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MARKET INFORMATION SHARING; AN EXPLORATION STUDY ON HORTICULTURAL SECTOR IN DAR ES SALAAM

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ABSTRACT

It has been noted that the horticultural sector does not have a clear system to determine both demand and supply that reflects inappropriate market information sharing. This study explored the market information sharing and assessed challenges impacting effective market information sharing in the horticultural sector (vegetables and fruits). The study is qualitative in nature because it seeks to explore information and it was carried out in Dar es Salaam City. The study employed phenomenological design for describing the essence of the experiences for several individuals who have all experienced the phenomenon. Purposive sampling was used to identify the useful groups and then stratified sampling technique was employed to get a total of 34 respondents from the clusters: farmers, middlemen, vendors, and agricultural officers. Interviews and document reviews were the tools used for collecting both primary and secondary data and the data collected were analyzed by the use of MAXQDA 2020. The study found out that the needed information are price, availability of produce, transportation, and delivery and money transaction methods to be used. Secondly, the results show that information sharing in the industry employs two ways, that is, word of mouth and the use of mobile phones. There are many challenges impacting effective market information sharing such as personal interest in providing information, poor knowledge, poverty, unprotected e-business, poor network, and poor transport facilities. Based on the findings, we strongly recommend that education should be given to the entire industry, to formalize the industry, and sharing of the collected market information through various platforms to enhance availability to anybody's needs.

***Key Words**: horticulture, marketing communication, information sharing.*

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INTRODUCTION

Background Information

Market information is a powerful tool to accelerate the horticultural sector in Tanzania, for example, vegetables and fruits have a short life span after harvest if not marketed on time they perish. For that reason, the country established various initiatives to improve the agricultural sector, such as Agricultural Sector Development Programme Phase One and Phase Two (ASDP I & ASDP II) which focus on facilitating all aspects of agriculture for inclusive economic growth in the country. The second goal of the Agricultural Sector Development Programme Phase Two (ASDP II) focuses on economic improvement and food security by ensuring the presence of food to everyone at all times (*Government Programme Document*, 2016).

Tanzania is in a strategic economic zone surrounded by many countries, but there are hindering factors to access markets such as lack of market information, underdeveloped markets and market infrastructure such as roads, storage facilities, and frenzying rooms (*Government Programme Document*, 2016). The study conducted by Yahaya & Mutarabukwa (2015) suggests that poor information is a hindering factor for East African citizens to tap economic benefits in the region. The suggestion given unveils the shortage of marketing information in the region. If effective

market information sharing is achieved it will lead to transparency in the business, ensuring that both customers and firms operate in a win-win situation (Heimler et al., 2007).

Horticulture as the subsector in agriculture has been not only growing at the rate of 8-10% but also contributing about USD 354millions per year. The sector employs about 450,000 Tanzanians where 65-70% are women. Most farmers in the industry are stakeholders who feed the local community, while 70% of exports are obtained from farmers owning less than 2 hectares (*TAHA,* 2011). As the sector grows the challenges also increase based on the durability of horticultural produce.

The durability of horticultural products since harvest is very short depending on the type of product, therefore, they need to reach the consumers before the damage occurs (Tong, 2018). The horticultural sector in Tanzania is faced by poor systems to trace the demand and supply leading to an inadequate market for the produced goods (*TAHA*, 2011; Nyambo & Verschoor, 2005). This shows that despite the governmental strategies to ensure business growth, stakeholders in this industry do not have a well-defined way to access potential information relating to their business. Furthermore, the study conducted by Issa (2019) suggests that inadequate market information sharing between farmers and urban traders fuels poor business performance. Cementing on the phenomenon, Zeruk (2015) explains that inadequate information limits customer's choice in business since there is no alternative information to assist them in decision making. Information is a vital component in business growth which the farmers, vendors, middlemen and consumers of horticultural products depend on to make a decision. The absence of or inappropriate market information contributes to a number of problems including the unnecessary loss of products and even health problems.

The general objective of this study is to examine the efficiency of market information sharing in the horticulture sector in Tanzania and assess the challenges for effective information sharing in the sector. To be able to achieve the intended objective, the study was governed by three questions: how to identify the kind of information shared in the horticultural market, how horticultural information is shared in the market, and what are the challenges to effective horticultural market information sharing in Tanzania.

LITERATURE REVIEW

Conceptual Definitions

Horticulture is a science of production, utilization and improvement of crops such as fruits and vegetables, spices and condiments, ornamental, plantation, medicinal and romantic plants (Product, n.d.). Horticultural crops require intense care in planting, carrying out intercultural operations, manipulation of growth, harvesting, packaging, marketing, storage and processing.

The presence of different rainfall in Tanzania makes horticulture to be more grown in some areas where there is a suitable climate for a particular product such as: (1) Northern Zone (Arusha, Kilimanjaro, Manyara and Tanga); Vegetables (high value): Fresh beans, baby corns, baby carrots, sugar snaps and mange touts; High volume vegetables: carrots, tomatoes, cucumbers, onions and cabbage; Fruits: avocado, bananas, citrus, and passion; Flowers : Cut flowers (Roses) and cuttings; (2) Coastal Zone (Coast, Morogoro, Dar es Salaam); Vegetables: tomatoes, carrots and cabbage; Fruits: Pineapples, watermelon and mangoes; (3) Southern Highlands (Iringa, Mbeya, Njombe and Ruvuma); Vegetables: onions, tomatoes and carrots; Fruits: avocado, passion, apples; (4) Central Zone (Dodoma, Manyara and Singida); Vegetables: Onions and cabbages; Fruits: grapes 5. Lake Zone (Mwanza); Vegetables: capsicums; and (6) Zanzibar (Pemba, Zanzibar); Vegetables: Spices, carrots, capsicums and tomatoes; Fruits: watermelon and pineapples (DLV Plant B.V., 2015)

Marketing involves finding out what your customer wants and supplying it to them at a profit (Dixie, 2005). This means the marketing focus should be customers and to give profit to those involved in a supply chain. Effective marketing should, therefore, identify consumers, products needed, method of supply needed, effective production-marketing and being able to make a profit for prosperity (Dixie, 2005).

Market information sharing is a vital vehicle in any business for better results (Mramba, 2015). Although the country has a suitable climate for horticulture production, only two regions have tried to expand their production: the northern region (Arusha, Kilimanjaro and Tanga) and the southern highlands (Mbeya and Iringa) have shown a potential commercial and export-oriented production (Nyambo & Verschoor, 2005). This shows the necessity of having enough and useful information about a particular product for better business decisions.

Empirical Studies

Marketing information sharing in agricultural products in Tanzania varies from one person, place, investment scale and market access (Eskola, 2005). The access to both local and foreign market has been accelerated by the presence of vital information about the needs such as the species needed, quality and quantity, for example, cut flowers have been highly exported rather than internal use, however about 50% of all cut flowers are exported via Nairobi (Nyambo & Verschoor, 2005). On the side of fruits in the country, especially tropical fruits such as citrus, mangoes, pineapples, avocado, jackfruit, bananas, and guavas, as well as the fruits suitable to more temperate climates (the highlands) such as apples, pears, blackberries and strawberries are produced and sold locally or exported (Nyambo & Verschoor, 2005).

According to Eskola (2005), agricultural markets available in Tanzania include: village, regional, national, and export market. A local market is located close to production areas characterized by few customers, no specific place normally found along the road, a poor facility especially for perishable goods and has a limited supply of goods. Village markets are not connected with national markets because of limited communication infrastructures and hence the market capital does not grow. The main means of communication in village markets is word of mouth. For example, the main market for fruits is the local market, while a small amount is exported to Southern and Eastern Africa and EU markets (Nyambo & Verschoor, 2005).

The second is regional markets where most of the sellers used to buy agricultural goods from village markets in the region or from other places, this practice makes the market richer in terms of quantity and quality of goods. As the market consists of small, medium, and large entrepreneurs, sharing of information also varies. For instance, the use of phone and internet is highly used by large entrepreneurs while word of mouth is mostly used by small and medium entrepreneurs. Furthermore, the market facilities such as storage halls and freezing rooms are available (Eskola, 2005). National markets can be viewed as the market from one region to another facilitated by transport facilities such as roads, ports, and railways. The market is characterized by a large number of large-scale practitioners with the ability to access goods from various parts of the country or foreign countries. Communication of marketing issues is done via phones, word of mouth, and internet (Eskola, 2005).

Export markets are foreign markets that receive main cash crops such as cashews and coffee, however, other crops may be sold there. The market is characterized by specialized experts and proper analysis of customer needs. Marketing information sharing is based on the nature of transactions (Eskola, 2005). Tanzania horticulture has been exported to various market in the world such as beans and Asian vegetables for the UK market, peas (mange mange-tout or snow peas, sugar snaps, etc.) and to lesser extent beans, Asian vegetables, baby corn, baby carrots, cauliflower, leeks, onion and shallots for the Netherlands, Belgium, India and the United Arab Emirates (Nyambo & Verschoor, 2005).

There are several challenges to horticultural marketing such as farmers' education, middlemen, pricing, and marketing infrastructures such as storage facilities, roads, and railways. For example, the study conducted on the marketing of mango fruits in the Masongaleni ward shows that 79.3% of the price was determined by middlemen. This indicates that farmers do not have enough information on market trends and are not able to have appropriate price decisions (Nzioki, 2013). Farmer's education matters a lot on how to access and use the marketing information. Education enables a person to access potential information from various places and be able to make a decision by reasoning. Having the ability to use more than one language also expands marketing opportunities. The study conducted by (Nzioki, 2013) shows how education determines the pricing of agricultural products.

Inappropriate information on the customer needs contribute to either poor quality production of overproducing which ends on the business drop. Farmers using a traditional system of cultivation and marketing are highly faced by failure to get profit because of inappropriate information (Janes et al., 2004).

Stiff competition in the market-leading to inadequate information. Farmers find themselves in a dilemma when the market is full of products from other parts of the world which are cheaper and have quality than theirs (Baliyan, 2016). Here is where the middlemen find a gap to the lower prices that subject farmers to a failure in business. Nzioki (2013) shows that about 78% of the price in the regional and national markets are determined by middlemen because farmers have limited information for further decisions.

Poor marketing facilities such as poor road and storage facilities contribute much to the failure of marketing horticultural products (TAHA, 2011). The study conducted in Botswana on marketing problems on small scale horticulture shows that poor marketing infrastructure contributes about 21.44% to poor market information sharing. Therefore, the absence of roads, ports and other transport facilities should be abolished for better marketing information sharing

In addition, the horticultural produce is not well exported for foreign currency gain because of numerous reasons as established by a number of studies which identified the key factors contributing to successful export marketing. These factors include management, attitude, competitors' factors, and the peculiarity of the industry, product features and the export market (Cadogani, Diamantopoulous and Siguaw, 2002; Christensen, da Rocha, and Certner (1987); Aaby and Slater (1989); *Murray et al.,* (2011), Mohamed and Al-Shaigi, 2014, Gaye, 2013). Specifically, Gaye (2013) found out that export performance was influenced by a firm's business strategy, Aali *et al.* (2013) indicated that the basic company offering, the contractual link with foreign distributors or agents and export promotion and pricing were the major marketing decisions and factors leading to successful exports. Therefore, it is evident that the marketing of horticultural produce is affected by a number of challenges for both local and foreign consumption.

Theoretical Framework

The study employed the Interpreted Marketing Communication (IMC) model developed by Schultz & Schultz (2004) with five stages that make up the complete marketing process. Figure 1 describes the components of the model.
This model suggests that the establishment of the customer's experience is guided by the arrangement of messages and incentives applicable and accessible to the customer, which depends on the mechanisms of the delivery system. The delivery system is basically made up of the product and its use, channel, traditional media, electronic media and special events. On this ground, a product should be well packed to permit its use by customers, while the channel of delivery of a product should be guided by the marketer or undirected by any other stakeholders in the business cycle. Information can be delivered through traditional media (radio, TV and magazines, outdoor signage and direct marketing or a word of mouth), electronic media (wireless network (i.e. phones) and a wired network (i.e. internet search engines and website). There are four main motives why a marketer would like to use IMC: …*to inform customers and stakeholders of a service or any situation within the organization (Akerlund, 2004; Rawal, 2013); to persuade customers and potential customers about the efficacy and credibility of a service or policy (Rawal, 2013); to create an image of the organization (Akerlund, 2004) and to reinforce the transmission of a message to target audiences (Akerlund, 2004)* in Frimpong (2014). An effective marketing communication process is the one in which each IMC tool is appropriately and suitably applied to produce expected results in service delivery (Porku et al. 2012. Manisha, 2012) in Frimpong (2014).

The reflection of the model in the study can easily be established by describing how marketing information is accessed and disseminated in the horticultural industry. The model suggests how farmers, middlemen, vendors, and consumers of horticultural produce can be identified where every person identifies the next in the cycle until the last i.e. farmers determine the buyers of their products such as whole buyers or individuals. Through the assessment of the customers basing on their ability, needs and location farmers or vendors of horticultural produce establish the distribution mechanism that provides effectiveness and efficiency in the industry. Through creating and delivering message and incentive to the identified and assessed customers via an appropriate message that indicates the kind of horticultural produce, price, location and delivering system enables a smooth movement of the produce from the production or selling points to consumers in a right time that reduces loss to both farmers and vendors. Lastly, the model suggests budgeting, allocation and evaluation where farmers and vendors have the ground to determine how their business goes in terms of the profit gain or loss.

PASTA method can be used to develop an operational plan: **Problem definition - Analysis - Strategy - Tactics - Action (PASTA).** First, there must be a clear definition of the problem, issues, or objectives to be accomplished. The second step is to analyze the market and the environment in which the organization or the product exists i.e. customers, competition and products. The third step is to strategise the direction to be taken in order to achieve the goal. The fourth step are tactics to communicate by determining which devices, tools, and techniques are to be used. The last step is action, to make the information available to the audience.

The Conceptual Framework

The conceptual framework for market information sharing in horticultural products is shown in figure 1.

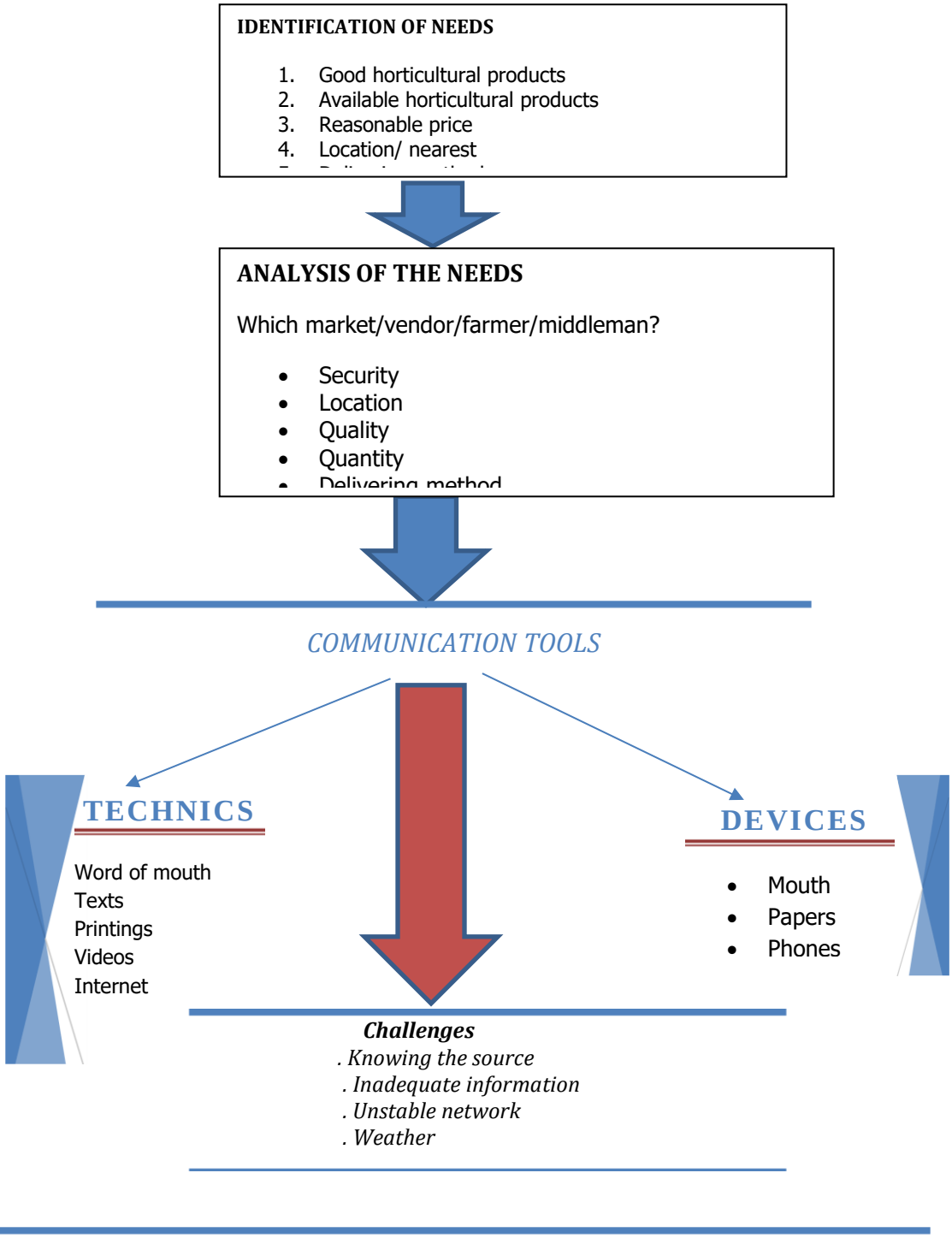

Figure 1: Conceptual Framework Market Information Sharing In Horticultural Sector

METHODOLOGY

The research approach entails how the data will be presented which can be either in a qualitative or quantitative manner (Creswell & Plano, 2011). As the study dealt with perceptions, interests, and perspectives of respondents, the qualitative research approach was employed to uncover in-depth the process and the challenges of sharing market information in the horticultural sector in Dar es Salaam. The choice of Dar es Salaam was motivated by the fact that it is the business city where most of horticultural produce is brought, be it for processing purposes or for direct consumption, hence, there were huge chances of meeting the farmers, middlemen, and consumers of the produce.

The phenomenological design was used to describe the practices based on experiences from several sectoral stakeholders (Creswell & Plano, 2011). Data were collected from three main horticultural markets in Dar es Salaam: Buguruni, Kariakoo, and Temeke, this was geared by a large number of likely respondents in those markets and the fact that the said markets are busy markets in the city. Purposive sampling was employed to obtain specific information from experienced people. Respondents selected included 4 farmers, 4 middlemen, 4 vendors, 4 customers, and 1 agricultural officer. The majority of respondents had 5 to 35 years of experience. The respondents' age varied from 19 to 56 years.

Since there is no single perfect instrument for data collection, triangulation as a mixture of tools in data collection was used to complement the weaknesses of each instrument (Creswell & Plano, 2001). Data were collected via in-depth interviews for the purpose of identifying market information sharing techniques and challenges facing market information sharing in the horticulture sector. Likewise, the documentary review was employed to study the already existing information on the study at hand and note the gap in the literature. Data collected via interview were recorded and transcribed by using Express Scribe Transcription Software.

The study employed a content analysis technique to analyze data because it focuses on providing knowledge and understanding of the phenomenon studied through the contextual meaning of a particular narration, open-ended questions, interviews, focus group, observation, or printed media. Therefore, qualitative content analysis is the subjective interpretation of the content of the text data by a systematic classification process of coding and identifying themes or patterns (Hsieh and Shannon, 2014).

In the analysis process, three themes were established: kinds of marketing information needed, sharing methods and challenges to effective sharing of information. Thereafter, the coding process was done properly in MAXQDA 2020 to establish a better interrelationship between the themes. MAXQDA 2020 has been selected because it provides the researcher with the opportunity to organize, sort, and look for images or text coded easily and hence provide a valid interpretation of the data.

Validity in qualitative research would mean appropriateness of the tools, methods, and data. In ensuring validity regard was put on the validity of the research question in bringing the desired outcome, the choice of the appropriate data collection tools for answering the research question, appropriate sampling, and data analysis that demonstrate how information is shared in the horticultural industry in Tanzania, and finally coding the keywords into their respective themes to ensure that the results and conclusions are valid. On the other hand, reliability was assured by testing the consistency of data in similar dimensions for saturation. Therefore, the data collected were valid and reliable hence this is a valid and reliable research study.

DATA ANALYSIS AND DISCUSSION

Data collected from selected respondents: 4 farmers, 4 middlemen, 4 vendors, 4 customers, and 1 agricultural officer. The majority of respondents had 5 to 35 years of experience. The respondents' age varied from 19 to 56 years. Data was collected from Dar es Salaam region in the selected markets: Buguruni, Kariakoo, and Temeke. Then themes were identified, coded and analyzed independently as seen hereunder.

Kinds of Horticulture Marketing Information Needed

It was observed that there are pieces of information that enable farmers, vendors, middlemen, or customers in daily transactions in the horticultural industry in the selected markets to make business decisions such as where to buy, the

quantity, and distribution. Data collected from farmers, vendors, middlemen, and customers on the kind of information they need to be available for their effectiveness is as presented in table 1 and the elaboration given under the table.

Table 1: Kinds of Market Information Needed in Horticultural Market

Respondent	Quote	Issues
Vegetable vendor at Temeke market	"I need to know the price before I get to the market	price
Middleman at Buguruni market	"I have to be assured on the transport"	transportation
Vendor at Buguruni market	"I usually ask about the availability of goods before I start to go"	availability
Government officer at Temeke market	"If I don't have enough time, we have to negotiate how to deliver and how to pay"	Delivery & money transaction method

Source: Researcher, 2020

Table 1 provides the kind of information needed for effective horticultural market information sharing as identified from the data collected. The following are interpretations of the issues as shown in table 1.

Price

Price is a determinant of profit in the business. Every person wants to be aware of the price to determine if his or her budget will accommodate the items needed. Setting the price of horticultural goods is a common challenge as the majority of respondents noted. Customers may be informed of the availability of horticultural goods but the price of such goods tends to fluctuate every time making the business trends unstable. It was noted that price determinant factors are several and includes prevailing market situation; quality of the goods; quantity; and friendship. It was further noted that the involvement of middlemen who receive horticultural goods in bulk has a great role in determining the price of the goods to the final consumer. This was confirmed by one respondent as follows;

...most goods have no specific price, the price fluctuates based on a season, weather, quantity, middlemen and familiarity. (Vendor at Buguruni market, Dar es Salaam).

The findings above suggests that the price of the horticultural products is unpredictable mainly because of the durability nature of the horticultural products that give the urban traders and the middlemen power to decide on the price. The durability is highly affected by the absence of good facilities to store freshly harvested products from farmers to the consumers, vegetables are not stored in refrigerators rather being watered to keep them alive. However, the method is useful but as the more heat comes the vegetables shrink and hence both quality and quantity decline. According to the Tong (2018) vegetables differ in storage conditions and mostly affected by temperature and humidity as there are three combinations for long-term storage: cool and dry (50-60°F and 60% relative humidity), cold and dry (32-40°F and 65% relative humidity), and cold and moist (32-40°F and 95% relative humidity). In relation to Dar es Salaam, where the average annual humidity is 73.0% according to Weather and Climate (2020) and the average high-temperature is warm 29°C (84.2°F) according to Weather Atlas (2020), the life span for harvested vegetables is very low unless there are modern means of storage. Therefore, the absence of storage facilities makes the industry run informal, in low standard and subjects farmers into a submissive status during negotiation.

Another reason for not having a common system for determining price is an informal practice in the horticultural sector. Vendors, middlemen, and farmers are not in the formal system which can be easily traced from the time of planning to produce up to marketing. Everyone works on his own and they meet by coincidence in marketing processes. That is similar to the findings made by Nyambo & Verschoor (2005) and *TAHA* (2011) that the horticultural sector is faced

with poor systems to trace the demand and supply leading to an inadequate market for the produce. Working in the informal sector makes the group unreachable, difficult to be managed by the government authorities, and not advantageous for financial assistance. So long as the business is informal, the exchange of information is limited and difficult to comprehend.

Taking vegetables as an example, informal means of pricing vegetables is the obstacle for both farmers and vendors to sell their product at the right price and hence the consumers may be advantaged or disadvantaged. It has been observed that both farmers and vendors are not willing to use a scale because of little knowledge, absence of weighing scales or fear of formalizing the business which may end up subject to tax payment. These findings are similar to what Ramsburg (2012) explored that both farmers and vendors are reluctant to scale their products because it may take a long time to measure, pricing decisions, being under weighing, and measuring laws in their respective authorities.

Availability of the Horticultural Produce

The information about the availability of horticultural produce is critical because the consumers do not want to misuse their time. The availability of produce at a time in terms of quality and quantity is the vital information needed by vendors and consumers. Having well informed about the quality and quantity, the vendor or consumer goes to the respective seller with confidence and being ready for making decision.

Transportation

Transport infrastructure facilitates the movement of agricultural produce from one place to another. Transport infrastructure limits the movement of people and goods from one place to another. During the rainy season traders take a long time to have the goods reach the markets and due to the nature of horticultural goods and poor storage mechanisms, some may perish even before getting to the market. That finding is in line with Baliyan (2016) who conducted a study in Botswana on marketing problems on small-scale horticulture which showed that poor infrastructure contributes about 21.4% to poor market information sharing.

Delivering and Money Transaction Method

The growth of science and technology did not leave other sectors free, of which the introduction of modern ways of conducting business by using e-platforms are in place. People want to sell and buy without being face to face, in such a context, the need for how the products are going to be delivered to the consumer and how the payment is going to be done are among the critical marketing information needed. Sometimes when people in business are familiar with each other, the mobile phone takes part to sophisticate the process.

Market Information Sharing Methods

The second theme was the methods used in sharing information in the horticultural industry in the selected markets in Dar es Salaam. It was the finding of the study that the main means of communication to relay marketing information among stakeholders is the use of mobile phones and direct word of mouth. The use of the mobile phone is becoming common as the majority of people own cellular phones. Mobile phones enabled respondents to get market information easily and conduct businesses without physical contact. Also, mobile phones facilitate mobile banking which ensures the security and effectiveness of the business. This finding is in line with Madlen, Schumacher & Dannenberg (2014) who suggested that the use of a mobile phone enables small-scale farmers to communicate, negotiate and do various transactions while they are at their places.

It was noted further that the majority use mobile calls and messaging to access or inquire about marketing information and only a few use the internet for the same purpose. This was said to be the case due to; (1) expensive internet charges; (2) internet connection problems; and (3) the expensive cost of mobile phones that may access the internet, as a result majority of farmers and petty vendors are unable to afford the same. Confirming the foregone position, one of the vendors had the following to say;

...I use a mobile phone for calling and messaging, I cannot use the internet because of related cost... ***(Vegetable vendor at Kariakoo Market, Dar es Salaam).***

Although the use of mobile phone internet would have eased information sharing and accessibility, the cost of running effective service through the internet limits the majority to enjoy and expand their business through various platforms available on social media. This finding is in line with Qureshi, Khushk & Maher, (2018) who found out that 95% of farmers do not use phones to access various information on the internet.

A word of mouth was also identified as another common means for sharing market information. Word of mouth is mostly used in the business where people meet face to face. The majority of respondents trust the use of word of mouth in negotiation as it creates a friendly atmosphere. This finding confirms suggestions made by Ojwang' (2018) that a word of mouth is effective in small business growth and the best way to collect feedback from customers on satisfaction.

Challenges facing Effective Market Information Sharing

The last theme was the challenges facing effective market information sharing in the selected markets in Dar es Salaam. There are several challenges patterning sharing of marketing information, the respondents declared that there is a need of having information for better decision making however, in some environments the information may be inadequate or even not found at all. Challenges identified are associated with; (1) where and how to get the information; (2) inadequate capital or fund; (3) fear of online theft and fraud; and (4) unstable network as table 2 shows:

Table 2: Challenges Facing Effective Information Sharing in Horticultural Markets

Respondent	Quote	Issues
Customer vendor at Temeke market	"…getting information is very difficult…"	Source of information
Middleman at Buguruni market	"…farmers and customers may be far from the market, so I have to use a phone that consumes much money and sometimes I fail to contact them because of a scarcity of fund…"	inadequate capital or fund
Farmer selling at Buguruni market	"…you cannot trust people, I have lost a lot of money by conducting business through phones"	fear of online theft and fraud
Vendor at Temeke market	"communicating market information is difficult especially to farmers from villages"	unstable networks

Source: Researcher, 2020

As table 2 identified the challenges established from the data gathered from the mentioned respondents, the following discussion elaborates the key challenges:

Knowledge of where and how to access marketing information hinders stakeholders from accessing appropriate information to enable the options available before making a decision. Farmers are not aware of when to produce regarding weather, how to harvest, and where to sell their products except what they usually do such as cultivating during the rainy season and sell their products to middlemen in the urban areas. Furthermore, farmers, vendors and middlemen confirmed not to be aware of organisations that can help them such as TAHA. Likewise, they are not aware of various developed platforms to connect farmers, vendors, and customers such as NINAYO, and AgriMark. This is confirmed by Qureshi, Khushk & Maher (2018) who observed that inadequate knowledge limits farmers from using the internet to access plenty of information available in many platforms developed there.

Associated with the above is the tendency of using information for individual interest which leads to disclosure of inappropriate information to protect one's business. This is commonly used by middlemen who act as a bridge between farmers and buyers (vendors) and benefit from the ignorance of the majority of farmers who are unaware of the market trends as well as vendors who do not know where the goods are found. This finding matches Baliyan (2016) and Nzioki (2013) who found that farmers find themselves in a dilemma when their products are ready and that about 78% of the price in the regional and national markets are determined by middlemen because farmers have limited information for further decision.

Another hindering factor is poverty or inadequate funds to enable mobile phone users to enrich themselves through numerous electronic platforms. The price of buying devices and airtime to access the information from electronic platforms is high. However, Tanzanian's internet usage grows yearly, but only 38.7% of the population can access the internet (Internet World Stats, 2020).

In addition to that, there is a fear of internet theft and fraud. The use of phones is affected by lack of protection for both goods or service providers and customers. Sellers may display pictures of goods contrary to the actual ones and likewise, customers may refuse to pay for the requested goods after delivery. It was observed by one farmer that the majority of middlemen request goods at a good price but when goods are delivered to them, they tend to reduce the offer price. These findings are similar to the study conducted by Lugano, Ojwang' & Pastory (2020) on consumers' protection on e-business in Tanzania who found that consumers are not well protected when using the internet to buy or sell goods or services.

Furthermore, effective sharing of marketing information is hindered by poor networks. With the increase of mobile phone users and internet users, the network is becoming a vital component in business growth as it provides everyone in the field updates on what is going on. The mobile phone enables people to be connected countrywide through various platforms such as social media and educational sites. As the majority of farmers and vendors are of small scale it is difficult for them to manage all the expenses to be well informed via phone internet.

Poor transport infrastructure limits the movement of people and goods from one place to another. During the rainy season traders take a long time to have the goods reach the markets and due to the nature of horticultural goods and poor storage mechanisms, some may perish even before getting to the market. That finding is in line with Baliyan (2016) who conducted a study in Botswana on marketing problems on small-scale horticulture which showed that poor infrastructure contributes about 21.4% to poor market information sharing.

CONCLUSION AND RECOMMENDATION

Market information sharing is a vital component in fueling the growth of the horticultural sector in Tanzania. The findings show information needed in the horticulture market include price, availability of produce, transportation and mode of delivering and money transaction. This information enables the business process to be simple and clear to every person in a need.

The study found that information sharing in the sector is based on two ways which are word of mouth and mobile phones. It has been observed that word of mouth is still recommended by the majority in the industry because it provides them with effective negotiation, friendship and networking. Although the word of mouth is still potential for the majority of respondents it limits them from trying modern means of trading such as e-business. Furthermore, the method is highly used in informal business where there is no need of having records and formal structures by which small-scale businesses such as farmers and vendors are not advantaged to financial aids.

The mobile phone has been recognized as a means of getting in touch with people easily and facilitates business growth. The findings show that the majority of farmers, customers, vendors, and middlemen use mobile phones in one way or another in their daily activities. The exchange of marketing information is simple through phones and the knowledge is found through various potential e-platforms available.

Besides the market information sharing process in the horticultural sector, the study explored challenges facing effective sharing of information in the industry. There are numerous challenges such as lack of knowledge on how and where to get appropriate information on marketing horticultural products and poor network. The study also found that farmers, vendors and middlemen are not even aware of the TAHA which was established to accelerate the industry. Stiff competition caused by working informally subjects the industry to a shortage of information because the majority of participants are scared to provide information to protect their interests. Poor facilities such as roads, railways and ports contribute to poor information sharing in the industry.

Finally, the informal practice of the majority of practitioners in the industry fuels poor information availability in the industry. The absence of well-structured means of identifying and monitoring the person has made it difficult to determine demand and supply chain in the industry. Every person works in his or her own direction from the farm to the market, which reduces government revenue. Also, informal pricing that does not consider the weighing of the

horticultural products limit all people in the supply chain into getting what they deserve. All these challenges fuel inappropriate market information sharing in the industry.

Based on the exploration made above, we strongly suggest the following to be done: the government through various authorities and organizations dealing with the horticultural sector in Tanzania should educate stakeholders on the availability of potential information in electronic platforms and the usefulness of various initiates. Secondly, although their experience shows formalization of the informal sector diminishes the business because of the needed criteria to be accomplished, the government should formalize these businesses by customizing the situation personnel of which they will feel protected and join the movement strongly. Thirdly, market information should be collected daily and shared with the users in various modalities such as newspapers, special airtime in the media and conferences. Lastly, more studies should be conducted on behavioral patterns toward sharing information between vendors or businessmen of the same commodities.

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