropriate laws consistent with WTO agreements, it now has draft anti-dumping regulations under review. It must be cautioned that anti-dumping measures may pressurise the government to restrict the import of better and cheaper imports by calling them dumped commodities. Dumping should not be mistaken and simplified to mean cheap or low-priced imports. Rather it should only be taken up in its legal sense, that is, the export of goods lower than their normal value where the goods are low priced imports only in the relative sense – relative to their normal value.

Vanuatu's WTO commitments to foreign direct investment

The encouragement of foreign direct investment through Vanuatu's commitments has also increased the availability of locally produced food preparations and processed foods and ultimately the consumption of these. As presented in Table 5, the production of foods for both local consumption and export has important implications for the nutritional quality of the food environment in Vanuatu. Food preparations such as bakery goods and biscuits, snack foods, soft drinks, chocolate products and other confectionary products are now produced locally. Further to this, Vanuatu's commitment to have fewer restrictions on investment to promote local businesses has contributed to an increase in these food preparations via domestic industries as shown in Table 5 (see Additional file 4). These products are increasingly consumed as indicated in the 2017 Shop Survey (15) and the baseline study identifying households most at risk of poor nutrition outcomes in Vanuatu (16). The rising availability of these less healthy products is most greatly associated with foreign direct investment and the progressive liberalisation of Vanuatu's business environment with few restrictions on investment to promote domestic industries and small local businesses.

Study Limitations

The study was limited by gaps in available data – the segregation of data by countries exporting into Vanuatu, data relating to tariff rates, FDI investment and monetary data, and calculation of tariff-rate quotas for the identified focus foods. The limited availability of data made it difficult to demonstrate causality, nor could the importance of trade agreement provisions in driving change in nutrition quality and shaping Vanuatu's food environment be effectively estimated.

Conclusion

The analysis presented in this paper suggest that Vanuatu's commitments to WTO Agreements do play an important role in shaping their food environment by increasing both healthy and less healthy imports. For all Pacific Island countries, the systematic and objective monitoring of the impacts of these agreements on national food environments remains a significant challenge. There is also minimal data to inform the development of effective, coherent trade and health policy approaches to promote healthier food environments that can contribute to reducing the burden of obesity and related NCDs. Nevertheless, there is scope when developing trade policies and agreements to consider NCDs as part of broader social impact assessment studies. These can be used to identify potential modifications that can be made to trade policies and agreements. These modifications can regulate food environments and reduce the impact of NCDs or ensure that mitigating complementary actions are taken.

References

1. Vanuatu Ministry of Health. Vanuatu Non Communicable Disease Policy and Strategic Plan 2016-2020. In: NCD Unit and wider Ministry of Health, editor. Vanuatu.2016. p. 1-77.
2. Thow A, Snowdon W. The effect of trade and trade policy on diet and health in the Pacific Islands. In: Hawkes C, editor. Trade, Food, Diet and Health: Perspectives and Policy Options. Chinchester, England: Wiley Blackwell Publications; 2010. p. 147-68.
3. Hawkes C. Uneven dietary development: linking the policies and processes of globalization with the nutrition transition, obesity and diet-related chronic diseases. *Globalization and Health*. 2006;2(1):4.
4. Branca F, Lartey A, Oenema S, Aguayo V, Stordalen GA, Richardson R, et al. Transforming the food system to fight non-communicable diseases. *BMJ*. 2019;364:l296.
5. NCD Countdown 2030 collaborators. NCD Countdown 2030: pathways to achieving Sustainable Development Goal target 3.4. *The Lancet*. 2020;396(10255):918-34.
6. Wang H, Naghavi M, Allen C, Barber RM, Bhutta ZA, Carter A, et al. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*. 2016;388(10053):1459-544.
7. Snowdon W, Thow AM. Trade policy and obesity prevention: challenges and innovation in the Pacific Islands. *Obesity Reviews*. 2013;14(S2):150-8.
8. Thow A, Heywood P, Schultz J, Quesed C, Jan S, Colagiuri S. Trade and the nutrition transition: Strengthening policy for health in the Pacific. *Ecology of Food and Nutrition*. 2011;50(1):18-42.
9. Rayner G, Hawkes C, Lang T, Bello W. Trade liberalization and the diet transition: a public health response. *Health Promotion International*. 2006;21(suppl_1):67-74.
10. Friel S, Hattersley L, Snowdon W, Thow A-M, Lobstein T, Sanders D, et al. Monitoring the impacts of trade agreements on food environments. *Obesity Reviews*. 2013;14(S1):120-34.
11. Ministry of Foreign Affairs International Cooperation and Trade. Government of Vanuatu Trade Policy Framework Update 2019. Port Vila, Vanuatu: Government of Vanuatu.; 2019.
12. World Bank. Non-Communicable Disease (NCD) Roadmap Report (English). Washington, D.C.: World Bank Group; 2014.
13. United Nations. Transforming our world: the 2030 agenda for sustainable development [Available from: <https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>.
14. World Health Organization. NCD Global Monitoring Framework Geneva: WHO; [Available from: https://www.who.int/nmh/global_monitoring_framework/2013-11-06-who-dc-c268-whp-gap-ncds-techdoc-def3.pdf?ua=1.
15. Bayandori T, Paterson K, Abel M, Hinge N. Vanuatu Salt Intake Survey Report 2017: A sub-national survey. Vanuatu: Vanuatu Ministry of Health; 2017. p. 1-28.
16. Martyn T, Yi D, Fiti L. Identifying the household factors, and food items, most important to nutrition in Vanuatu. Food and Agriculture Organisation, The University of Adelaide; 2015.
17. World Health Organization. Set of Recommendation on the Marketing of Foods and Non-Alcoholic Beverages to Children. Geneva, Switzerland: WHO; 2010.

18. Global Panel on Agriculture and Food Systems for Nutrition. Food systems and diets: Facing the challenges of the 21st century. London, UK; 2016.
19. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128.9 million children, adolescents, and adults. Lancet. 2017;390(10113):2627-42.

Tables

Due to technical limitations, table 2, table 3, table 4 and table 5 are only available as a download in the Supplemental Files section.

Figures

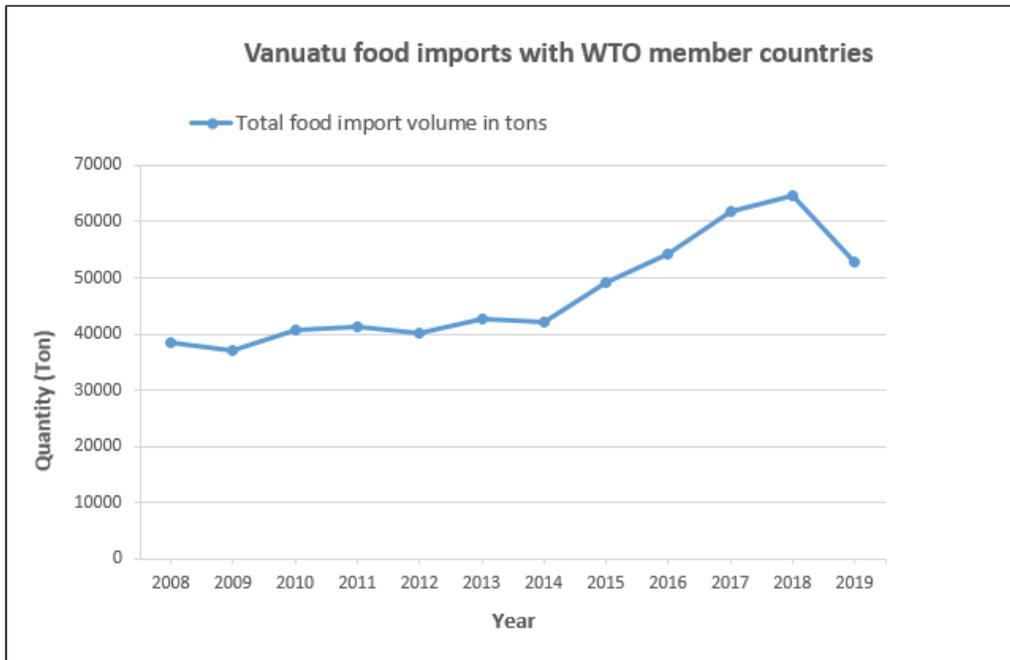


Figure 1

Vanuatu total import volume with 32 WTO member countries for the period 2008 to 2019. Source: Vanuatu National Statistics Office.

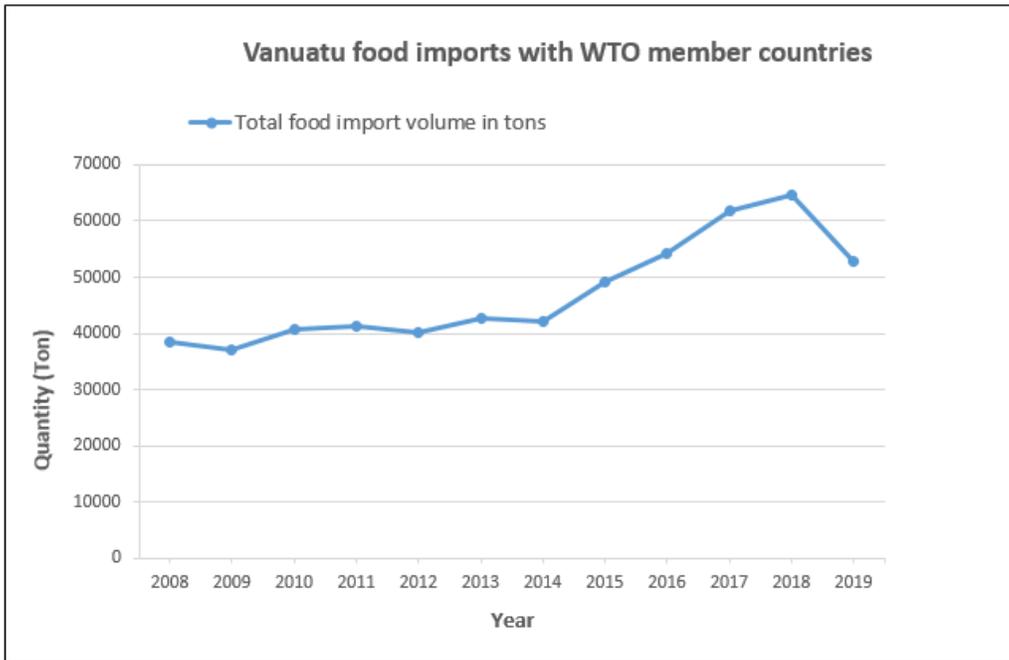


Figure 1

Vanuatu total import volume with 32 WTO member countries for the period 2008 to 2019. Source: Vanuatu National Statistics Office.

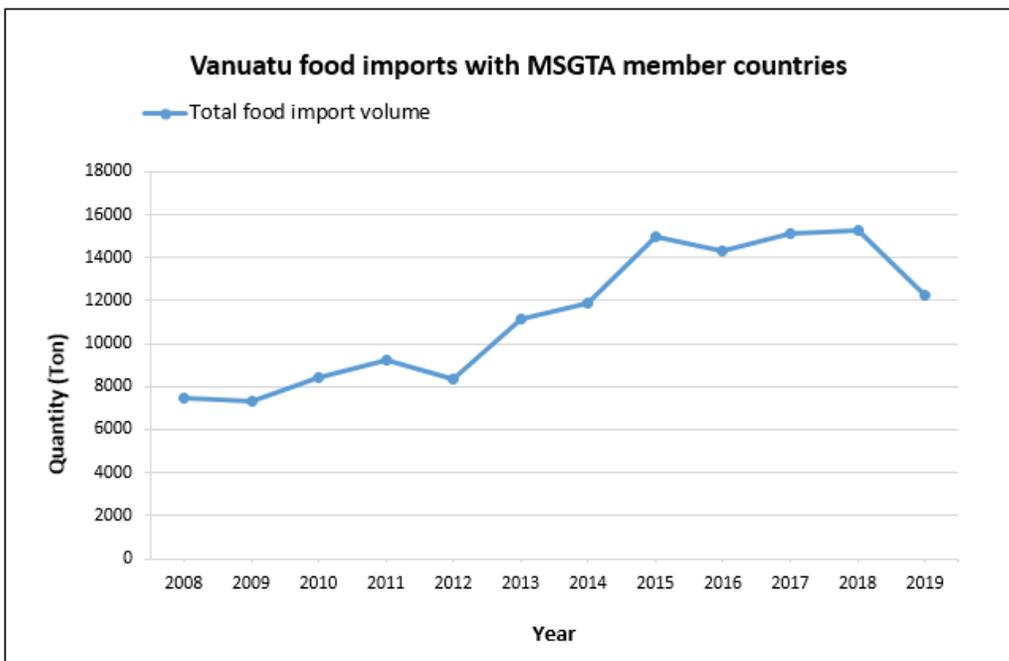


Figure 2

Vanuatu total import volume with 3 MSGTA member countries for the period 2008 to 2009. Source: Vanuatu National Statistics Office.

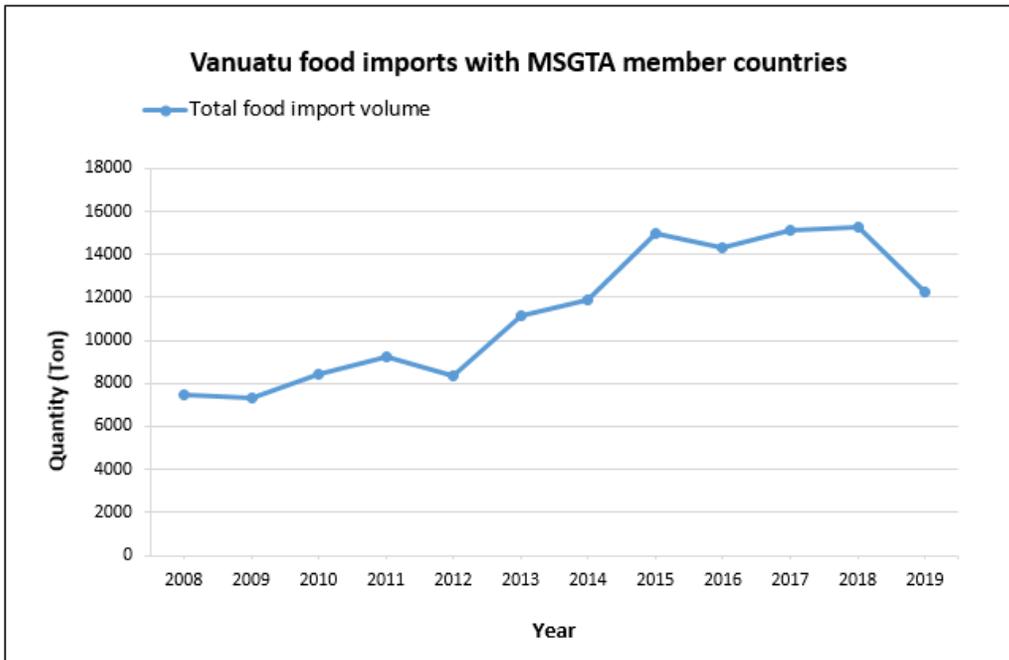


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Vanuatu total import volume with 3 MSGTA member countries for the period 2008 to 2009. Source: Vanuatu National Statistics Office.

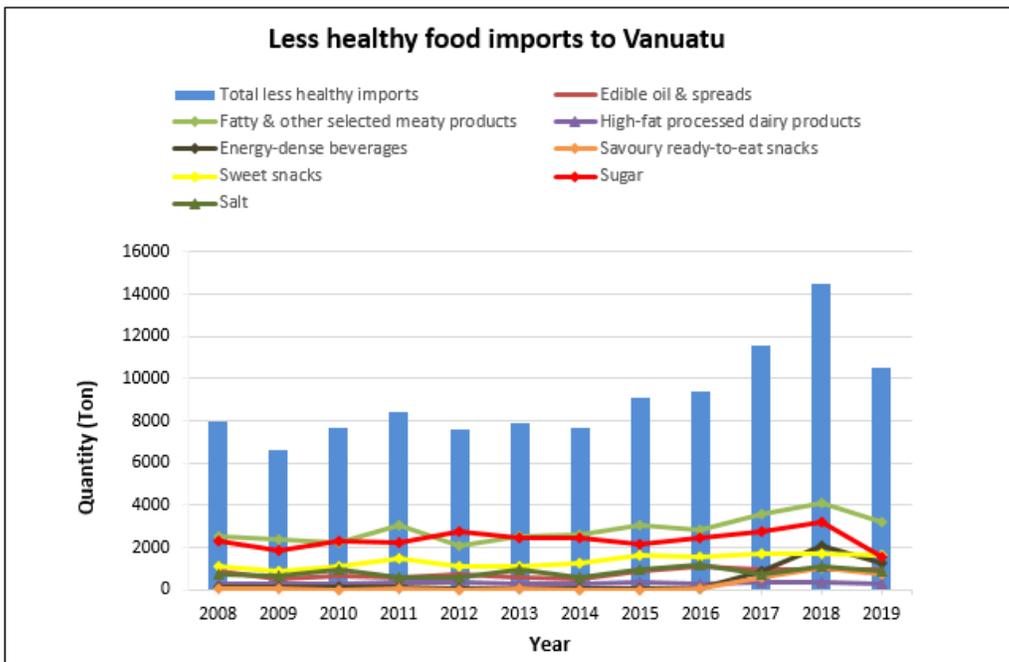


Figure 3

Volume of select less healthy food imports to Vanuatu over the period 2008 to 2019 from major WTO importing countries. Source: Vanuatu National Statistics Office.

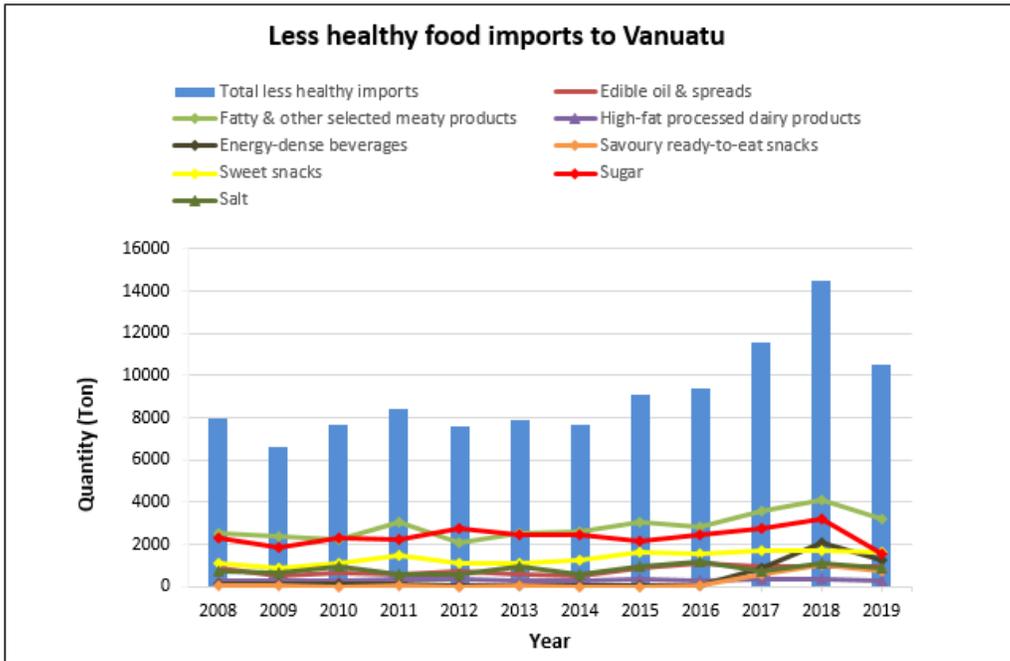


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Volume of select less healthy food imports to Vanuatu over the period 2008 to 2019 from major WTO importing countries. Source: Vanuatu National Statistics Office.

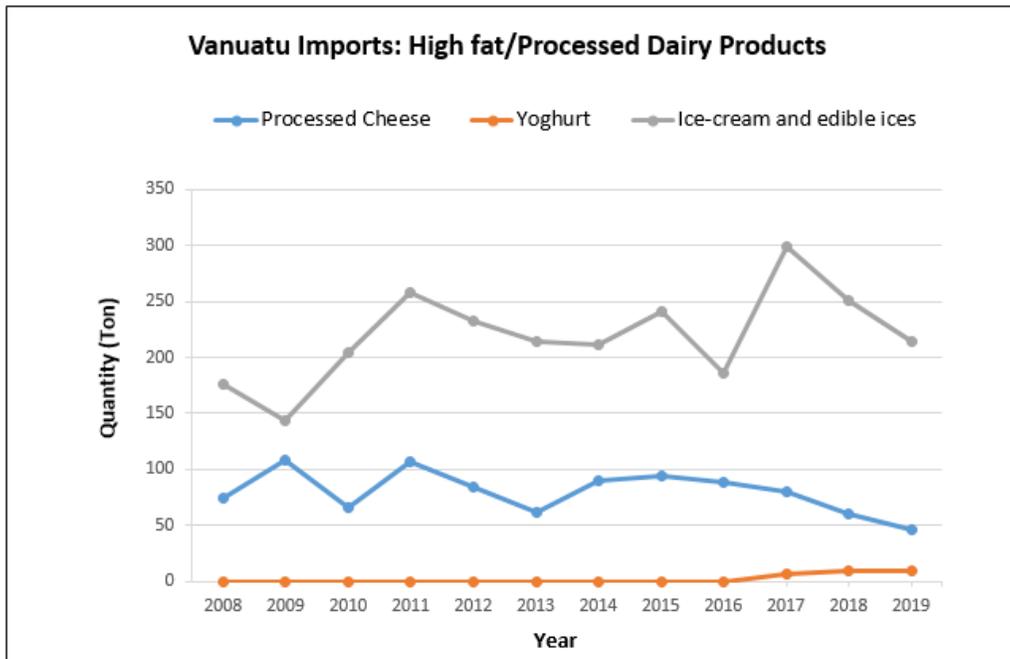


Figure 4

High fat/processed dairy food imports to Vanuatu over the period 2008 to 2019 from major WTO importing countries. Source: Vanuatu National Statistics Office.

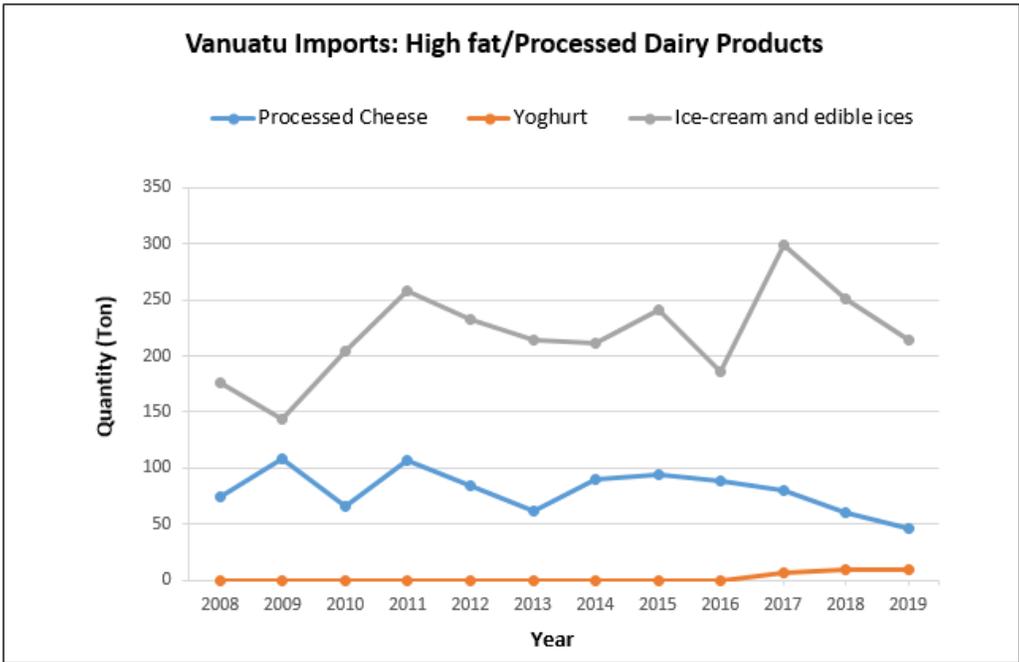


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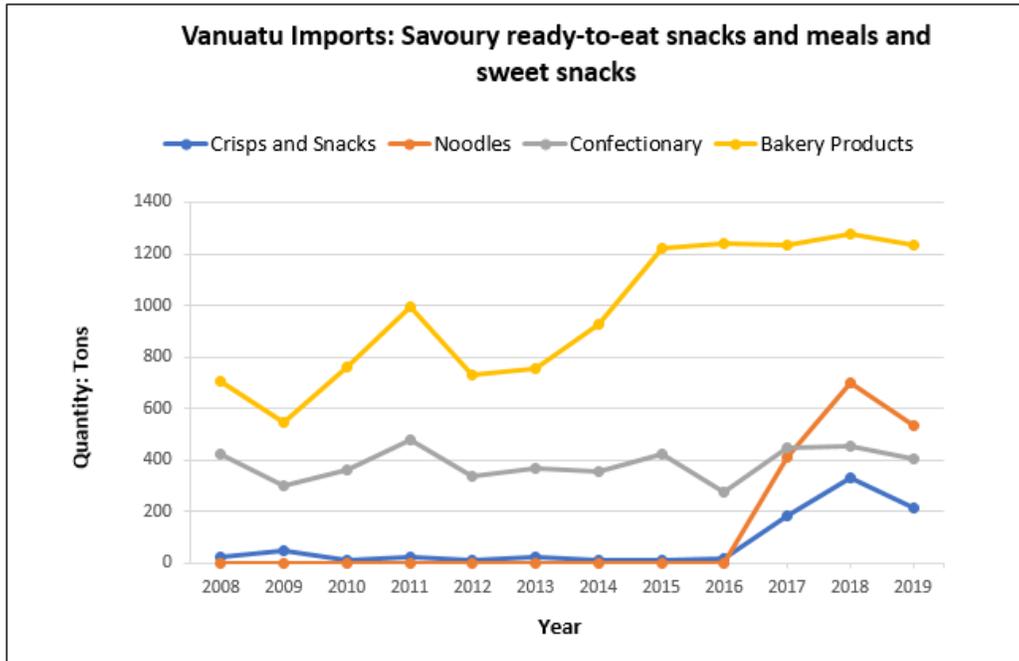


Figure 5

Savoury ready-to-eat snacks and meal (crisps and snacks, noodles) and sweet snack (bakery products, confectionary) imports to Vanuatu over the period 2008 to 2019 from major WTO importing countries. Source: Vanuatu National Statistics Office.

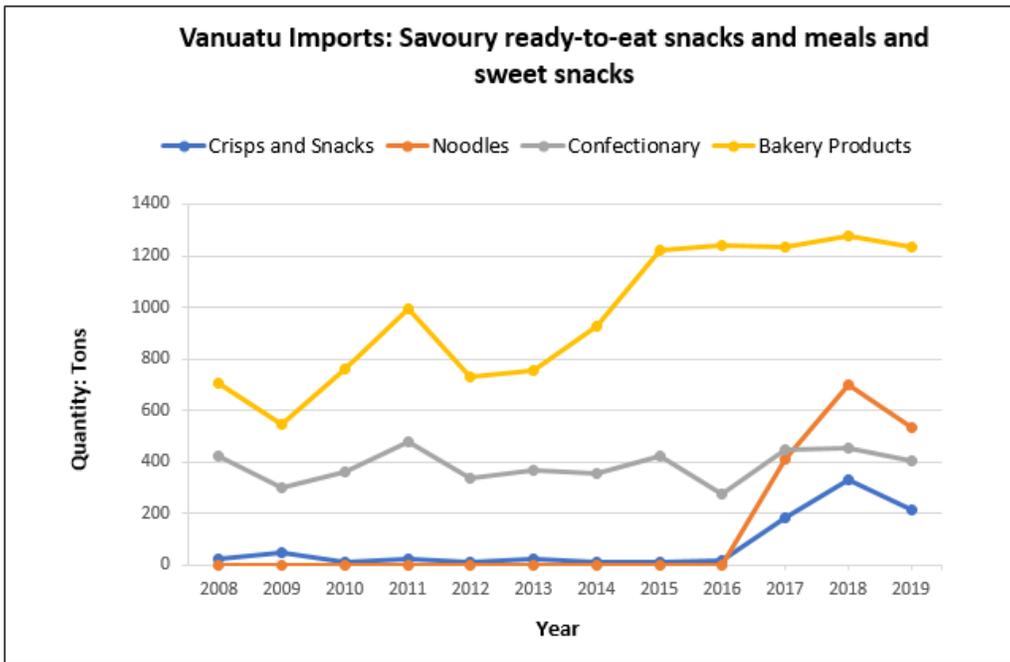


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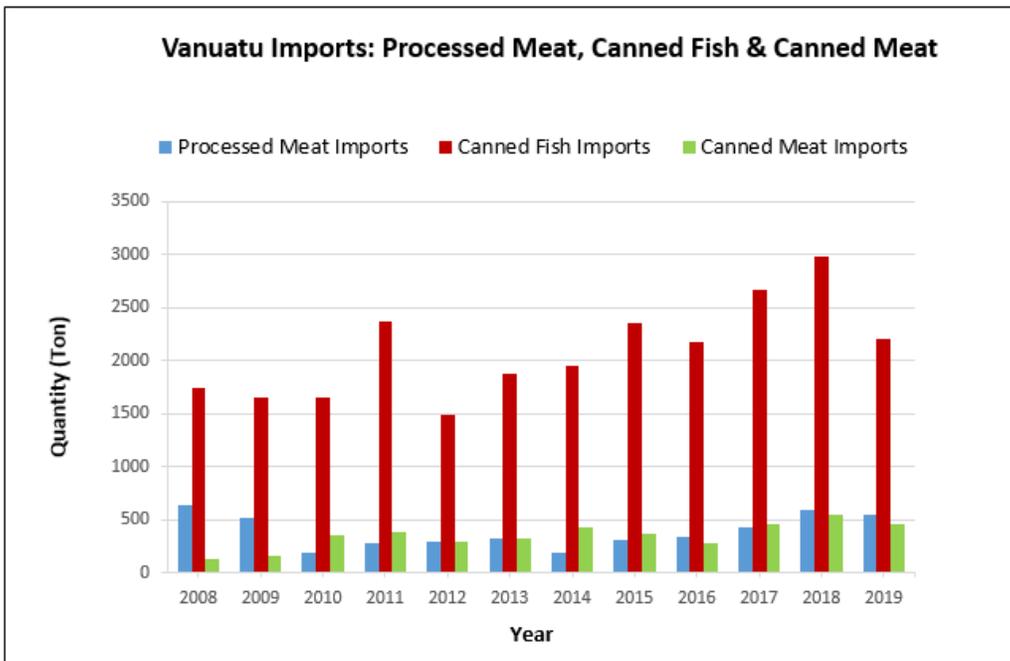


Figure 6

Selected fatty and other meat imports into Vanuatu over the period 2008 to 2019. Source: Vanuatu National Statistics Office.

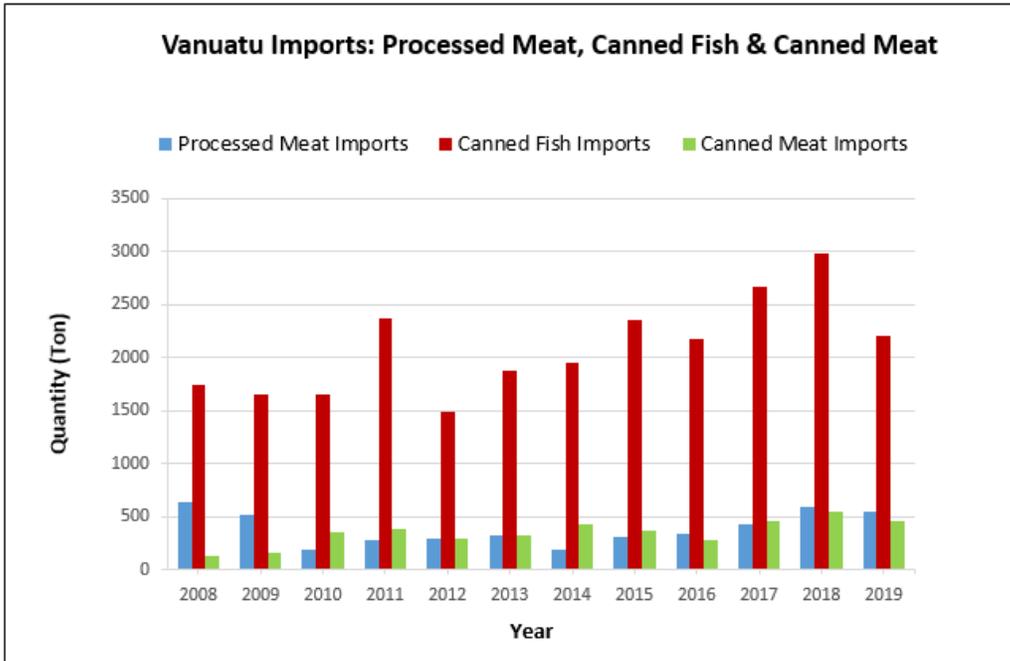


Figure 6

Selected fatty and other meat imports into Vanuatu over the period 2008 to 2019. Source: Vanuatu National Statistics Office.

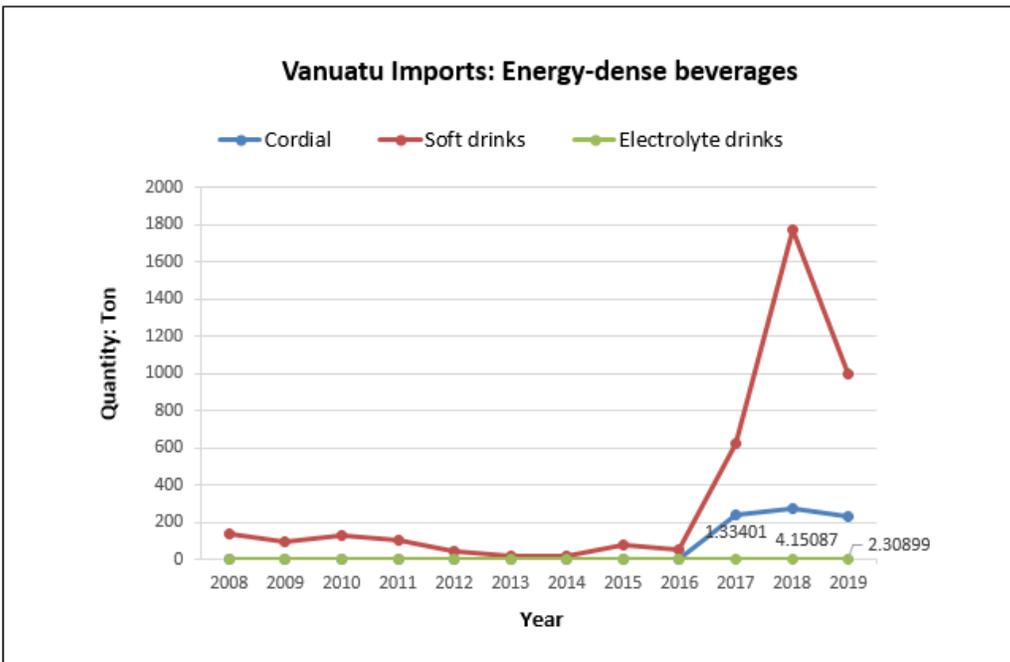


Figure 7

Cordial juices, soft drinks and energy drink imports into Vanuatu over the period 2008 to 2019. Source: Vanuatu National Statistics Office.

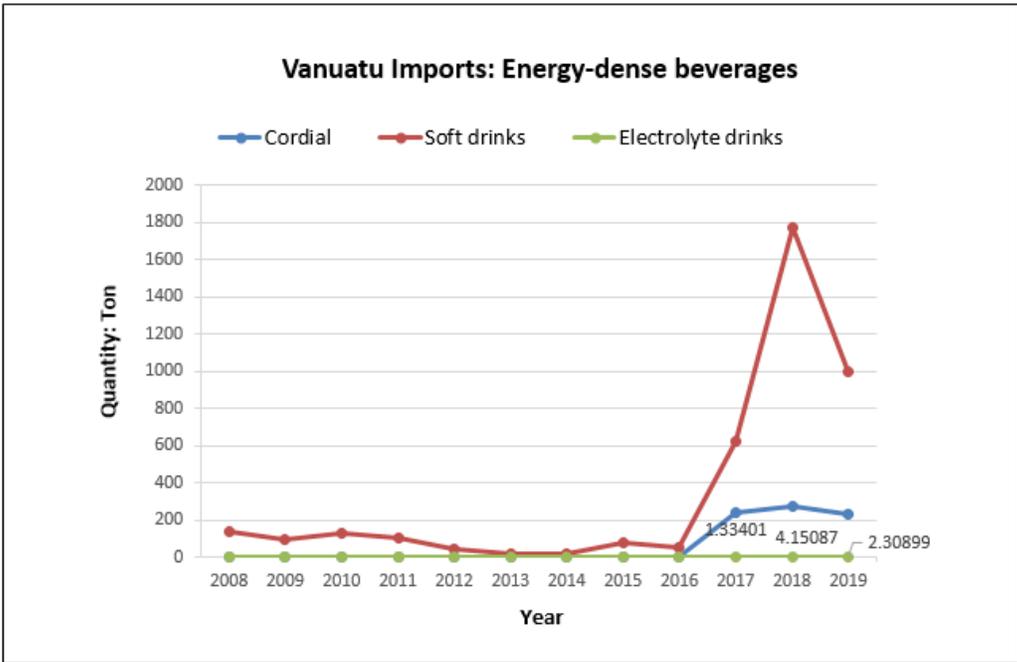


Figure 7

Cordial juices, soft drinks and energy drink imports into Vanuatu over the period 2008 to 2019. Source: Vanuatu National Statistics Office.

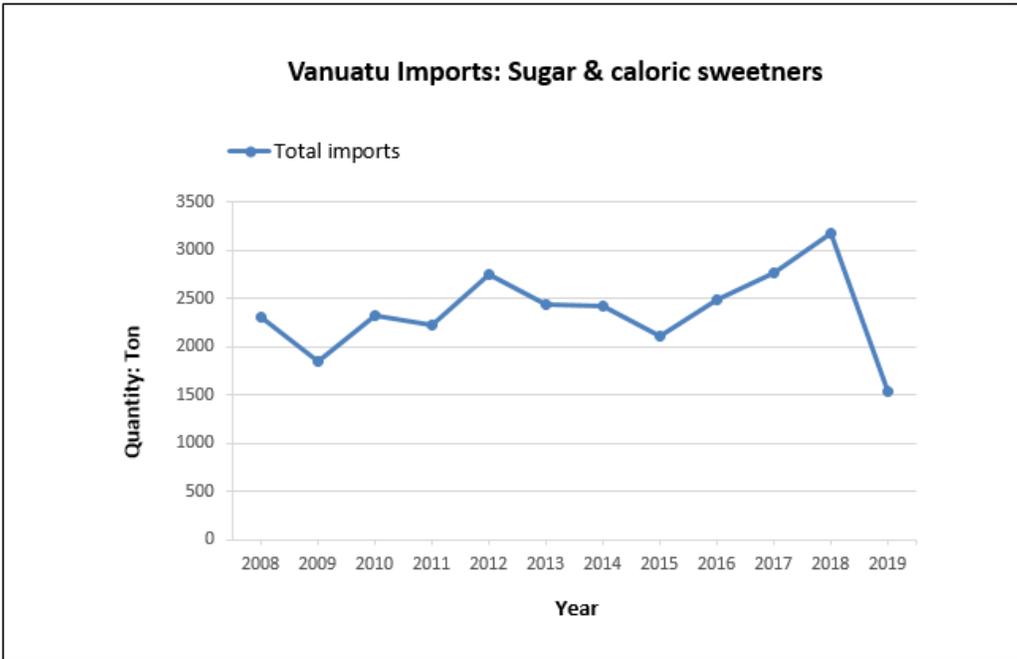


Figure 8

Sugar and caloric sweetener imports into Vanuatu over the period 2008 to 2019. Source: Vanuatu National Statistics Office.

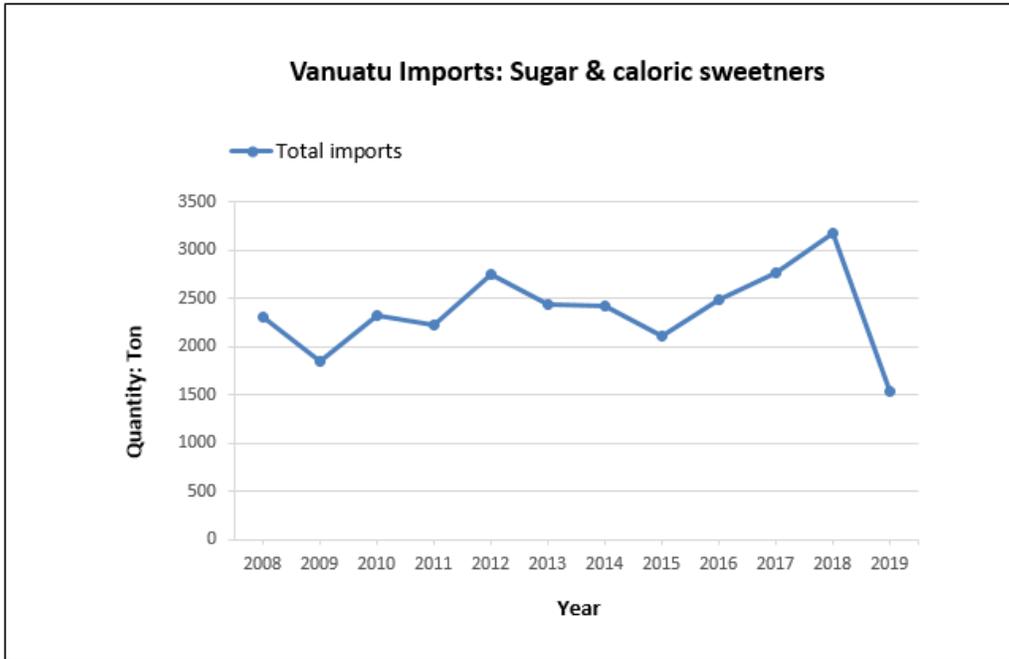


Figure 8

Sugar and caloric sweetener imports into Vanuatu over the period 2008 to 2019. Source: Vanuatu National Statistics Office.

Supplementary Files

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