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NAMIBIAN AGRONOMIC BOARD
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AGRONOMY AND HORTICULTURE DEVELOPMENT DIVISION

RESEARCH AND DEVELOPMENT SUBDIVISION

RESEARCH REPORT

THE IMPACT OF VALUE-ADDED TAX ON CONSUMER PRICES FOR FRESH FRUITS AND VEGETABLES IN NAMIBIA

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ABSTRACT

Value-Added Tax (VAT) is one of the most widely used indirect taxes globally. It plays a significant role in generating revenue for governments while shaping the pricing of goods and services for consumers. Despite its widespread adoption, many consumers and even some businesses may not fully understand the underlying principles of VAT and how it impacts everyday purchases.

This study explored the fundamental principles of VAT and provided a clear analysis of how it affects consumer prices for fresh fruits and vegetables in Namibia. Furthermore, the study also assessed various VAT relief measures implemented in Namibia and selected SADC countries.

VAT is classified as Input VAT when buying items to make or obtain products for resale and Output VAT when selling products to customers. The VAT of 15% on domestic supplies' value in Namibia is collected at each stage of the supply chain, from input suppliers to farmers, distributors, retailers, and consumers, while a VAT of 16.5% is charged on import supplies' value. However, VAT-registered businesses (agri-inputs suppliers, farmers, processors, distributors/wholesalers, and retailers) can claim back the VAT they paid on vegetable supplies. This ensures that VAT is not a burden on businesses and is fully transferred to the final consumer.

The study also found that only Namibia and Lesotho out of the six (6) SADC countries sampled charge VAT on fresh fruits and vegetables, and no VAT is charged on exports. It was also noted that Namibia charged VAT on basic agri-inputs, implements, and machinery, while the rest of the SADC countries did not charge VAT. This practice makes the production of crops in Namibia more expensive than in most of the sampled SADC countries. It was also found that all the sampled SADC countries, including Namibia, have zero-rated or exempted major grain/ grain products from paying VAT, and this includes maize meal, sorghum meal, bread flour, bread, beans, sugar, etc.

In this study, it was found that VAT makes fresh fruits and vegetables at least 13% more expensive in Namibia, which is borne by the end consumers. This also adds a financial burden to businesses and makes locally produced products more expensive than imports from SADC countries that have no VAT on basic agricultural inputs such as seeds, fertilisers, and agro-chemicals.

If Namibia is to include all fresh fruits and vegetables in the list of zero-rated or exempted supplies, it will make these products more affordable to the end consumer and stimulate domestic consumption.

To balance the effect of VAT on end consumers, it is recommended that all locally produced fruits and vegetables be either zero-rated or exempted from paying VAT, and this should be extended to basic inputs such as seeds, fertilisers, agro-chemicals, agricultural implements, and machinery to lower the cost of production and make fresh fruits and vegetables more affordable.

Alternatively, the government can consider introducing a subsidy at the production level to ensure that fresh fruits and vegetables produced locally are also affordable to the end consumers. This way, revenue from VAT can be reinvested in subsidising local farmers to assist fresh fruit and vegetable farmers in offsetting the regressive nature of VAT. This subsidy should target basic inputs such as seeds, fertilisers and agrochemicals, agricultural implements and machinery.

ACRONYMS AND DEFINITIONS

Table 1: *Acronyms and definitions*

ACT	*A Government Gazette, Act 10 of 2000*
AMID	*Agricultural Marketing Information Database*
CIF	*Cost, Freight and Insurance: A tax invoice including transport, insurance and other costs (The seller is responsible for shipping and other costs)*
EPZ	*Export Processing Zone*
EXEMPT SUPPLIES	*Supplies that are not VATable at all (exempted from VAT registration and VAT returns submissions)*
FOB	*Free-On-Board: A Tax Invoice excluding transport, insurance and administration costs (The buyer is responsible for shipping and other costs)*
FREE-ON-BOARD DESTINATION	*A Tax Invoice including transport, insurance and administration costs*
INPUT VAT	*A VAT paid by a registered person/ business when purchasing goods for use in producing taxable supplies*
MT	*Metric tons*
MFPE	*Ministry of Finance and Public Enterprises*
NAB	*Namibian Agronomic Board*
NAHOP	*Namibia Association of Horticulture Producers*
NamRA	*Namibia Revenue Agency*
NET OUTPUT VAT	*Output VAT minus Input VAT*
OUTPUT TAX	*A VAT is collected for the Receiver of Revenue when a registered person/ business is selling taxable supplies*
REBATE	*A Payment back to a buyer of a portion of the full purchase price of a good or service, e.g. discount*
ROR	*Receiver of Revenue*
SADC	*Southern African Development Community*
TAXABLE SUPPLIES	*Supplies vatable at a 15% rate when sold by a registered person*
USD	*United States Dollar (s)*
VAT	*Value Added Tax*
VATABLE	*Qualifies to be charged VAT*
ZERO-RATE SUPPLIES	*Supplies are taxable at a Zero Percent (0%) Rate when sold*
PERSON	*Legal Person, i.e. sole trader, partnership, close corporation, private company, public company, co-operative, etc.*

1. BACKGROUND OF THE STUDY

Value-Added-Tax (VAT) is defined as the tax imposed on the value added at every stage of production and distribution, as well as on imported goods and services (NamRA, 2023). It is in the interest of each state to control the tax compliance of all taxable persons, whether legal or natural persons. The value-added tax (VAT) is considered to be an efficient fiscal tool to generate public revenue, but it performs poorly in terms of equity. VAT reduces purchasing power since it is applied to consumption goods, and since poor households have a limited capacity to save, they are affected by a larger share of their total income; hence, they will support a larger share of the tax burden compared to the non-poor.

The VAT standard rate in Namibia stands at 15% for domestic and 16.5% for imported supplies of goods (NamRA, 2023), which is usually charged to consumers by registered businesses, which pays it to the State through the Ministry of Finance and Public Enterprises (MFPE). The VAT charged on registered businesses when they purchase their goods is usually claimed back by such registered businesses, except for the end consumers.

Since the year 2000, the VAT Zero (0%) rate has been applied in Namibia to various staple products such as mahangu (pearl millet) grains and flour, maize grain and maize meal, water, electricity, refuse removal, and sewerage disposal (Odhiambo & Odada, 2010). Other products were added to the VAT Zero (0%) rate list in 2008, namely: fresh and dried beans, cooking oil, bread, cake and bread flour, and processed animal fat. However, all fresh fruits and vegetables are excluded from the zero-rated supplies and exempt supplies schedule as outlined in the Value-Added Tax Act 10 of 2000.

Fresh fruits and vegetables are among the basic foodstuffs. Prices have been increasingly getting high in Namibia due to inflation and increased cost of production, making the basic livelihood expensive and ultimately negatively impacting food and nutrition security (Namibia Economics, 2016). The fresh fruits and vegetable industry has huge potential in enabling the agriculture discipline to fight abject poverty, increase contribution to the economy, and feed the world's forecasted population of 9.7 billion by 2025 (Trading Economics, 2019).

Therefore, this study gives an overview of VAT regulations in Namibia and quantifies the VAT revenue generated by the State from fresh fruits and vegetables. The study further evaluates the impact of VAT on the consumer price of fresh fruits and vegetables in Namibia. Last but not least, the VAT relief measures implemented in Namibia and selected SADC countries, in the context of the agricultural industry, are also analysed.

2. PROBLEM STATEMENT

Overall, inflation in Namibia stands at 6.3% year on year as of May 2023. The major contributors to the annual inflation rate of 6.3 percent in May 2023 were Food and non-alcoholic beverages (2.4 percentage points); Alcoholic beverages and tobacco (1.0 percentage points); Housing, water, electricity, gas, and other fuels and transport each contributed 0.7 percentage points; while all other divisions contributed 1.5 percentage points altogether (NSA, 2023).

The price levels of Fruits went up to 22.1 percent during May 2023 compared to 16.5 percent recorded during the same period a year earlier. The increase was reflected mainly in the price levels of watermelons (from -7.8% to 22.1%), citrus fruits (from 9.1% to 31.3%), and pears (from 5.7% to 12.5%). On average, vegetables were 18.5 percent more expensive in May 2023 than during the previous year. The increase in the annual inflation rate for this subcategory was mainly observed on spinach (14.3%), onions (35.7%), cabbage (43.3%), and cucumbers (41.1%) (NSA, 2023).

On the other hand, food producers are also struggling with the high prices of basic inputs such as fertilisers, chemicals, and energy, that has increased to above 10% over the past 5 years. This situation has made it difficult for poor households in Namibia to afford basic fresh fruits and vegetables such as potatoes, cabbage, tomatoes, onions, apples, bananas, oranges, etc.

Hence, there is a need for the government to cut VAT from the price of basic fresh fruits and vegetables to support producers and stimulate consumer demand and businesses to cope with high inflation and interest rates. The removal of VAT on basic fresh fruit and vegetables is a ‘shovel-ready’ measure, which is easy to implement quickly. It can provide a short-term boost to the economy by giving people more money to spend and by incentivising consumers to bring purchases forward to take advantage of lower prices while addressing food insecurity.

3. OBJECTIVES OF THE STUDY

a) Discuss how the VAT works in Namibia.
b) Examine the impact of VAT on the consumer price of fresh fruits and vegetables in Namibia.
c) Evaluate VAT relief measures implemented for Namibia’s agriculture sector, in comparison to those in selected countries in SADC, and the benefits reaped by the end consumers.
d) Make key recommendations to inform decision-making and policy formulation or review.

4. SCOPE OF THE STUDY

The scope of this study was to assess the impact of VAT on the consumer price of fresh fruits and vegetables in Namibia. This study deliberated on VAT; its definitions, classifications, and the VAT approaches in the context of the agriculture sector in Namibia. The VAT charged against domestic and imported fresh fruits and vegetables consumed in Namibia is computed. VAT charged at different stages along the supply chain was estimated, whilst using carrots as an example. VAT relief measures applicable in Namibia versus those applicable in other selected countries within SADC were also evaluated, with emphasis on the benefits reaped by end consumers.

5. SIGNIFICANCE OF THE STUDY

Fresh fruits and vegetables contribute significantly to food security in Namibia, and hence, there is a need to zero-rate or exempt basic fresh fruits and vegetables from VAT to increase consumption and support businesses. Fresh fruits and vegetables are rich in vitamins, micronutrients, and dietary fibre and can help in alleviating hunger and malnutrition in Namibia, particularly for the poor households that are currently challenged by employment, drought, reduced disposable income, and high food inflation. This will complement staple cereal food crops that are already included in the VAT relief measures in Namibia.

6. METHODOLOGY

6.1 Study location and design

This study was conducted at the Namibian Agronomic Board in Windhoek, Namibia, and it is a qualitative (inductive) study, using a case study approach. Therefore, the literature review was conducted to induce research evidence. Sources such as information brochures, government gazettes, industry reports, research articles, books, and websites of key stakeholder organisations were reviewed in this study. Descriptive statistics were used to analyse and support qualitative data.

6.2 Sampling, data collection, and analysis

This is an in-depth study of a single subject relating to the impact of VAT on the consumer price of fresh fruits and vegetables. VAT in selected SADC countries (South Africa, Botswana, Lesotho, Zambia, and Zimbabwe) was also evaluated to benchmark relief measures in place. The study used the latest trade data available on the NAB's AMID system for the years 2017/18 to 2021/22 (5 years) financial years. The list of fresh fruits and vegetables consists of about 140 different controlled products.

The VAT amount estimated to have been paid to the government from the supplies of fresh fruits and vegetables during the selected periods was calculated. The study also highlighted that VAT is specifically paid by end-consumers, and the study focused on the top 20 special controlled fruit and vegetable crops. This study also used a secondary data collection method; hence, literature reviews on critical factors were necessary to induce qualitative findings. Descriptive statistical analysis was used in calculating the VAT collected. Trade statistics of fresh fruits and vegetables in Namibia were obtained from the AMID system of the NAB, on which the estimated monetary value of the VAT collected by the government was based.

7. GENERAL OVERVIEW OF VALUE-ADDED TAX (VAT)

7.1 PRINCIPLES OF VAT

According to Olatunji (2024), VAT is essentially a consumption tax that applies to the value added at each stage of a product's lifecycle from raw materials to final sale. It is collected in stages along the supply chain, with each business remitting VAT to the government but also claiming back the VAT they have paid (for input VAT claimable). Below are the key principles of VAT:

- **Tax on Value Addition:** VAT is applied only to the value added at each stage of production or distribution.
- **Multi-Stage Collection:** VAT is collected at multiple stages of production and distribution, thereby ensuring consistent tax application. Every entity involved in the supply chain (manufacturer, wholesaler, retailer) collects VAT on its sales.
- **Input Tax Credit:** Businesses can claim back the VAT they paid on inputs used in production. This ensures that VAT is not a burden on businesses and is fully transferred to the final consumer.
- **Proportional Tax:** VAT is usually a percentage of the price of goods or services, making it proportional. Higher-priced goods attract more VAT, while lower-priced items pay less VAT.
- **Broad-Based Application:** In most economies, VAT applies to a wide range of goods and services, with certain exemptions for essential goods like food, education, or healthcare services, depending on local policies.

7.2 THE IMPACT OF VAT ON CONSUMER PRICES

According to Olatunji (2024), VAT, as an indirect tax, is added to the cost of goods and services, meaning that consumers bear the ultimate burden. Here's how VAT influences consumer prices and spending behaviour:

- **Increased Prices for Goods and Services:** The most direct effect of VAT is an increase in the cost of goods and services. For example, if a product costs N$100,000 and the VAT rate is 7.5%, the final price consumers pay will be N$107,500. This increase can influence consumer behaviour, especially for non-essential or luxury items.
- **Regressive Effect on Low-Income Earners:** VAT tends to be regressive because lower-income individuals spend a higher portion of their income on VAT-taxable goods. This means that VAT impacts poorer households more than wealthier ones, as they allocate a significant part of their income to essential purchases.
- **Impact on Demand:** The effect of VAT on consumer demand depends largely on the elasticity of the products being taxed. For necessities such as food or healthcare, which have inelastic demand, consumers may continue to purchase them despite higher prices. For luxury items, demand might drop if the additional VAT pushes prices too high.
- **Inflationary Pressure:** In economies where VAT rates are increased, businesses often pass this cost to consumers by raising prices, leading to inflationary pressures. While VAT alone may not cause inflation, it can contribute to overall price increases in an economy.
- **Shifts in Consumer Preferences:** VAT can change consumer behaviour by making taxed goods more expensive compared to untaxed alternatives. For example, if essential goods like certain foods are exempt from VAT, consumers may shift their spending to those untaxed goods.

7.3 OVERVIEW OF THE NAMIBIAN VALUE-ADDED TAX (VAT) SYSTEM

As stated earlier, this subsection presents the results of the literature review on how VAT works in Namibia, in the context of the agricultural industry. It was important to initially explain VAT to bring the audience up to par in understanding the topic at hand.

Subsequent to the definitions, VAT was classified and explained in terms of liabilities and entitlements, before it was also classified based on economic activities (supplies). Lastly, analysis and discussions on whether the current VAT in Namibia plays any role in influencing the consumer price and demand of fresh fruits and vegetables are also discussed below.

7.3.1 Value-Added-Tax (VAT) in Namibia

In terms of the Value-Added Tax (VAT) Act 10 of 2000, a value-added tax is a consumption tax levied on a product whenever value is added at each stage of the supply chain, from production to the point of sale. The amount of VAT that the consumer pays is based on the cost of the product, minus any of the costs of materials used in the product that have already been taxed. In Namibia, VAT is charged at a standard rate of 15% on the supply of most goods and services and on the importation of goods

(NamRA, 2023). Every person becomes liable for registration within 21 days of becoming liable, and this liability arises when a person makes supplies with a total taxable activities value exceeding N$500,000 during 12 months, or if there are reasonable grounds to believe that the total value of taxable supplies to be made by such person during 12 months will exceed N$500,000 (NamRA, 2023).

However, persons with a turnover not exceeding N$500 000 but exceeding N$200 000 in 12 months may apply to the commissioner of revenue for voluntary registration. Every registered person charges 15% of the sales price, which should be paid to the receiver of revenue. The standard rate of 15% is similarly charged on the imported goods; however, a 10% of such standard rate is charged extra when the foreign supplier exports on a free-on-board destination invoice. Free-on-board destination invoice is when the exporter excludes transport, flight, and administration fees on the invoice. Therefore, a normal effective rate for imported goods is 16.5% i.e., ((10/100 x15%) + 15%) = 16.5%.

7.3.2 VAT classification in terms of liabilities and entitlements

Value Added Tax, or VAT, is a tax imposed on goods and services. It’s a consumption tax similar to a sales tax, but instead of being collected at the final sale and charged entirely to the customer, it’s levied along the way. VAT is paid every time a product is sold, including transactions between manufacturers, wholesalers, and retailers. It’s collected throughout assembly and is evaluated at each stage of the process. The role of the business in this case is to pay VAT to a VAT-registered supplier for things like raw materials and professional services. Basically, a business does not have to be registered for VAT to be charged VAT by the suppliers (Adelaide Carleton, 2022).

However, the only way that a business can reclaim that VAT is when the business becomes VAT-registered (either by reaching the minimum threshold or voluntarily registering). Once VAT-registered, a business can collect VAT from consumers and reclaim the VAT it has been charged by suppliers from the government. The business is, in essence, acting as a tax collector on behalf of the government.

In Namibia, VAT is categorised as Input VAT or Output VAT. Registered persons are liable to charge 15% on top of their set prices on all of the goods and services that they supply other than zero-rated and exempted items. The 15% charged is paid to the Receiver of Revenue, and this is called ‘Output VAT’.

The Output VAT is calculated by multiplying the tax fraction (15/115) by the VAT-inclusive price charged, e.g., 15/115 x N$1000 = N$130.43, which is the Output VAT due to the receiver of revenue. The registered persons are entitled to claim the VAT that they were charged as they purchased the items to produce the taxable supplies, and that is called ‘VAT Input’ (Brown, 2010).

Instead of a registered person paying the full Output VAT and claiming the full Input VAT at the same time, such a person only pays or claims the difference between Output VAT and Input VAT (Output VAT– Input VAT = Due VAT or Net VAT output. Figure 1 below illustrates how VAT works for a business.

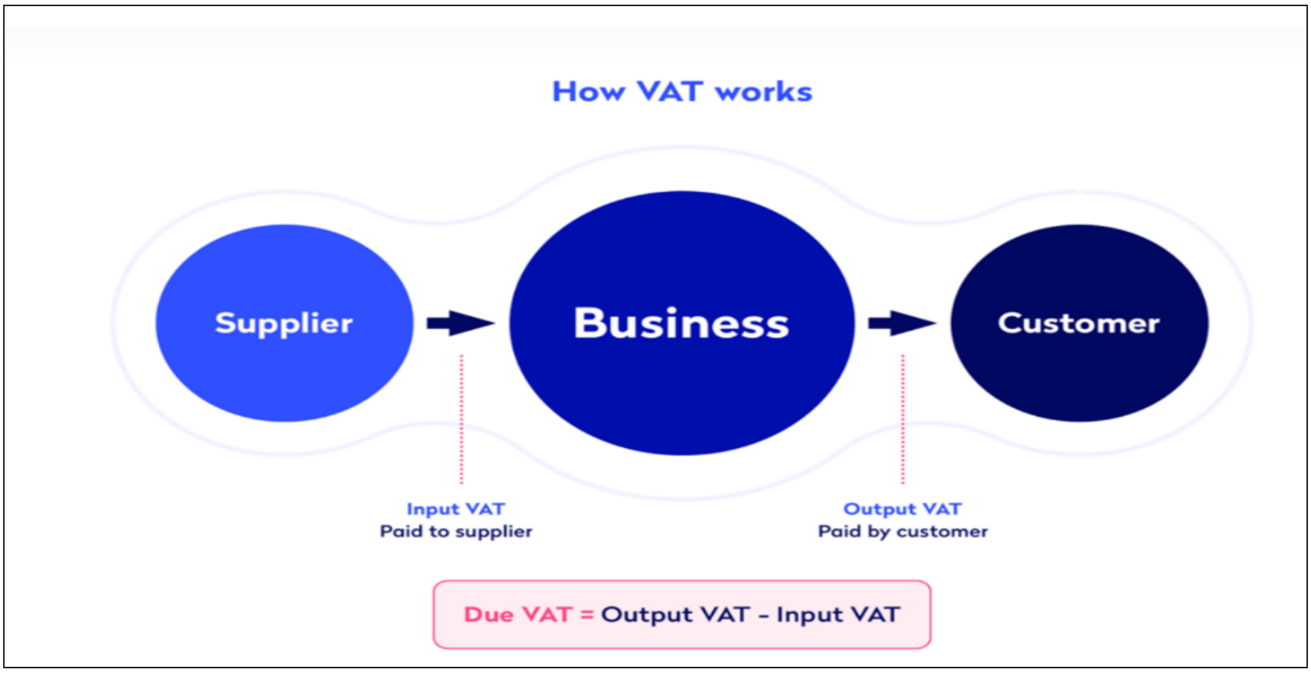


Figure 1: *How VAT works (Source: Adelaide Carleton, 2022)*

If the VAT difference is positive, the registered person has to pay such difference, whereas if the difference is negative, the registered person has to claim such difference from the Receiver of Revenue. In other words, the difference between the VAT that has been paid and the VAT that has been collected must be paid to the Receiver of Revenue or claimed back (Nieuwenhuizen et al., 2006).

For example, if the Output VAT was N$1000.00, while the Input VAT was N$800.00 (N$1000 – N$800 = 200, the registered person is liable to pay N$200.00 to the state. On another note, if the Input VAT was N$800.00, while the Output VAT was N$1000.00 (N$800 – N$1000 = N$ -200), the registered person is entitled to claim N$200.00 from the Receiver of Revenue. A VAT report of every two (2) months tax period is submitted as a return to the Receiver of Revenue on or before the 25th of the month following the end of such tax period (NamRA, 2023).

The suppliers who import material inputs for use in making taxable supplies must also pay 16.5% of the invoice total amount to the Receiver of Revenue on or before the 20th of the month following every month of importing (NamRA, 2023). This import VAT can be claimed back as Input VAT, simultaneously with the Input VAT from domestic purchases of taxable supplies. It is worth noting by the registered persons that penalties of N$100.00 per day are payable per day for the return not submitted, a 10%

payable VAT is charged every month of late payment as penalties, whereas a 20% payable VAT amount is also charged as annual interest for late payment (VAT Act 10 of 2000). Penalties are doubled in the case of persons liable to register but who failed to do so. It is also penalisable if persons registered or liable to register for VAT fail to keep records or fail to keep accounting records in the English language at their registered place in Namibia.

7.3.3 Types of VAT supplies

Value-added tax shall be levied and paid, for the benefit of the state revenue fund. Such Value-Added Tax shall be imposed on every taxable supply by a registered person and on every import of goods or import services other than an exempt import (VAT Act 10 of 2000). VAT is accounted for by the registered person making a domestic supply of goods or services other than exports, paid by the importer of goods, or paid by the recipient of imported services.

However, accountability for VAT is based on different economic activities. Different economic activities are, therefore, categorised by the VAT Act as taxable supplies, zero-rate supplies, exempt supplies, and exempt imports. The four (4) categories of VAT are explained in the following paragraphs.

i. Taxable Supplies

According to the amendment of the VAT Act, Act 4 of 2010 subsection (27), "taxable activity is any activity which is carried on continuously or regularly by any person in Namibia or partly in Namibia, whether or not for monetary profit, that involves or is intended to involve, in whole or in part, the supply of goods or services to any other person". All domestic taxable supplies are vatable at the rate of 15%, whereas import supplies are also vatable at 15%, plus 10% of the import invoice is on a free-on-board basis; hence, the rate for VAT import is 16.5%.

According to the VAT Amendment Act 6 of 2002, Taxable activities are excluded from private recreation (the activity involves making exempt supplies), activity carried from premises of a branch or main business permanently outside Namibia, licenses issuance, activities by the state, levying of taxes or levies, taxable supply of goods or services within an EPZ by an EPZ enterprise or export processing management company.

ii. Zero-rated Supplies

Zero-rate, as per section 9 subsection 2 of the VAT Act 2000, is a taxable activity or supply charged with tax at the rate of zero percentage (0%), provided it is in paragraph 2 of Schedule III as a zero-rate supply and it is entitled to a registered person. Zero rate implies that the registered person does not have to charge 15% but rather 0% when selling to customers.

Zero rates on fruits and vegetables would benefit the end consumers as they are not charged an extra 15% percentage in buying these products. However, farmers would end up experiencing a negative Net Output VAT and therefore have to claim it back from the Receiver of Revenue, of which industry actors are unlikely to push this cost upstream, and this is to the advantage of end consumers.

Zero rates may similarly work in favour of all industry actors if it is also applied to primary production inputs such as seeds, fertilisers, other agrochemicals, and ploughing services. This would mean that farmers are charged zero VAT whenever buying zero-rated primary farm inputs, hence there are no VAT refunds. The following agricultural supplies are currently applicable to VAT zero-rate in Namibia, as provided in Schedule III, namely:

1. Maize grain	**5. Fresh and dried beans**	**9. Cake flour**
2. Maize meal	**6. Sunflower cooking oil**	**10. Sugar**
3. Mahangu grain	**7. Animal fat**	**11. Fresh milk**
4. Mahangu flour	**8. Bread flour**	**12. Bread**

iii. <u>Exempt Supplies</u>

Exempt supply as per section 10 (1) of the VAT Act 10 of 2000 is applicable if the activity or supply is specified in paragraph 2 of Schedule IV of the Act. <u>Not even a zero per cent rate (0%) applies to the exempt supplies; hence, no registration or returns are required</u>. As per the analysis in this study, none of the agricultural food items or inputs is part of Schedule IV as of the latest amendment of Schedule IV in Amendment Act 12 of 2015 of Namibia. Exempting fruits and vegetables may benefit all stages upstream of the supply chain, except the downstream, such as input suppliers and farmers. If fresh fruits and vegetables are exempted, it would mean that fresh fruits and vegetable farmers are not obliged to register for VAT and would not be entitled to claim the input VAT that they are charged whenever buying the taxable supplies used in producing fresh fruits and vegetables, i.e., seeds, fertilisers, other agrochemicals, ploughing services, packaging materials, and machinery.

Farmers are likely to push these unclaimed VAT supplies to the upstream stages of the supply chain, which will still increase consumer prices. Exempting fresh fruits and vegetables may, therefore, only work well if key primary production inputs are also exempted. Most of the exempt supplies in Namibia are currently in hospitality (accommodation), educational services, medical services, financial services, asset management services, land lease, trade unions, and transport services.

iv. **Exempt Imports**

Exempt imports as per section 13 (2) of the VAT Act 34 of 2000, Schedule V has provided the imports that are specified as exempt imports. The exempt imports are the same as exempt supplies; the only difference is that exempt supplies are not obliged to register and charge or are entitled to claim 15% VAT on domestic supplies or purchases. Exempt imports, on the other hand, are not obliged to register and charge or are entitled to claim 16.5% VAT on import supplies or purchases. None of the scheduled exempt imports pertains specifically to agriculture. The current exempt imports in Namibia are rather applicable to activities such as;

- EPZ, import of technical assistance through agreement, charities/welfare, funerals, sea transport machinery, goods imported for oil and gas mining, goods under a heading and rebate as per the Customs and Excise Act, exports of imported unaltered goods and goods under transhipment to any other countries, donations and goods/ services imported by or donated to the state, among others.

8. RESULTS AND DISCUSSIONS

This section (Section 8) presents the general principles of VAT, the impact of VAT on consumer prices, an overview of the VAT system in Namibia, an assessment of the monetary impact of VAT on fresh fruits and vegetables, and the evaluation of VAT relief measures implemented in Namibia and selected SADC countries.

8.1 EVALUATING THE VAT SYSTEM IN NAMIBIA'S FRESH FRUITS AND VEGETABLE INDUSTRY

On the upstream of the supply chain, consumers of agricultural products are charged VAT at a rate of 15% of the exclusive purchase value when buying the items in the retail shops, hence paying it as a direct tax on both locally produced and imported foodstuffs. Section 8.2 of this report presents the estimated amount of VAT paid by consumers of fresh fruits and vegetables over the last five (5) years.

Namibia imports the majority of the Fresh Fruits and Vegetables that are consumed in the country, so the importers of Fresh Fruits and Vegetables are liable to pay 16.5% (effective rate) of the invoice value to the Receiver of Revenue. However, the traders are likely to recover part of this cost as they add it to the Input VAT, hence the end consumer pays this net Output VAT indirectly.

On the downstream of the supply chain, domestic farmers are charged 15% VAT on all the inputs they use in the production of fresh fruits and vegetables, except for the zero-rate and exempt supplies such as water and electricity. However, VAT-registered farmers are entitled to claim this VAT from the

Receiver of Revenue. Farmers who are not registered for VAT are not entitled to claim this Input VAT from the Receiver of Revenue, and they are likely to push this Input VAT cost to the end customers or to the retailers who may ultimately push this cost to the end consumers.

When registered farmers are selling through distributors (wholesalers) or processors of fresh fruit and vegetables, they are liable to charge VAT at a 15% rate, of which distributors pay, and such distributors are entitled to claim it from the Receiver of Revenue as Input VAT. Furthermore, distributors are liable to charge VAT at the rate of 15% whenever supplying fresh fruits and vegetables other than zero-rated and exempted produce to the retailer, whereas the retailers are entitled to claim it as Input VAT. On some occasions, processors are liable to charge VAT at the rate of 15% whenever supplying processed fresh fruits and vegetables to retailers who are entitled to claim it as Input VAT. Processors are also entitled to claim the Input VAT that they were charged as they purchase fruits and vegetables for processing from farmers.

So, each stage of the supply chain is liable to pay or entitled to claim the Net Output VAT from the Receiver of Revenue, and these are in some way factored into the value of the next stage along the supply chain, and the end consumers pay these as VAT indirectly. Ultimately, the retailers, who are at the last stage before the end consumer stage, are liable to charge VAT on behalf of the Receiver of Revenue whenever selling the same fresh fruits and vegetables to the end consumer. Supply chain stages regarding VAT payments and claims are illustrated in Figure 2.

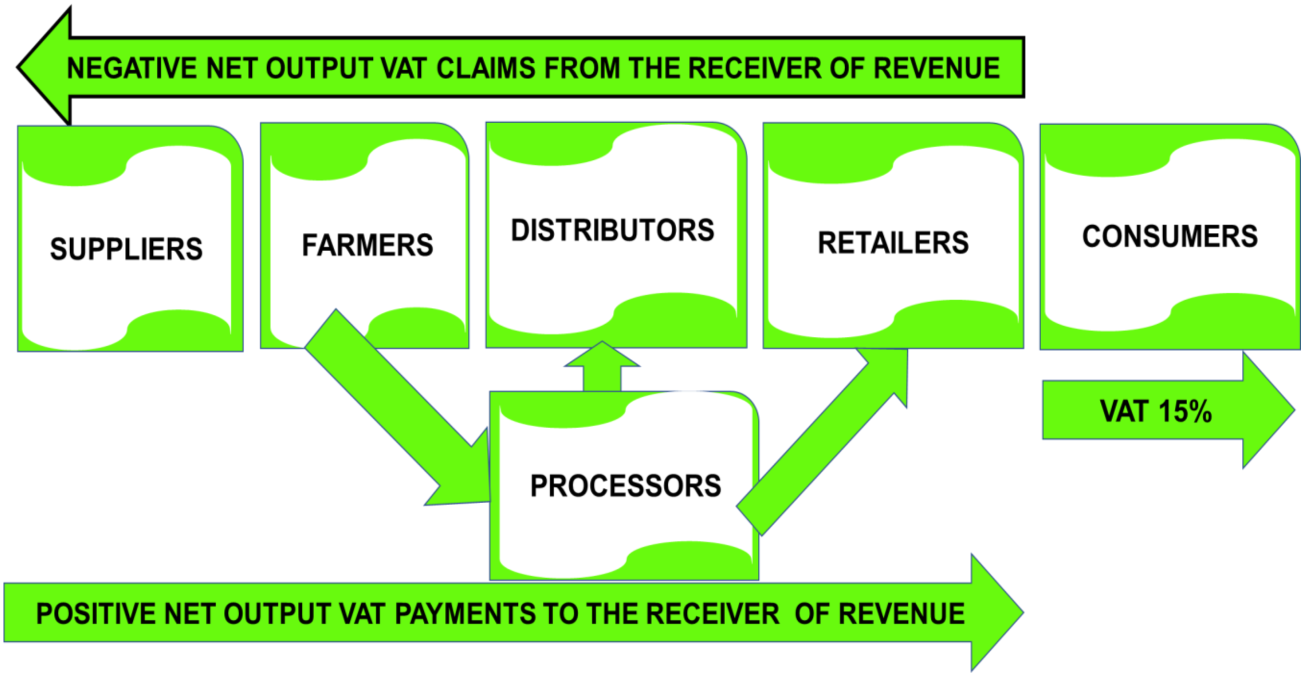


Figure 2: *Supply chain stages of VAT claims and payments*

The value that the consumers pay is higher than all stages of the VAT due to incremental supply chain costs, incremental supply chain mark-ups, and incremental supply chain Net Output VAT at each stage from downstream to upstream. The incremental values that the consumer pays indirectly and directly are illustrated in Figure 3.

Figure 3 indicates that at each stage of the agricultural produce supply chain, various costs are summed up to arrive at the final consumer price. These costs include production, distribution, and retailing costs, as well as business mark-up and Net Output VAT. These analyses are in concurrence with the study by Odhiambo and Odada (2010), which regarded VAT on fresh fruit and vegetable value chains as multi-staged, and there is a need to consider zero-rating them at the consumer level in Namibia.

Table 1: *Incremental value of consumer price for a taxable agricultural produce*

STAGE 1	STAGE 2	STAGE 3 (Sometimes)	STAGE 4	STAGE 5	STAGE 6
1. Input Production Cost **2.** Supplier Mark-up **3.** Supplier Net Output VAT ***= Input Supply Value***	**1.** Farm Production Cost **2.** Farm Mark-up **3.** Farm Net Output VAT ***= Farm Gate Value***	**1.** Processing Cost **2.** Processing Mark-up **3.** Processing Net Output VAT *(Exempted)* ***= Processed Product Value***	**1.** Distribution Cost **2.** Distributor Mark-up **3.** Distributor Net Output VAT ***= Distribution Value***	**1.** Retailing Cost **2.** Retailer Mark-up **3.** Retailer Net Output VAT **= Retail Value**	**1.** Retail Value **2.** VAT 15% **=Consumer Price**

Key: *Net Output VAT = Output VAT minus Input VAT*

8.2 IMPACT OF VAT ON CONSUMER PRICE - CARROT SCENARIO

According to the NAHOP former Chairperson, Mr Anton Koekomoer, the following formula is commonly used to arrive at the final retail price in Namibia: Production cost + 30% (producer mark-up) + 90% distributor and retailer market value added. The markup rate of 30% of the production cost was therefore added to the input cost to determine the farmer's selling price.

Subsequently, the general upstream mark-up rate of 90% (45% Distributor plus 45% Retailer) was added to the farmer’s selling price to determine the consumer's price. VAT rate at 15% of the domestic supplies’ invoice value of carrots and 16.5% of import supplies’ invoice value (agri-inputs) was then calculated to estimate the VAT amount charged at different stages of the supply chain.

Hence, using the pricing model of carrot vegetables as an example, Table 2 clearly shows that fresh fruits and vegetables pricing is multistage, and every stage adds its own mark-up to make a profit and VAT before the product gets to the end consumer. The supply chain stages range from input suppliers as stage 1 with a 30% mark-up, farmers as stage 2 (carrot production stage) with a 30% mark-up, distributors as stage 3 with a 45% mark-up, and retailers as stage 4 with a 45% mark-up, and it is at this stage that the VAT accumulated along the supply chain is passed to the end consumer.

The VAT charges at stage 1 are rated at 16.5% as nearly all farm input supplies are imported into Namibia, while VAT of 15% was charged at the rest of the stages. Input suppliers, farmers, distributors, and retailers have paid to the Receiver of Revenue (ROR) the differences between Output VAT and Input VAT, referred to as Net Output VAT, at each stage. The input cost to produce one kg of carrots is about N$5.93 per kg (NAB, 2023). However, this input cost includes N$1.32 for fuel, labour, land lease, interest, and management costs, which are either zero-rated or exempted.

Therefore, the vatable imported production inputs at the input supplier's cost are about N$4.61 VAT excluded per kg of carrot to be produced. This cost could be higher when the production takes place during out-of-season. Table 2 shows that the price of carrots increased from N$9.41 per kg at the producer (farmer) to N$19.79 per kg at the retail level, as a result of mark-up and VAT added at different stages of the supply chain. It is noted that VAT alone contributed about 13% (N$2.58 per kg) to the retail or consumer price of N$19.79 per kg, and the biggest portion is the mark-up of N$5.34 per kg.

Table 2: Impact of VAT on consumer price – Carrot scenario in Namibia

		DOWNSTREAM STAGES		UPSTREAM STAGES	
Description		**Stage 1: Production Input Suppliers**	**Stage 2: Producers (Farmers)**	**Stage 3: Distributors**	**Stage 4: Retailers**
A.	Cost of making or obtaining taxable supplies N$/kg excl. VAT & mark-up	4.61	5.99	8.19	11.87
B.	Input VAT N$/kg (15% of local supplies, 16.5% of import supplies	0.76	0.90	1.23	1.78
C.	Mark-up of 30% for stage 1 & 2, 45% for stage 3 & 4 (N$/Kg) + 1.32 for labour, fuel, interest and land for stage 2	1.38	2.2	3.7	5.34
D.	**Selling Price (N$/Kg Excl VAT) = A+ C**	**5.99**	**8.19**	**11.87**	**17.21**
E.	Output VAT N$/kg = 15%X D	0.90	1.23	1.78	2.58
F.	**Total Selling Price (N$/Kg Incl VAT) = D + E**	**6.89**	**9.41**	**13.65**	**19.79**
G.	TOTAL Net Output VAT (Actual VAT Paid to ROR) = E - B	0.14	0.33	0.55	0.80
H.	Percentage Actual VAT paid to ROR = G/E x 100	15%	27%	31%	31%
I.	TOTAL NET VAT Retained by the Industry N$/Kg = E - G	0.76	0.90	1.23	1.78
J.	% VAT Retained by the Industry N$/Kg = I/E X 100	85%	73%	69%	69%

8.3 ANALYSIS OF VAT REVENUE ON TARGETED FRESH FRUITS AND VEGETABLES

One of the objectives of this study was to estimate how much VAT revenue is collected by the government annually from the fresh fruits and vegetables, and the outcome of this assessment is presented below:

8.3.1 Volume, value, and VAT of fresh fruits and vegetables consumed in Namibia

As presented in Table 3, the average value of locally produced fresh fruits and vegetables traded formally for the seven (7) financial years is N$312 million, and at the retail level, this is approximately N$453 million, and N$521 million after adding 15% VAT, as estimated to have been passed on to the end consumer. The total VAT that was passed on to the end consumers over the period is, on average, N$68 million, on locally produced fresh fruits and vegetables.

Table 3: *Estimated VAT paid by end consumers on domestic supplies of Fresh Fruits and Vegetables at the Retail stage*

Fiancial Year	Local Value (N$)	Total Retail Value (N$) + 45% Mark-Up (Excl VAT)	Total Retail Value (N$) + 45% Mark-Up + 15% VAT	Estimated VAT Paid by End Consumer at Retail Stage (N$)
2017/2018	221,566,093.00	321,270,834.85	369,461,460.08	48,190,625.23
2018/2019	240,274,807.00	348,398,470.15	400,658,240.67	52,259,770.52
2019/2020	319,407,252.00	463,140,515.40	532,611,592.71	69,471,077.31
2020/2021	351,347,977.00	509,454,566.65	585,872,751.65	76,418,185.00
2021/2022	343,179,073.00	497,609,655.85	572,251,104.23	74,641,448.38
2022/2023	326,871,258.48	473,963,324.80	545,057,823.52	71,094,498.72
2023/2024	388,106,139.40	562,753,902.13	647,166,987.45	84,413,085.32
AVERAGE	**312,964,657.13**	**453,798,752.83**	**521,868,565.76**	**68,069,812.92**

Source: NAB (2024)

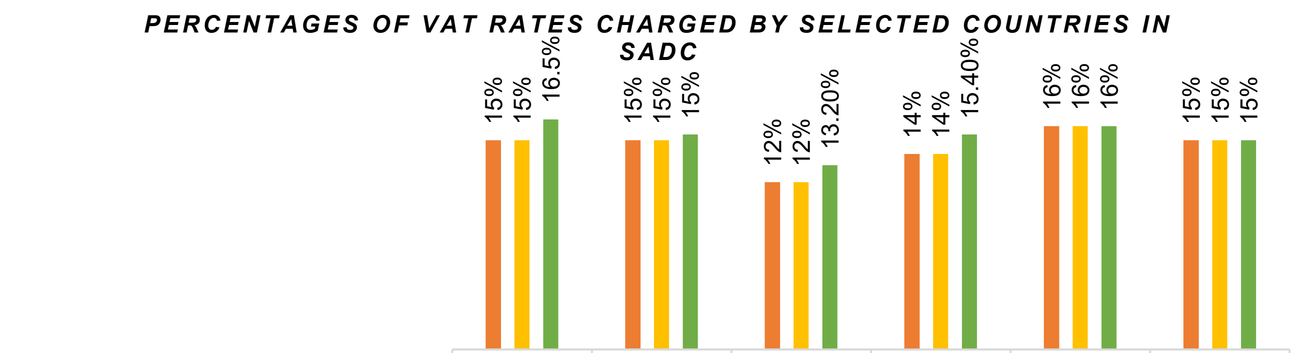
8.4 EVALUATION OF VAT RELIEF MEASURES IN NAMIBIA AND SELECTED SADC COUNTRIES

This section was designed to report on exercises undertaken to evaluate VAT approaches undertaken by various countries in the SADC. These are, namely, South Africa, Lesotho, Botswana, Zambia, Zimbabwe, and, of course, Namibia, where the study was carried out. The countries are evaluated in terms of VAT percentage rates, VAT registration threshold for both mandatory and voluntary, and ultimately the VAT relief mechanisms in place for agriculture and fresh fruits and vegetables in particular.

8.4.1 VAT percentage rates in selected SADC countries

It was critical to compare certain SADC member countries on the VAT regulation approaches practised. This would aid in making recommendations to inform policy and decision-making in Namibia and beyond, if applicable. VAT regulations practised by some SADC countries were, therefore, evaluated in this study. Countries whose VAT regulation practices were evaluated are Botswana, Lesotho, Namibia, South Africa, Zambia, and Zimbabwe.

The evaluated SADC countries have adopted different standard VAT rates for both domestic and imported goods and services, as well as for effective rates on imports. The VAT rates implemented by the selected countries range from 12% to 16.5%. In all countries analysed, the VAT import rates are equivalent to the VAT rates on domestic goods and services; however, VAT import rates are elevated by the effective rates. The effective rates are the actual VAT rate on imported goods and services, which varies based on the shipping agreement, i.e., FOB or CIF. For example, imports in Namibia are charged with an extra 10% of the standard VAT rate for FOB-origin tax invoices, hence the effective rate of 16.5% on imports. Namibia was highest in the highest effective rate on VAT imports (16.5%), whereas Botswana had the lowest (estimated at 13.2% VAT on imports). None of the SADC countries among those evaluated was found to be charging VAT on the export of agricultural produce. Figure 6 presents the VAT percentage rates charged by selected countries in SADC.



	Namibia	South Africa	Botswana	Lesotho	Zambia	Zimbabwe
VAT Standard Rate (Domestic Supplies)	15%	15%	12%	14%	16%	15%
Import VAT - Standard Rate	15%	15%	12%	14%	16%	15%
Import VAT - Estimated Current Effcetive Rate	16.5%	15%	13.20%	15.40%	16%	15%

Figure 5: *VAT Rates Charged by Selected Countries in SADC*

Source: *PWC (2022), Evergreen Accounting (2020),* Carpustax (2022)

8.4.2 VAT registration threshold in selected SADC countries

A lower requirement for voluntary registration would enable SMEs (including small-scale farmers) to qualify for VAT output claims. It was, therefore, vital to evaluate the annual turnover threshold in US dollars (USD) as a requirement of compulsory and voluntary registration for VAT in selected member countries of SADC.

Botswana had the highest in both voluntary and mandatory VAT registration requirements. Three of the countries evaluated do not require any amount of annual turnover by the persons intending to apply for voluntary registration for the VAT, and these countries are Zambia, Zimbabwe, and Lesotho.

Namibia is the least in terms of the requirements of annual turnover for compulsory VAT registration, whereas it is the second highest in annual turnover requirements for voluntary VAT registration. Figure 7 hereunder presents the VAT registration thresholds in USD.

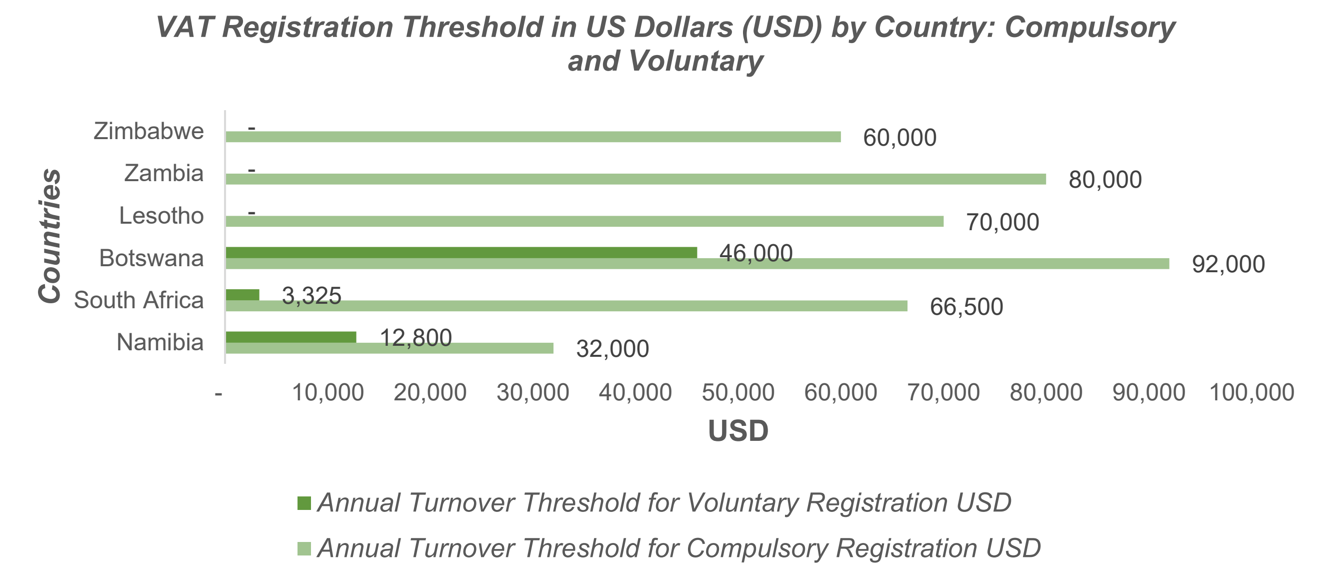


Figure 6: VAT registration threshold in selected SADC countries

Source: *PWC, 2022*

8.4.3 VAT relief mechanisms for agriculture in selected SADC countries

While VAT is an important part of government income as it is used to cater to a weighty budget. It has a direct and indirect impact on the cost of consumer goods. The decisions of VAT zero-rate or exemption for basic goods such as fruits and vegetables, and others, may, therefore, rescue consumers from high inflation, particularly for poor people, from the high cost of basic food items. Table 6 presents the supplies that are zero-rated and/or exempted from VAT charges. Except for Zambia, which exempted all unprocessed agricultural foods and products, all countries, including Namibia, have zero-rated VAT on most cereals and legume crops and primary products other than processed products.

Among other countries evaluated, Zimbabwe and Zambia are the only countries that exempt fruits and vegetables from VAT. Both Botswana and South Africa have zero-rated VAT on fruits and vegetables. Only Namibia and Lesotho have not yet exempted or zero-rated VAT on fruits and vegetables. Moreover, except for Namibia, evaluated countries such as South Africa, Botswana, Lesotho, and Zimbabwe have all zero-rated VAT on farm inputs, whereas Zambia has exempted agricultural supplies. Furthermore, Zambia has zero-rated certain agricultural equipment and accessories, whereas Zimbabwe and Botswana exempt VAT charges on certain agricultural equipment.

Table 6 is useful in identifying which countries have considered the agriculture sector, fruits and vegetables in particular, in their VAT relief measures. Namibia seems to be lagging on the matter when compared to other selected SADC member countries. In addition to a high import share of fruit and vegetables, Namibia imports almost all agricultural inputs and farm equipment, hence a limited list of zero-rated or exempted goods and services that are related to the production of agricultural foodstuffs. This may exacerbate the high cost of fruits and vegetables as they are also excluded from the VAT zero-rate or exempt schedules.

Table 6: *VAT zero-rating and exemption approaches in selected SADC countries*

Country	Zero-rated agricultural supplies	Exempted agricultural supplies
Namibia	Exports of goods, fuel, maize grain and meal, mahangu grain or meal, fresh or dried beans (excl. canned or frozen), sunflower cooking oil, animal fat for food preparation (fried or processed), bread, sugar (dry, wet, granular white or brown), fresh milk and international transport services	Financial services
South Africa	Exports of goods, certain agricultural products supplied under prescribed circumstances, farming inputs, goods transferred to a foreign branch, basic foodstuffs such as brown bread, brown wheat meal, maize meal, samp, mealie rice, dried maize, beans and lentils, pilchards or salmonella, rice, vegetables, fruit, vegetable oil, milk, cultured milk, milk powder, dairy powder blend, eggs and edible legumes, paraffin, movable goods excluding cars sold to a registered vendor in a customs controlled area (CCA) (in an industrial development zone), well associated with animal disease grands, international transport services, services offered to a foreign branch, services relating to land and improvements outside South Africa	Financial services, donations by Section 21 companies
Botswana	Exports of goods, international transport services, unprocessed/ unfinished sorghum or maize for human consumption, millet grain or meal, wheat grain, maize cobs or flour, sugar, Setswana beans (natural & unmixed), pesticides, fertilisers, brown bread, vegetables, fruit, rice, samp,	**Financial services** (loans, credit or security for money, excluding transactions rendered at a fee or commission. **Grants** or **donations** and **tractors** for farming (those

	milk and bread flour. Services funded by government grants or international donors.	specified under customs Tariff Heading 8701.90)
Lesotho	Maize meal, maize, excluding popcorn and green mealies for human consumption, beans (dried, crushed or powder but not further prepared), agricultural inputs, paraffin, milk for domestic consumption, bread for domestic consumption, peas (dried, crushed or powder but not further processed, canned or frozen), sorghum meal, un-malted sorghum grain, wheat grain and wheat flour	Financial services, insurance, unimproved land, leasing or letting immovable properties for manufacturing purposes and water, among others
Zambia	Export of goods, freight transport services, energy-saving appliances (machinery and equipment), certain agricultural equipment and accessories, wheat, flour, bread, bread rolls and buns	Mains water, relief on importation of certain goods, insurance and financial services and unprocessed agricultural foods and products and certain agricultural supplies
Zimbabwe	Farm inputs (herbicides, fodder and insecticides), soya beans and cotton seed (raw material in oil expression), certain basic foodstuffs (milk, raw meat and bread), goods supplied to an independent branch in an export country, international transportation services, and local transportation services	Financial services, donations, certain agricultural equipment and machinery, certain fuel and fuel products, certain live animals, fruits and vegetables, specific PPE used in farming, brown rice, etc.

Sources: *PWC (2022), The Conversation (2018)*

Table 7: *Crop industry VAT relief measures (Zero-rating and Exemption) summary per SADC country*

Country	Staple grain products	Fruits and vegetables	Basic Inputs (Seed, fertilisers and agrochemicals	Agricultural implements/ machinery
Namibia	Yes	No	No	No
South Africa	Yes	Yes	Yes	Yes
Botswana	Yes	Yes	Yes	Yes
Zambia	Yes	Yes	No	Yes
Zimbabwe	Yes	Yes	Yes	Yes
Lesotho	Yes	No	Yes	No
Total	**Yes = 6, No = 0**	**Yes = 4, No = 2**	**Yes = 4, No = 2**	**Yes = 2, No = 4**

Sources: *PWC (2022), The Conversation (2018)*

NB: Yes means that the VAT relief measures are being implemented, and No means that they are not being implemented

9. CONCLUSIONS

VAT is an essential tool for raising government revenue, but its impact on consumer prices and spending should not be underestimated. While businesses benefit from input tax credits, consumers ultimately bear the cost through higher prices. This is especially true in countries such as Namibia, where VAT rates are high, or where essential goods and services are not exempt from the tax.

By understanding the principles of VAT and analysing its real effects on fresh fruits and vegetables, policymakers and consumers can better navigate the complexities of this tax system. For consumers, particularly those in lower-income brackets, it's important to understand how VAT contributes to the price of everyday purchases and to make informed spending decisions accordingly.

It is clear from this study that VAT on fresh fruits and vegetables increases the consumer price by large margins. It was also discovered from this report that Namibia and Lesotho are the only countries, amongst sampled SADC countries, that charge VAT on fresh fruits and vegetables, and this makes the products more expensive for ordinary citizens. Furthermore, most SADC countries have zero-rated or exempted basic production inputs such as seeds, fertilisers, and agrochemicals from paying VAT, including agricultural implements and machinery, thereby lowering the cost of production and making the fresh fruits and vegetables more affordable and much more competitive in export markets. Lastly, all the countries sampled in the SADC, including Namibia, charge VAT on imported fresh fruits and vegetables, while exports are excluded.

Therefore, in practice, policymakers need to find the right balance between raising revenue through VAT and minimising the negative impact on consumer prices and inflation on fresh fruits and vegetables. By doing so, they can ensure that VAT remains an effective but fair tool for improved food security and nutrition and economic development.

10. RECOMMENDATIONS

Governments can implement policies to reduce the regressive nature of VAT and its inflationary impact. Strategies include:

- **Zero-rating or exemptions for fresh fruits and vegetables:** All fresh fruits and vegetables can be VAT zero-rated or exempted to support local farmers and businesses, to benefit the end consumer, to address food insecurity, and contribute to economic development. This will relieve businesses from this financial burden and also contribute to the overall objective of the Namibian Horticulture Market Share Promotion Scheme.

- **Zero-rating or exemptions for basic inputs, implements, and machinery:** The government can also consider introducing a subsidy on inputs to ensure that fresh fruits and vegetables produced locally are affordable to the end consumers. This way, revenue from VAT can be reinvested in subsidising local farmers to assist fresh fruit and vegetable farmers in offsetting the regressive nature of VAT.

  This subsidy should target basic inputs such as seeds, fertilisers and agrochemicals, agricultural implements and machinery. This will also improve the competitiveness of Namibian products in terms of price, both at the domestic and international levels.

- **Voluntary VAT registration - Awareness creation:** Farmers and traders, including smallholders, should register their businesses with BIPA for Income Tax to qualify for VAT registration, provided they earn an annual turnover equal to or more than N$200 000 for voluntary VAT registration or an annual turnover equal to or more than N$500 000 for mandatory VAT registration.

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