Contact Details
Tel office: +264 61 379 500
Fax office: +264 61 22 5371
E-mail: nabdesk@nab.com.na
Website: www.nab.com.na

Physical address:
Agricultural Boards' Building
30 David Hosea Meroro
Road
Windhoek
Namibia

Postal address:
PO Box 5096
Ausspannplatz
Windhoek
Namibia

NAMIBIAN AGRONOMIC BOARD
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AN OVERVIEW OF MARKET ACCESS BY SMALL-SCALE HORTICULTURE PRODUCERS

ABSTRACT

Namibia recorded a total consumption of 89,083 tons of horticulture fresh produce worth N$658 million during the 2018/2019 financial period (NAB, 2018/2019). During the aforementioned period, more than half of Namibia's fresh fruits and vegetables were imported, and only about 35% were locally produced. The Namibian Agronomic Board (NAB) implements various schemes aimed at encouraging local production. However, despite these interventions, small-scale horticulture farmers constantly complain that they do not have a market for their produce. Based on these complaints, the NAB commissioned a study to investigate this and engaged various small-scale producers from the North Central, Kavango, and Zambezi production zones as well as the formal and informal traders from the Central, Karst, North Central, Kavango, and Zambezi trading zones. The study used a survey approach whereby a sample of 30 key and active small-scale producers, 17 formal traders, and 25 informal traders was selected. The collected data were analysed using Microsoft Excel, Microsoft Word, and QuestionPro. The results indicated that the majority of small-scale horticulture producers grow a variety of horticulture products that fall under the Special Controlled Products (SCP) and as such, the Market Share Promotion (MSP) rules are applied. However, only 48% of the small-scale producers sell their products through formal markets, with the remaining 51% selling their products through informal markets, whilst 1% sell to export markets. All (100%) of the interviewed traders buy fresh produce from small-scale producers. Factors such as compromised quality, inconsistent supply, lack of cold storage and transport facilities, strict packaging requirements, and lack of production agreements limit small-scale producers' participation in the formal markets. Therefore, at a high level, this study recommends that fruit value chain development should be a Chapter in the 5-year Crop Value Chain Strategy that is being developed by the NAB, to have targeted interventions that will stimulate market access by small-scale horticulture producers in Namibia.

Keywords: *market access, horticulture fresh produce, small-scale producers, traders, formal markets, and informal markets*

1. INTRODUCTION

Namibia recorded a total consumption of 89,083 tons of horticulture fresh produce worth N$658 million during the 2018/2019 financial period (NAB, 2018/2019). This indicates an 8% increase from 81,452 tons of fresh produce consumed during the 2017/2018 financial period. During the aforementioned period, more than half of the fresh fruits and vegetables consumed in Namibia were imported, and only about 35% were locally produced. The Namibian Agronomic Board (NAB) implements the Market Share Promotion (MSP) scheme to ensure that Namibian registered traders purchase a certain minimum percentage of their quarterly turnover from local farmers before being granted an import permit (NAB, 2020). Close border periods for the top 19 Special Controlled Products (SCP) are implemented during the time of sufficient local supply, and most of the common horticultural products produced by smallholder farmers are part of the list of special controlled products (NAB, 2020).

The implementation of this scheme further aims to encourage local horticulture farmers to increase production and take advantage of this almost guaranteed market. Local farmers have since taken advantage of this and the NAB has seen an increase in the number of local horticulture farmers or producers over the past years. Despite the implementation of the MSP scheme by the NAB that is aimed at developing the horticulture industry in Namibia, small-scale horticulture farmers constantly complain that they do not have a market for their produce. Some of the complaints from small-scale horticulture producers dating as far back as 2019 indicate that local supermarkets or traders are only buying from established horticulture producers or that they are still sourcing fresh produce from outside Namibia. Furthermore, although the Agro-Marketing and Trade Agency (AMTA) has tried to buy from small-scale producers and tries to find markets for local fresh produce, it continues to face the same resistance from the traders (Shaanika, 2019; Nembwaya, 2020; Shigwedha, 2021).

It was on this basis that the NAB conducted this in-house study to establish whether indeed small-scale horticulture farmers find it difficult to access domestic markets, then analyse such enabling or limiting factors, and ultimately make recommendations.

2. METHODOLOGY

Primary data were collected through a survey (face-to-face interviews) using a structured questionnaire with both structured and unstructured questions. The questions covered both aspects of supply (production) and demand (market) related issues. Individual small-scale horticulture farmers situated in the North Central, Kavango, and Zambezi production zones, as well as formal and informal traders situated in the Central, Karst, North Central, Kavango, and Zambezi trading zones, were interviewed. Additional or secondary information from previous studies, reports, and online data from other relevant institutions was also reviewed and utilised to support the primary data collected through the survey.

The study had a population size of 72 potential respondents, and 69 respondents from producers, formal traders, and informal traders were interviewed. The data were analysed using Microsoft Word and Excel, and QuestionPro to present the descriptive data.

3. RESULTS AND DISCUSSIONS

3.1 Import Analysis

Figure 1 shows the total national horticulture imports (2021/2022 financial year), indicating quite high amounts of potatoes and onions imported at a rate of over 2,600 tons annually. Although these products are mostly only imported when borders are open for imports as per the SCP and MSP rules, the high imports of potatoes indicate very low local production.

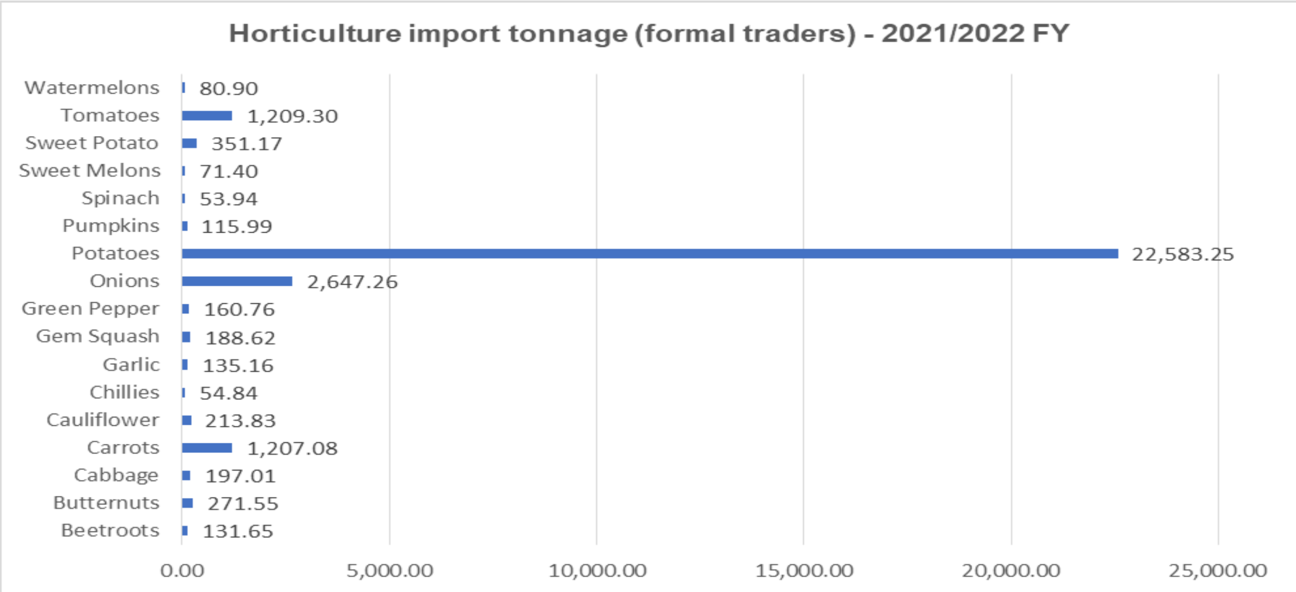

Figure 1: Namibia's annual horticulture imports by formal traders (tonnage) (NAB, 2022)

3.2 Production by Small-Scale Producers and Uptake by Traders

The statistics collected from the respondents during the survey depict that the majority of small-scale horticulture producers grow a range of horticultural goods that are classified as SCP products and to which the MSP rules are applied. With regards to the sampled small-scale producers in the North Central, Kavango, and Zambezi production zones, cabbages (22.6 tons) and watermelons (19.9 tons) are the horticulture crops that are produced the most by the small-scale producers in terms of tonnage, possibly due to their bigger sizes and weight (Figure 2). The next most produced horticulture products are onions (18 tons), tomatoes (17.6 tons,) and beetroots (15.2 tons) respectively.

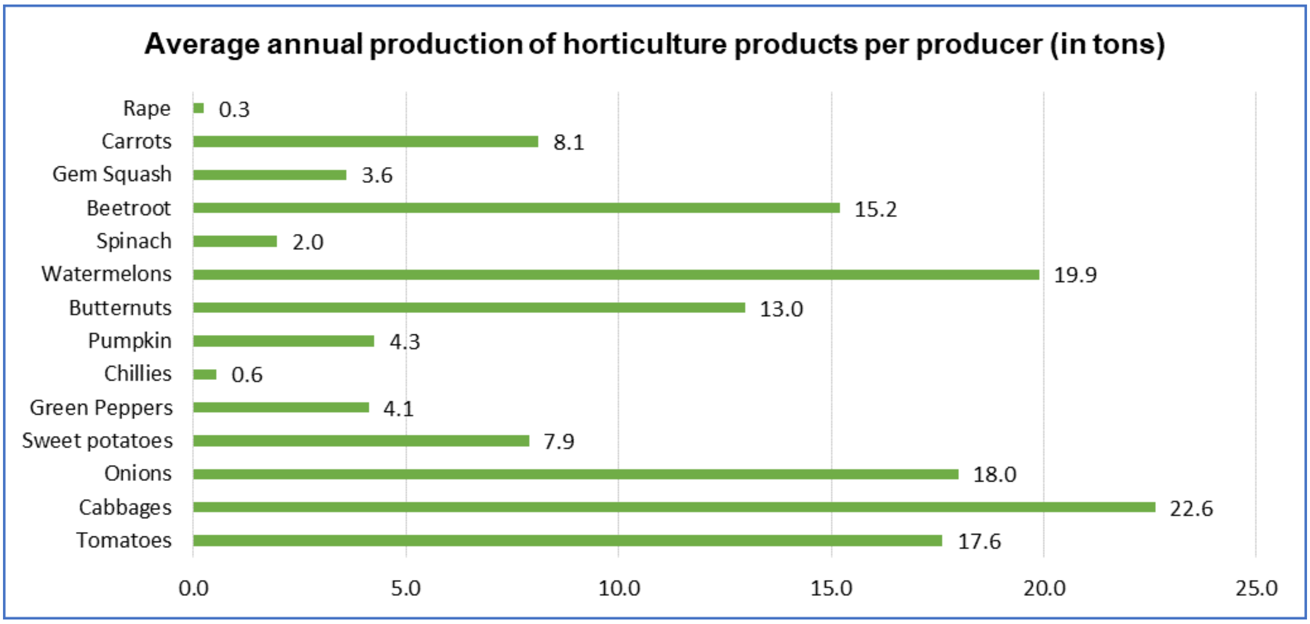

Figure 2: Average annual horticulture production per producer (in tons) (Survey data, 2021)

As for the uptake by traders, formal traders within the sampled production zones purchased an annual average amount of 182 tons of potatoes from the small-scale horticulture producers in the sampled production zones, 135.7 tons of watermelons, and 134.5 tons of onions respectively. Chilli, ginger, cauliflower, and broccoli recorded the lowest purchased products with less than 0.5 tons each (Figure 3).

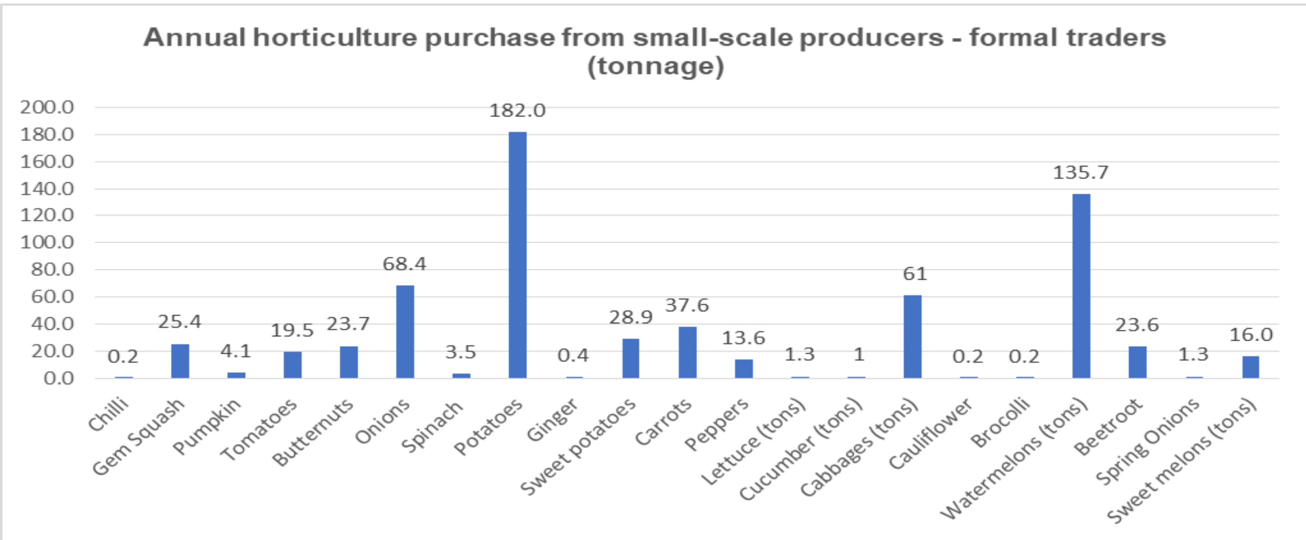

Figure 3: Average annual horticulture purchase from small-scale producers in North Central, Kavango, and the Zambezi - Formal Traders (Survey data, 2021)

Other horticultural products were also purchased from small-scale horticulture producers by the formal traders all within the three production zones and these are highlighted in Figure 4.

On average, formal traders in the North Central, Kavango, and Zambezi production zones purchased 14,350 heads of cabbages, 12,000 heads of lettuce, 3,600 cucumbers, 2,250 watermelons, and 450 sweet melons from the small-scale horticulture producers in the same production zones annually. Due to the insufficient local supply of all horticultural produce, traders are also importing some produce to complement the local supply and meet the local consumption demand (Figure 4).

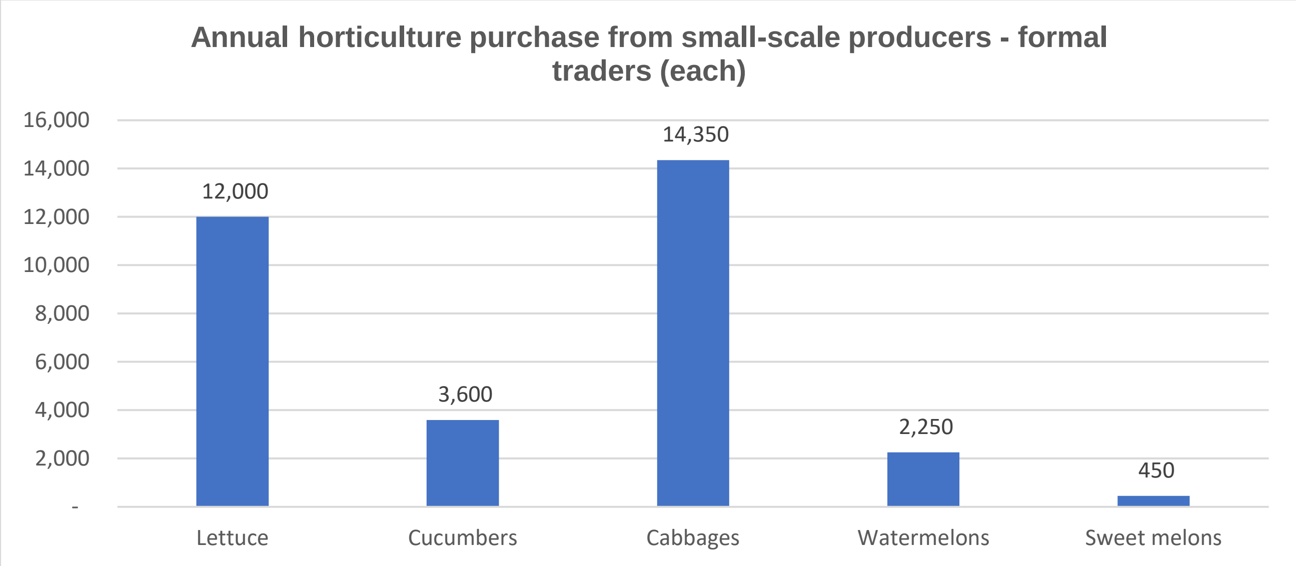

Figure 4: Average annual horticulture purchase from small-scale producers by formal traders in the three production zones (individual quantity) (Survey data, 2021)

Figure 5 depicts that out of the interviewed producers, 51% indicated that they sell their products through the informal market (local village/community/street vendor/open market and or at farm/farm gate stall), whilst only 48% indicated that they sell the products through formal markets, i.e. dealers such as retailers, processors, agents, farmers' market or associations, through production contracts with distributors/retailers, government agencies such as AMTA, and/or catering companies. About 1% of the respondents indicated that they sell outside of Namibia, specifically to Zambia.

From the trader's perspective, 100% of the interviewed formal and informal traders indicated that they source or buy their horticulture products from small-scale farmers (Figure 5). The traders, however, also highlighted the challenges they experience when sourcing from small-scale producers (Figure 6).

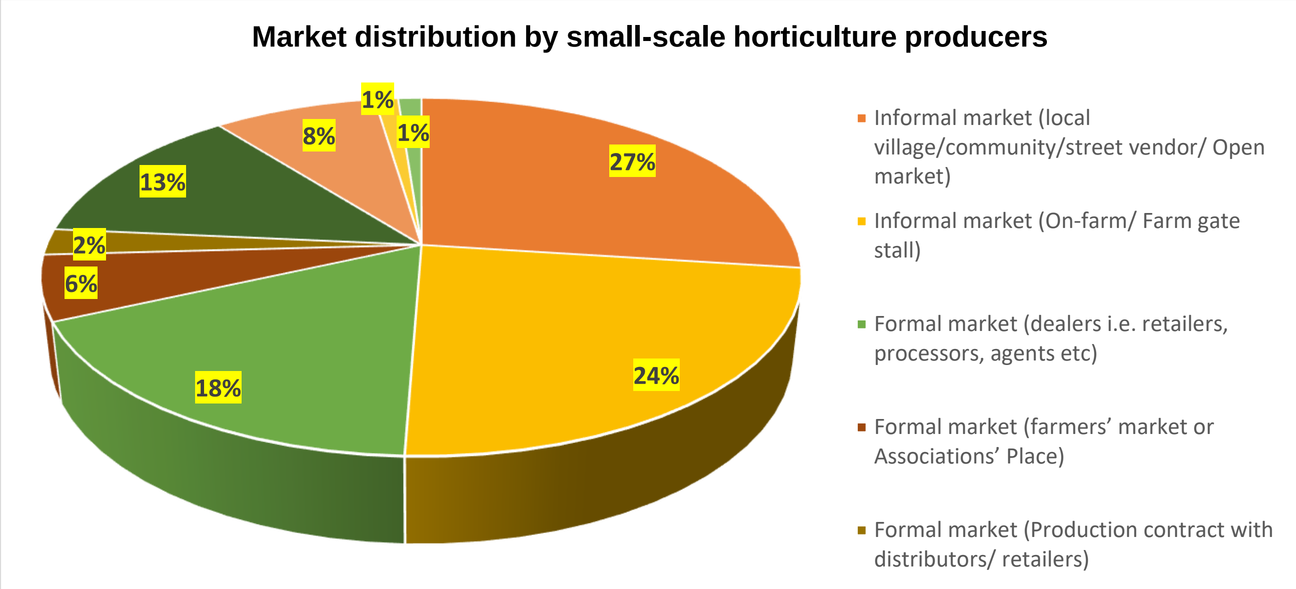

Figure 5: Market distribution for small-scale horticulture producers in North Central, Kavango, and Zambezi (Survey data, 2021)

Various traders indicated that they source fresh produce from small-scale farmers around Olushandja, Etunda, Salem, Sikondo, and many other individual small-scale producers within the three sampled production zones (Figure 6).

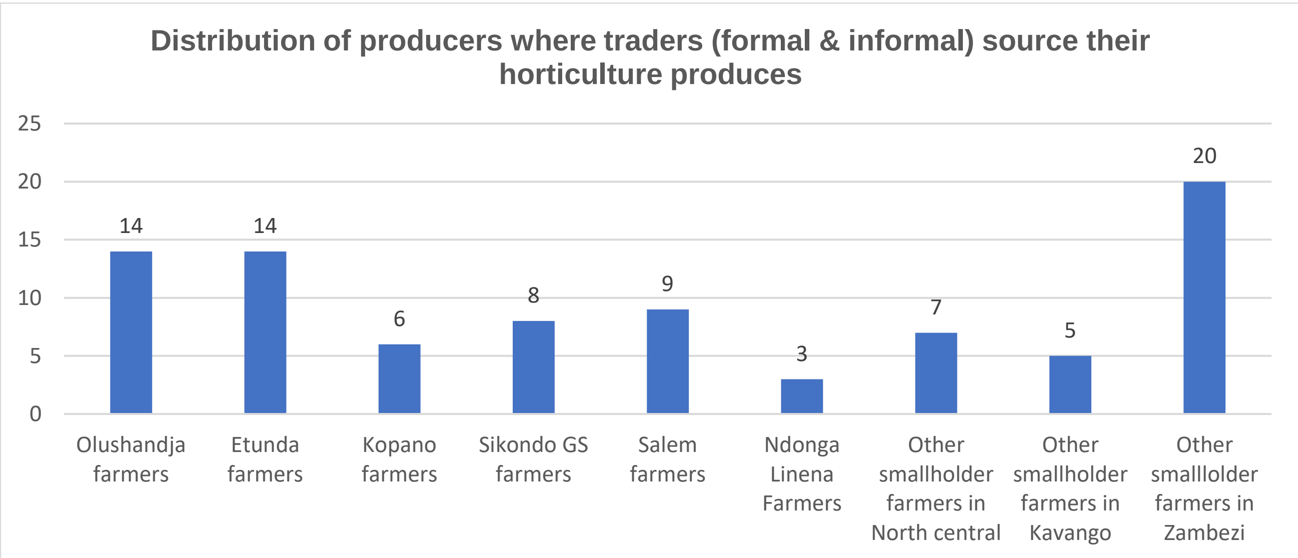

Figure 6: Distribution of where traders source their products (Survey data, 2021)

3.3 Price Determination by Producers and Traders

Respondents from all categories were also asked to indicate who sets up the prices when selling or buying the products and their responses are summarised in Figures 7a & b.

For producers, the pricing category of "both buyer and seller negotiate" on the price scored the highest with over 50%. This was, however, contradicted by traders who scored over 51% on the pricing category "the producer as the seller" sets the price, whilst only 35% of the producers indicated that they set the price themselves as sellers. Nonetheless, there is room for negotiation as both traders and producers scored close to 50% (51% - producers, 47% - traders) on the category of "both buyer and seller negotiate" (Figure 7a & b).

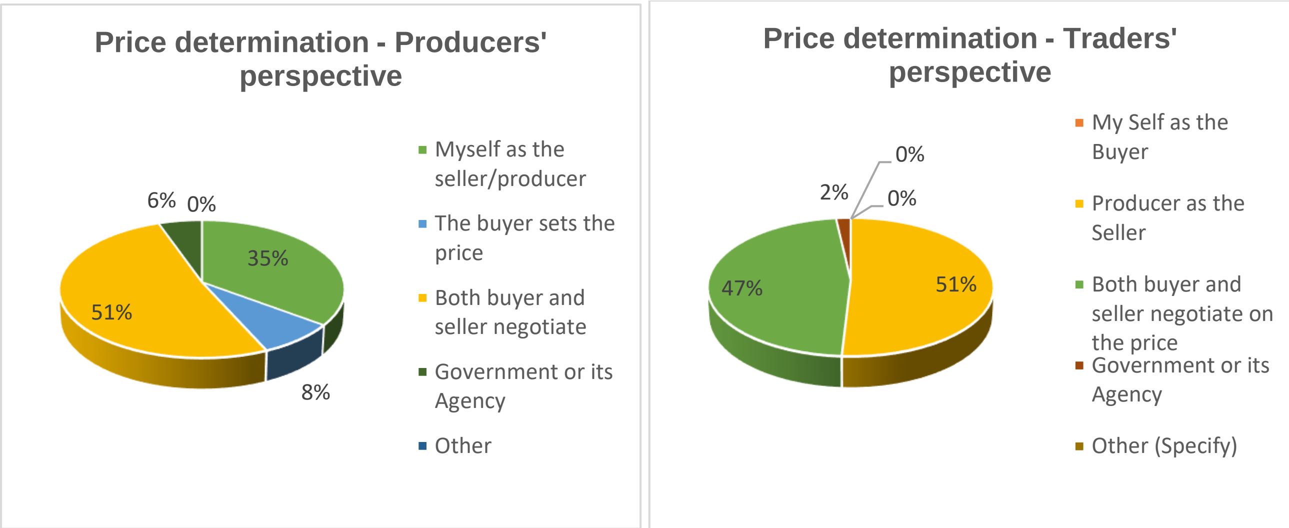

Figure 7a & b: Price determination: Producers' and traders' perspectives (Survey data, 2021)

The majority of traders and producers indicated that they feel comfortable about the "negotiating" pricing method because more often than not, it leaves both parties satisfied with the final negotiated price. Some formal traders, however, feel that sometimes the producers price the products at a high price, even when the products are not of top quality. This then leads to formal traders not being able to competitively price and sell the products. The informal traders feel as if they do not have any control over the prices being charged by the producers and hence they are always left with no choice but to accept whatever price is charged due to a lack of bargaining power.

The small-scale horticulture producers on the other hand also feel that they are being forced to under-price their produce especially when they have to negotiate the price with the traders. They indicated that the low prices offered to them hinder them from expanding their production and they are also, in most cases, unable to break even and cover their operational costs.

3.4 Market Access and Transportation

A total of 96% of the interviewed producers access their markets via tarred/gravel roads, apart from the 4% that indicated that they use a sandy road. They indicated having to travel for a minimum of 4km and a maximum of 200km to reach the formal markets. Producers further indicated that they spend a minimum amount of N$6.60 per km on transport to the markets, and the rate can get as high as N$30.00 per km.

In terms of who provides transport to the market, as indicated in Figure 8, the majority of producers (46%) have their own transport and they usually deliver their produce to the market or traders. A small proportion of producers (10%) indicated that some traders collect the produce from the farm themselves, however, this is still at the producer's cost.

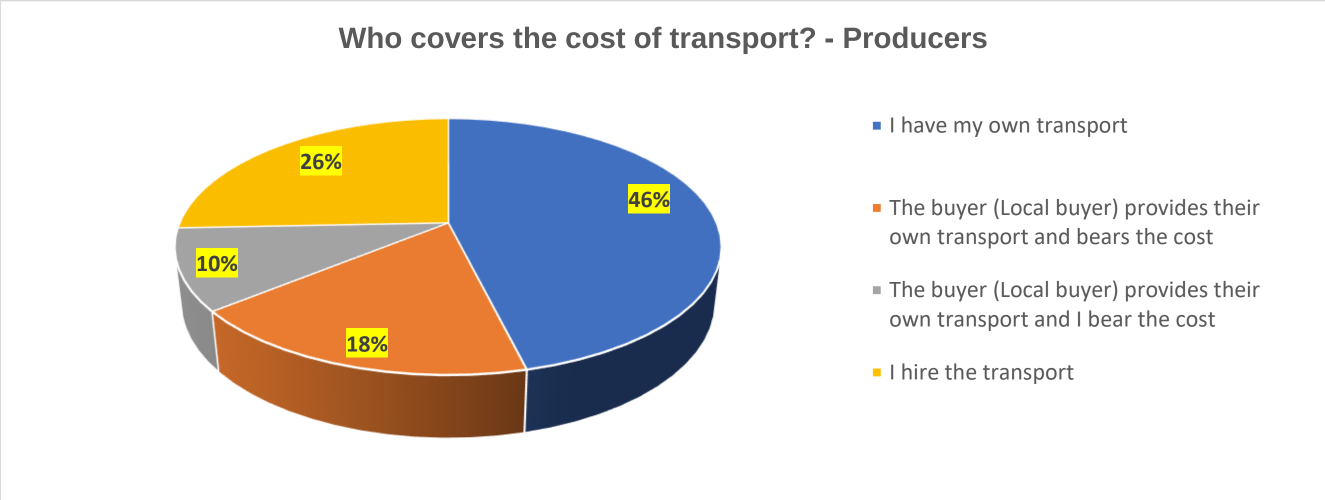

Figure 8: Transport cost coverage – Producers (Survey data, 2021)

From the trader's perspective, Figure 9 indicates that 57% of the producers provide their transport and they bear the costs. This corresponds to the figures indicated in Figure 8 above. Some of the traders also indicated that they have their transport (33%) and they collect their products directly from small-scale producers at their farms although this is most common with formal traders.

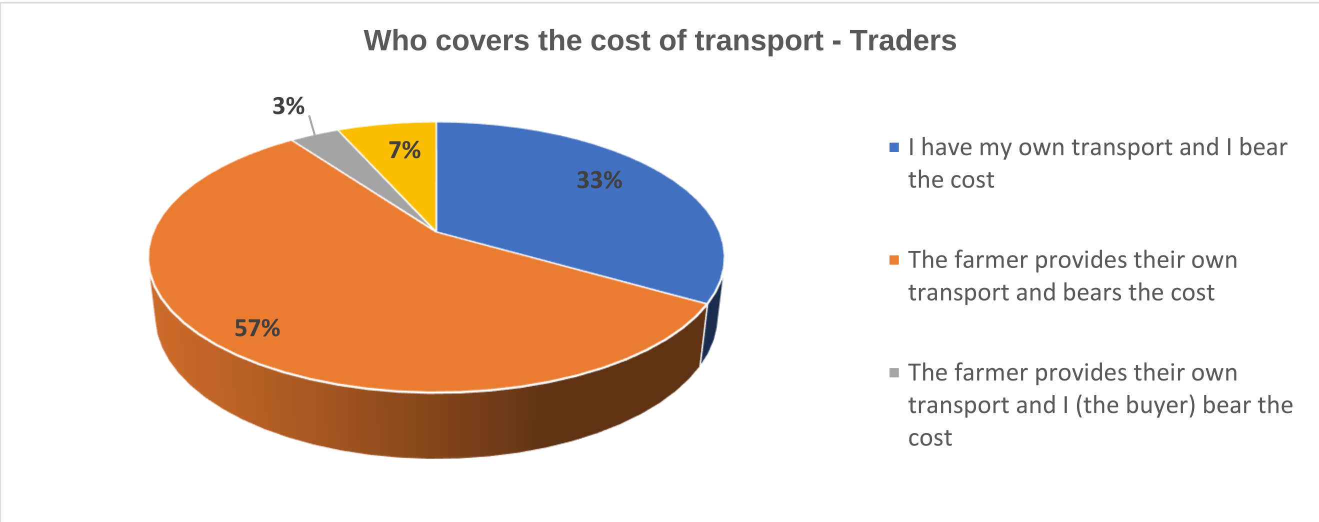

Figure 9: Transport cost coverage – Traders (Survey data, 2021)

3.5 Access to Information and Training

Access to information about the horticulture industry is another important aspect of a successful horticultural enterprise. Farmers must be well informed about the industry they operate in for them to make informed decisions, especially when it comes to production.

Figure 10 indicates that over 90% of the small-scale horticulture producers indicated that they have access to information about the horticulture industry in terms of market prices, production, and demand.

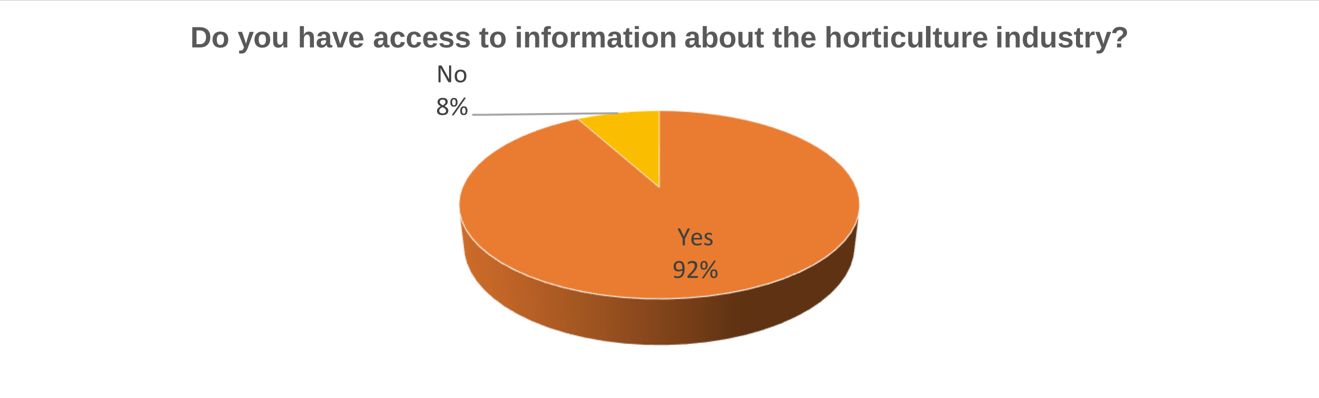

Figure 10: Small-scale horticulture producers' level of access to information about the industry (Survey data, 2021)

Training also forms an integral part of a successful crop farming enterprise as it enhances knowledge to improve production and income generation.

Figure 11 illustrates the level of training extended to the small-scale horticulture producers on vegetable gradings in Namibia. The figure shows that only 71% of the producers have received training in vegetable grading, thus leaving 29% without any knowledge about vegetable grading. These percentages leave room for improvement, especially from the regulator's side, to ensure a developed industry.

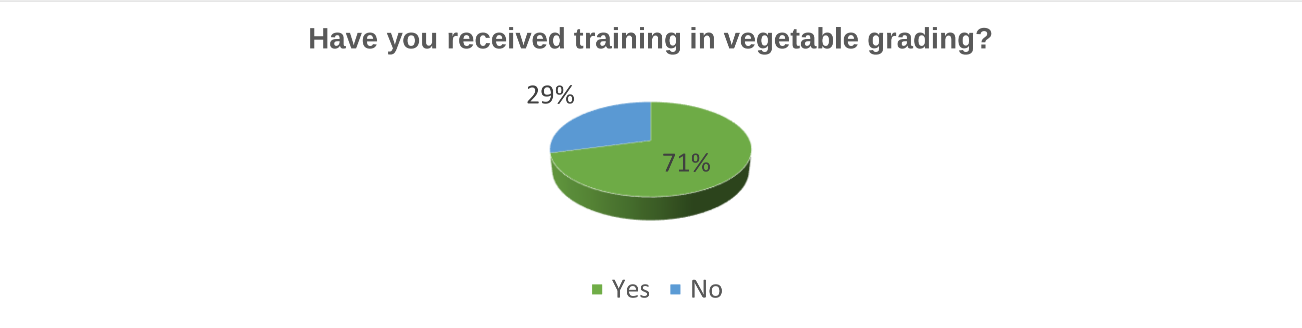

Figure 11: Small-scale horticulture producers' level of training in vegetable grading (Survey data, 2021)

3.6 Food Safety and Quality

In terms of food safety certifications, only a few traders (36%) (Figure 12) from the sampled production zones require their suppliers (small-scale horticulture producers) to have some food safety certifications. These are mostly general certifications such as Producer Registration with the NAB, basic Good Agricultural Practices (GAP), and Hazard Analysis and Critical Control Points (HACCP). According to the traders, apart from the NAB registration certificates, the two latter requirements are not compulsory.

Figure 12: Proportion of formal traders that require food safety certifications from horticulture producers (Survey data, 2021)

As shown in Figure 13, the majority of both producers and traders rated the quality of fresh produce from the small-scale producers as either of high or better quality. This indicates that the horticulture products produced by small-scale producers are of an acceptable standard. Less than 3% of the interviewed respondents indicated that the products are of low quality. Overall, based on what is represented in Figure 12 above, the industry perception in the North Central, Kavango, and Zambezi production zones is that there is a significant improvement in terms of quality from the small-scale producers compared to the past years when local vegetable production was very low in the country.

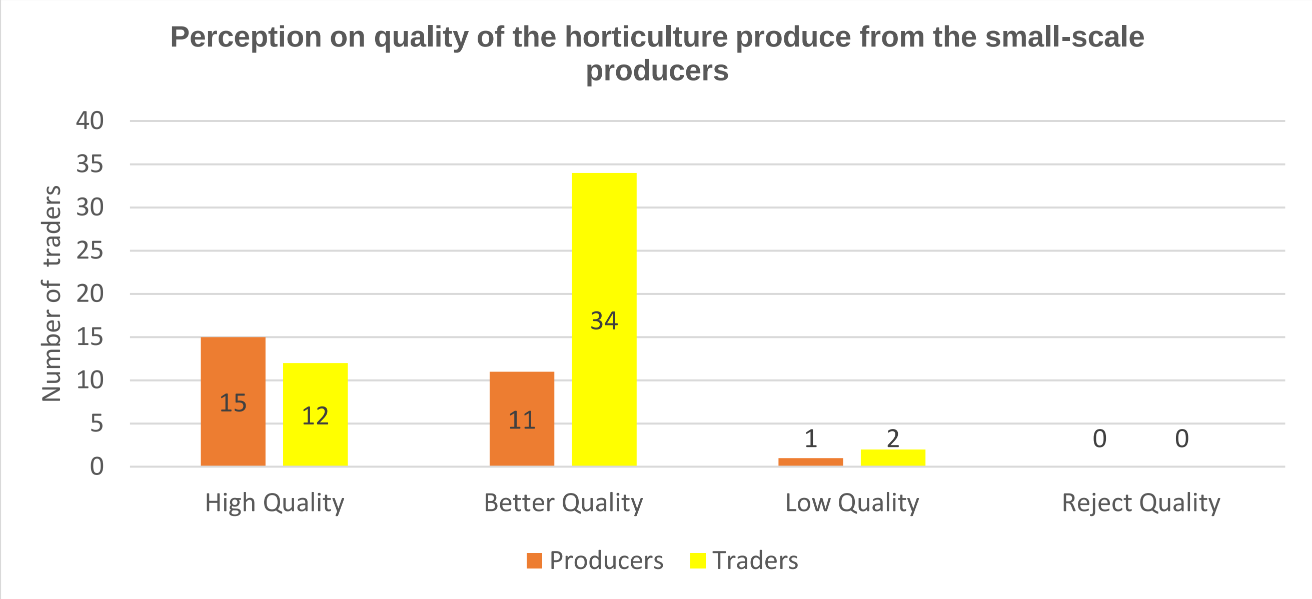

Figure 13: Quality of products from small-scale producers (Survey data, 2021)

3.7 Value Addition

Value addition ensures maximum benefits from all the harvest and minimises post-harvest losses as much as possible. The study, therefore, investigated the level at which the traders and producers are involved in this vital aspect.

The study revealed that about 47% of formal traders do minimal value addition of cutting, peeling, dicing, shredding, and mixing of some vegetables such as carrots, butternuts, and cabbages, whereas a few (20%) of the informal traders do some drying of vegetables such as spinach and beetroot leaves.

3.8 Challenges and Opportunities

Several challenges encountered by small-scale horticultural farmers when attempting to access formal markets for their products affect the production industry in Namibia. However, possible suggestions are available to change the situation and expand access to formal markets by small-scale horticultural farmers.

The findings of the study suggest that the top three challenges highlighted in Figure 14 are low prices offered (15%), distance to the market (15%), and, lack of storage facilities or pack houses for the producers (14%) among many other challenges.

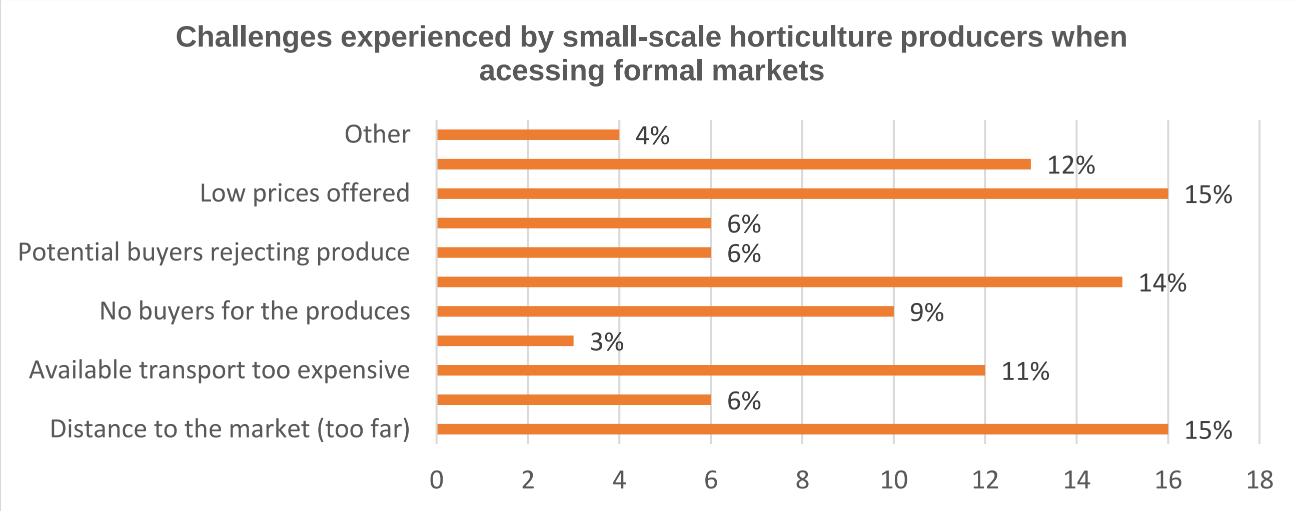

Figure 14: Challenges experienced by small-scale horticulture producers (Survey data, 2021)

Both traders and producers, who were the most significant stakeholders in the study when interviewed, made several recommendations that they felt were needed to better the condition of small-scale producers who are always having difficulties accessing official markets.

Table 1: Suggestions to enhance access to markets by small-scale horticulture producers (Survey data, 2021)

Producers	**Traders**
a) Assist farmers/producers with transport and cold storage facilities b) Encourage producers to get registered with the NAB c) Enhance extensive training for producers, especially in crop management, to ensure a sufficient supply of various products throughout the year and avoid an oversupply of similar products simultaneously d) Increased access to financial support/credit facilities, training on grading, and awareness of food safety aspects	a) Provide financial support to small-scale horticulture producers so that they can collaborate with larger wholesalers b) Regulating authorities such as the NAB should provide platforms for traders and producers to engage as there seems to be no engagement at this level that is targeted at training and industry development, especially platforms that are aimed at assisting the smaller producers c) The government should create favourable economic activities that will increase customer spending for traders

Producers	Traders
e) Prices, especially producer prices, should be regulated, taking into consideration the input costs to avoid producers' price exploitation f) Allow farmers to use production agreements or supply contracts to access credit facilities for production g) Encourage more investment in the agricultural input industry (fertilisers and seeds) to reduce costs and increase production	to continue supporting the small-scale horticulture producers d) Supply or production programmes could work; however, producers need to organise themselves in groups to meet the demand e) Find a way to formalise the informal traders of fruits and vegetables to avoid illegal foreign traders exploiting local traders f) Regulate the farmers/producers so that they do not sell directly to individual customers but only sell in bulk to traders as a way to avoid competition and encourage fair trade

4. CONCLUSION AND RECOMMENDATIONS

The main objective of the study was to investigate whether the small-scale producers from the North Central, Kavango, and Zambezi production zones indeed have challenges accessing formal markets. The study revealed that formal traders are doing their best to procure products from small-scale producers. However, factors such as low and inconsistent production, lack of transport, poor product quality, etc. limit the process. One can, therefore, conclude that the market is indeed available, considering the high demand and consumption of horticulture products produced within these zones. The challenge is, however, with the enabling environments within the market to ensure that trade is taking place smoothly.

Therefore, to stimulate market access by small-scale horticulture producers in Namibia, we recommend the following specific interventions;

a) All interested parties should offer technical support to the small-scale horticulture producers in terms of training in Good Agricultural Practices (GAP) at the production level so that the producers can improve their yields and quality to meet the requirements of the formal traders.

b) Government agencies including the NAB should work together to create platforms for small-scale horticulture producers and formal traders to come together and engage on factors affecting them and share ideas on how they can work together to tackle these challenges.
c) Government agencies including the NAB should regulate the informal sector that is involved in the horticulture trade as the present study revealed that these are the highest preferred traders by the producers. Strategies should be formulated on how this can be "formalised" for proper industry regulation and country trade data management.
d) The government (through the Ministry of Industrialisation, Trade and SME) needs to create an enabling environment that will encourage investment in the agricultural inputs supply business.
e) The NAB needs to include strategies that will stimulate agro-processing in Namibia in the 5-year crop value chain strategy that is being developed.

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