

## CONSTRAINTS TO INTERMEDIARIES' ROLE IN PROVISION OF MARKET AND MARKETING SERVICES FOR URBAN FRESH FRUITS AND VEGETABLES SUPPLY CHAIN

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### ABSTRACT

*Despite the critical role played by intermediaries in marketing services and trade, along with various initiatives undertaken to enhance this role, fresh fruits and vegetables traders in Dar es Salaam-Tanzania are still discontented with the intermediaries' inability to undertake marketing services roles. This paper examined the constraints to intermediaries' role in provision of market and marketing services for urban fresh fruits and vegetables supply chain and recommended strategies for improving the same. Qualitative approach was adopted and data were drawn from a purposive sample of 48 respondents through in-depth interviews and non-participant observation. Thematic data analysis strategy was adopted in which researchers transcribed data, read and familiarized themselves with data, coded them, searched and reviewed themes, named and finalized the analysis process. It was revealed in this study that, intermediaries' role in marketing services for urban fruits and vegetables supply chain was confronted by poor coordination and information, inadequate knowledge and awareness, poor market infrastructure and geography and poor transportation services. The authors recommend to the government through ministries in charge of agriculture and trade to take serious measures to improve market and marketing services of fresh fruits and vegetable services through building storage centres, educating intermediaries and farmers on best marketing practices and furnishing farmer and intermediaries with information on international available market opportunities for fresh fruits and vegetables.*

**Keywords:** *Intermediaries, Marketing services, Fruits and Vegetables*

### INTRODUCTION

#### Background Information

Agricultural markets for farmers are essential to increasing agricultural production as well as generating income. This provides assurance of the farmers to improve markets for agricultural products (Agrawal, 2018). It also improves productivity and strengthens food security for final consumers (Magesa *et al.*, 2014). Likewise, urban fruits and vegetables play a very critical role for the urban and peri-urban residents by providing urgent needs and foods (Mwagike & mdoe, 2015). However, the facts indicate that due to being highly perishable, fruits and vegetables cannot be stored or stay for long time without proper post-harvest facilities or marketing information in general in order to complete the entire supply chain (Issa & Munishi, 2020).

Globally, fruits and vegetables supply chain depends on markets and intermediaries' capabilities of distributing them in the required market (Sudharshan *et al.*, 2013). In this form, intermediaries and farmers create supply chain network for the urban fruits and vegetables so as to meet urgent demand to the final consumers (Report, 2014; Imtiyaz *et al.*, 2006). In countries such as India and other parts of Europe, intermediaries play a vital role in the supply chain of fruits and

vegetables including but not limited to coordinating customers and farmers through the use of sufficient marketing services (Horticulture, 2017; Shakeel-Ul-Rehman *et al.*, 2012). For instance, farmers sell the vegetables through assemblers and wholesalers at the farms gate or rather sell to agents in order to save transportation costs along the supply chain (Pera & Risks, 2018). Intermediaries at times provide information about what is existing in the market or even connect whole sellers and farmers.

In Africa particularly west and central Africa, intermediaries take versatile roles of dissemination of marketing information services of the products chain especially fruits and vegetables (FAO, 2015). It has been reported that intermediaries also provide distribution facilities, facilitate price negotiation as well as ensuring products quality (MMA, 2008).

In Tanzania, the situation has not been very different. Due to the abundance of fresh fruits and vegetables, it has been for the role of intermediaries to carry out marketing services for both local and international markets (Draft *et al.*, 2008). To facilitate the exercise, intermediaries link farmers who sell their produce at the farm gate to whole sellers and even home-based retailers. However, local intermediaries play the role of collecting fresh produces then sell it to traders or distance markets in urban areas (Oguoma *et al.*, 2011). Indeed some intermediaries visit the farms to establish marketing and supply chain link for fruits and vegetables (Agrawal, 2018; Mwagike & Mdoe, 2015; Magesa *et al.*, 2014). In general, further experience shows that intermediaries have to a great extent facilitated the easy flow of fresh fruits and vegetable supply chain as well as maximizing marketing services of these products to both local and international markets. In this aspect, supply chain is ensuring sustainable marketing services for any products (Issa & Munishi, 2020) or activities of introducing a product or services to consumers who want them (Productivity, Security, & Livelihood, 2020). In simple terms it entails marketing them. Marketing services in this context refers to the process of selling, purchasing, advertising and promoting business to constitute utilized by consumers (Report, 2014; Mchenga & Abubakar, 2016; Lanka, n.d.).

Studies (Imtiyaz *et al.*, 2006; Draft *et al.*, 2008; Deliya *et al.*, 2012) indicate that intermediaries form a great and important component in the supply chain and participate in the supply chain functions of packaging, transportation, storage, value addition and quality, distribution and alike have significant role on marketing for fresh fruits and vegetables in urban areas. It has been further recorded that intermediaries transfer market related information to farmers and other parties (Agrawal, 2018), determine customer's requests (Kitinoja & Kader, 2015), reduce post-harvest losses through quick transportation of the produces (Reddy *et al.*, 2010), and facilitate the marketing of all fresh fruits and vegetables (Kalidas *et al.*, 2012).

Following these roles, a number of initiatives by the government in cementing the roles of intermediaries have been taken from policies and practices. However, it has been recorded that, despite all the efforts, intermediaries in the fresh fruits and vegetable services, have not been able to carry out marketing roles accordingly. This is due to the fact that sometimes intermediaries are perceived as exploiters (Mwagike & Mdoe, 2015). The failure of intermediaries to carry marketing services effectively has increased the rate of post-harvest losses, failure of tapping the available offshore market, strangling farmers' livelihood abilities among others. Thus, the situation attracts more questions as to what constraints hamper intermediaries from effectively carrying out marketing services of fresh fruits and vegetables? Despite the fact that some studies (Sudharshan *et al.*, 2013; Negi & Anand, 2016) have dug into this reality, their findings are inconclusive and fragmented. Hence, this study assessed the constraints to intermediaries' Role in Provision of Market and Marketing Services for Urban Fresh Fruits and Vegetables Supply chain. The authors thus recommended strategies for alleviating such constraints by improving the performance of the marketing role among intermediaries in urban fresh fruits and vegetable supply chain.

## Data processing and analysis

Data collected was analysed both quantitatively and qualitatively. Quantitative data was analysed by using the Statistical Package and Service Solution (SPSS) version 22.0 to derive frequencies and percentages. Descriptive statistics was also used to give a summary of distribution of responses, so as to be able to classify and explain the association among and between the variables. Inferential statistical analysis was undertaken through cross-tabulation of dependent variables with independent variables. This helped to assess if the associations were statistically significant. Qualitative data from face to face interviews and observation were labeled and transcribed.

## LITERATURE REVIEW

### Empirical review

The existing literature highlights constraints to intermediaries' from facilitating marketing coordination and information for fresh fruits and vegetables supply chain (Date, 2016; Shankar *et al.*, 2017). One of the constraint is lack of information regarding the prices of the market and demand, (Negi & Anand, 2015b). Besides that, intermediaries is deterred by lack of knowledge about fruits and vegetables in which they sells it to urban areas (Negi & Anand, 2016). Correspondingly, poor marketing information by intermediaries is another constraints facing intermediary's role to the marketing services for fruits and vegetables related products (Sudharshan *et al.*, 2013)

Moreover, intermediaries is hampered by inadequate marketing orders from the customers (Horticulture, 2017). Furthermore, poor infrastructure such as poor roads and communication are hampering their role in marketing services for fruits and vegetables trade (Marketing, 2001). Closely related to the above is lack of financial sound for improving marketing services provision. Intermediaries are complaining on lack of cooperation from the farmers for picking fruits and vegetables (Horticulture, 2017).

Also, absence of institutions which promote fruits and vegetables from deterioration is another constraints facing intermediaries in marketing chain (Ayalew, 2017). On top of that, low prices hamper the intermediaries from provision of marketing services for fruits and vegetables in urban areas (Ayalew, 2017; Mwangike & Mdoe, 2015). Beyond that, poor market grade and standard hinder the intermediaries' role from provision of marketing services in urban areas (ACP, 2009; Report, 2014). Also, lack of specific regulatory board for ensuring marketing services is another factor impeding intermediaries' role to provide adequate marketing services for fruits and vegetables supply chain (Magesa *et al.*, 2014; Report, 2014). Another factor is remote location of the markets far from people residents (Date, 2016).

Other constraints are related to provision of marketing knowledge and awareness. Literature presents several factors for the failure of intermediaries to effectively ensure this role. One of the factor is related to low level of awareness and compliance of market regulation and standards by the farmers (ACP, 2009). Also, other related factor is lack of marketing techniques for branding and promoting fruits and vegetables (Report, 2014). Similarly, there is presence of local traders and extent of intermediaries who eat up the farm prices hindering the smooth marketing services for fruits and vegetables (Magesa *et al.*, 2014). Subsequently, poor harvesting and post-harvest handling practices minimizes the marketing attractiveness for FFVs (Sharma & Sharma, 2019; Report, 2014). Also, factors observed in many studies is little knowledge and skills of the farmers about urban markets that hamper the intermediaries role to provide adequate marketing services in urban areas (Issa & Munishi, 2020; Magesa *et al.*, 2014). Intermediaries are hampered by poor government efforts for improving marketing services for fruits and vegetables in urban areas (Raj, 2018).

In discharging geographical location and market infrastructures. Intermediaries are impeded with remote location of the farms (Issa & Munishi, 2020). Also, distance of the market adversely affects the farmers and customers to reach timely to the markets places (Ayalew, 2017). Moreover, poor layout such as inadequate space utility to the markets particularly to store fruits and vegetables is another confronting issue for the fruits and vegetables supply chain (Deliya *et al.*, 2012; Date, 2016). Beyond that, insufficient selling spaces lead to products spoil and deteriorate before selling to final consumers (Mgonja & Utou, 2017). Furthermore, lack of special room for maintaining permanent storage of fruits and vegetables are missing to various categories of intermediaries (Date, 2016).

Literature further sites a number of constraints from ensuring transportation of fruits and vegetables. One of the factor is high costs of transport services when transporting fruits and vegetables (ACP, 2009; Efficiency *et al.*, 2012). Another factor that deter this aspect is lack of transportation facilities since most of trucks were not equipped with modern storage facilities (Raj, 2018). Moreover, inadequate of packaging and labelling are another factors impeding marketing services from transportation of fruits and vegetables (Marketing, 2001; Report, 2014; Ayalew, 2017). Also, transportation services is deterred by traffic jams when the vehicles are nearly approach to the urban areas. Also, such as situation is caused by corruption and bribery by police officers who stops the vehicles unnecessary carry out fruits and vegetables (Issa & Munishi, 2020; Shankar *et al.*, 2017). Closed relate to above is absent of special reserve and parking at the marketing places, lack of alternative roads to the city as well as poor drainage system hampering the marketing services from effectively ensuring transportation for fruits and vegetables supply chain (Supply *et al.*, 2020; Mwangike & Mdoe, 2015).

To conclude, this section has surveyed the literature related to the constraints to intermediary's role in provision of market and marketing services for urban fresh fruits and vegetables supply chain. The available literature searched have highlighted some complications that face intermediaries when undertaking marketing roles in urban setting. However, this context has not been widely explained or rather covered in urban based market and marketing services in which the authors concentrated the constraints in the urban centres in Dar es Salaam, Tanzania.

### **Conceptual Framework**

The problem at hand concerns the intermediaries' inability to undertake marketing role in urban fruits and vegetables supply chain including inability to support coordination and information (Horticulture, 2017; Negi & Anand, 2016). These have been attributed to failure to provide adequate marketing knowledge and awareness (Sharma & Sharma, 2019; Report, 2014) geographical constraints and infrastructures (Ayalew, 2017; Mgonja & Utou, 2017) as well as transportation for fruits and vegetables (Issa & Munishi, 2020; Shankar *et al.*, 2017). In order to realize the improved intermediaries' role from provision of marketing services for fruits and vegetables supply chain in urban areas, it is imperative to examine factors impeding intermediaries' role on marketing services for urban fresh fruits and vegetables supply chain. It was expected that the information obtained from this assessment could be relied upon to improve intermediaries' role in marketing services provision in urban fresh fruits and vegetables supply chain.

### **METHODOLOGY**

This study was conducted in Dar es Salaam City and concentrated at Temeke Stereo market. With a population of more than five million people (Mof, 2013), the city acts like a perfect market for most of the agricultural produce including fruits and vegetables than any other city in the country. Temeke Stereo market is a hub which receives fresh vegetables and fruits from different parts of the country than any other market in the city. It is evident therefore that a mixture of intermediaries, traders and farmers is more available at Stereo market than it is to the rest of the markets in the city. This study employed a qualitative approach due to the fact that researchers were interested to collect respondents' views, personal experiences, attitudes and in-depth opinions that could not be captured by quantitative means as suggested by earlier scholars (Astalin, 2013; Spinks & Canhoto, 2015). Collected views and opinions enhanced researchers to explore, explain and understand the role of intermediaries in the marketing and marketing services of FFV business together with challenges towards executing their roles. A single case embedded study design was utilized. Stereo market was a single case, from which different units of analysis including intermediaries, traders and farmers were used as units of analysis (Yin, 2003).

Convenient sampling was employed to sample intermediaries, traders and customers. In these techniques, each segment dealing with a specific type of fruit formed a stratum from which respondents were drawn. Though this, five strata were created. From every stratum, a sample of eight respondents were selected conveniently. In general, a total of 40 respondents were drawn. Moreover, purposive sampling was employed to draw eight market officials and farmers who were used as key informants. In total, 48 persons obtained from Stereo market were used as a sample for this study. Data were collected through in-depth interviews by using the interview guide created by the author. Through in-depth-interviews all sampled respondents were asked the same set of questions prepared (interview guide), except when more probing was prompted. Questions were focusing on intermediaries' role in the marketing services and challenges in executing these roles. Such interviews lasted up to 30 minutes and were dynamic such that they could be halted to allow

respondents attend their customers. This method was particularly relevant as it facilitated rapport building. It also enabled the researcher to re-structure the interview guide and modify the repeated questions based on the respondents' knowledge, ideas, views and perceptions (Mikkelsen 2005). All interview proceedings were recorded both on the mobile phone and in a notebook. To complement findings provided by respondents during interviews, different documents were reviewed. These included Agricultural Marketing Support Development Programme (AMSDP), horticultural development strategies and policy, trade act, the National Strategy for Growth and Poverty Reduction I & II, Agricultural development policy, SMEs policy as well as National Post harvest Management Strategy. To facilitate easy capturing of the required information, a document review guide and checklist were used to ensure all piece of the required information is obtained.

Data were analyzed by qualitative content analysis techniques. In this technique, data collected through interviews and documents review were sorted and typed in rich text format. They were then cleaned to omit responses that were irrelevant to the study. Through reading and re-reading, authors managed to summarize all the data, coded them according to their contents, interpretations constructed, categories of their contents generated from which important themes were generated.

To ensure reliability of trustworthiness of the obtained findings, triangulation of data collection methods and respondents, peer debriefing of the study instrument, member checking of their responses were done. Further, the research area and context of the study area were thoroughly explained to ensure that whoever want to transfer findings should do so to a context similar to the one used in the study.

## **FINDINGS AND DISCUSSION**

Purpose of the study was to assess factors constraining the intermediaries' role in carrying out marketing services for fruits and vegetables in Temeke Stereo market.

Findings show that a number of factors were responsible for constraining intermediaries' role in provision of market and marketing services for fresh fruits and vegetables supply chain. These factors were associated with frequent distribution of 48 respondents from four major aspects notably; (1) Facilitating coordination and marketing information (2) provision of knowledge and awareness (3) market infrastructure and geographical location and (4) facilitate transportation and distribution. This is in response to the foregoing sections which shows that increasing intermediaries are incapable of successfully playing their roles in the market and marketing services urban fresh fruits and vegetables supply chain.

### **Constraints to coordination and marketing information**

Findings revealed that several factors confronted intermediaries when undertaking their functions in the coordination and provision of relevant market and marketing information for the urban fresh fruits and vegetables supply chain. These factors rotated around lack of information related to price of the fruits and vegetables. This showed that majority of intermediaries arranged fruits and vegetables price based on the availability of products from the farms. Another impediment was lack of knowledge and awareness about market and marketing demand for the urban fruits and vegetables by both farmers and intermediaries; meaning that farmers and intermediaries were unaware of the nature and dynamics of urban markets. For example, they could not figure out conditions in which the fruits and vegetables were needed at the urban markets

On top of that intermediaries were confronted by lack of marketing boards relating to coordinate marketing activities for fruits and vegetables. Most of the government authorities (boards) did not work in the field of fruits and vegetables rather they performed their works to the manufacturing industries. Moreover, intermediaries, traders and farmers in particular relied on lack of policy alignment for coordinating market and marketing services for urban fruits and vegetables. Owing to this intermediary did not follow market policy for ensuring adequate marketing for their produces leading to the poor market and marketing services including spoiling of their produces. Another factor was lack of market facilities for ensuring adequate selling and storage of fruits and vegetables. This critically indicated that, intermediaries use canvas sheets, leaves and traditional storage and selling facilities for the produces. One respondent narrated here under; -



*Customers think that it is a normal practice for using these facilities (canvas materials, leaves and tengas). These are our materials, and simply we lack the modern one due to the fact that profits do not allow us to buy the modern facilities. However, you can find that the facilities sometime are the major source of product loss and spoiled before selling to final consumers (Female avocados trader (36), Temeke stereo 08-05-2021).*

Concluding from the above findings, it is imperative to note that, the role of intermediaries in facilitating coordination and marketing information was affected by lack of information related to market price, knowledge and awareness on the market demand, marketing board, policy alignment for fruits and vegetables and lack of adequate market and marketing facilities. Similar to the contention in the literature, although intermediaries have a great role to perform, their roles depend on the presence of information. These findings further correspond well with existing literatures as reviewed from (Negi & Anand, 2015b; Negi & Anand, 2016; Ayalew, 2017; Mwangi & Mdoe, 2015). An amazing discussion is lack of relevant government authorities or board which could be ensuring adequate market and marketing services for fruits and vegetables. The discussion revealed that there is lack or nearly absence of standard measure or board at cultivating areas rather lack of institutions for fostering the coordination of fruits and vegetables from the farms and at urban areas (Magesa et al., 2014; Eskola, 2005). On the other side of the coin, it was generalized that: it is not easy for intermediaries to obtain important information due to the fact that in general there is poor information seeking behavior among Tanzanians an aspect that will automatically make intermediaries uninformed (Ikoja-Odong & Mostert, 2006).

### **Constraints to intermediaries 'role from knowledge provision**

Findings revealed a number of factors constraining the role of intermediaries from provision of knowledge in the urban fruits and vegetables related market and marketing. One of the factors was associated with low level of awareness on compliance to market regulations and standards as attested by majority of interviewees. This was proved that, intermediaries and traders involved in the selling of fruits and vegetables do not even know the products standard as well as regulations which could be used to comply with selling of fruits and vegetables.

On the other hand, lack of knowledge, skills and awareness as well as potential customers about the urban fruits and vegetable markets by both the farmers' and intermediaries was reported. Owing to this, farmers and intermediaries found it very difficult to produce and package fresh fruits and vegetables based on the urban market as further observed below:

*Apparently traders and intermediaries have little knowledge on the better ways of ensuring adequate marketing services for these products. We are not sure if our views (primary knowledge) could help the customers to purchase the goods. This is because majority of us obtained the primary education, as we did not attend university for studying business specifically fruits and vegetables business (Male trader (32), Temeke stereo market 6-05-2021)*

Not only that but also, intermediaries are affected by poor harvesting and post-harvest handling practices for the fruits and vegetables. This was reported that, farmers lack the knowledge on proper ways of harvesting products due to lack of harvesting technology and equipment. The role was further affected by lack of awareness of the farmers, and buyers in the ensuring of marketing for fruits and vegetables as attested by over 18 (38%) of the respondents. Owing to this, farmers and intermediaries found it very difficult to store, process and handle fruits and vegetables. Closely related to this is inadequacy of research on marketing issues related to fruits and vegetables. One respondents reported hereunder:

*If there could be research for marketing for the fruits and vegetables, we could not settle the products here, we can transfer our produces in international markets. But unsure of markets and marketing services, we brought the fruits from Kenya such as mangoes and avocados then we sell them in Temeke stereo market (Male avocados (42), Male mangoes (38) intermediaries, Temeke stereo market, 8-05-2021)*

Another factor is lack of market orientation and preparation by intermediaries for ensuring adequate selling of fruits and vegetables. The research found that, intermediaries picked the fruits and vegetables from Mbeya, Njombe and Tanga, yet they did not prepare for any market entry or selling of their products leading to magnitude of loss as well as unjustifiable of marketing services for the customers. Moreover, this role was complicated by lack of enough industries for processing of fruits and vegetables in terms of making end products such as tomatoes juice, mangoes juice and alike.

Based on the above findings, it can be revealed that intermediaries were incapable of performing the role due to lacking knowledge and equipment. These aspects were the low level of awareness and compliance of market regulation and

standards, lack of knowledge, skills, poor harvesting and post-harvest handling practices, lack of awareness among the farmers and buyers, lack of market orientation, inadequate research on marketing services and lack of enough industries for fruits and vegetables. While findings indicate that knowledge, compliance and equipment are constraint, the middlemen minorities concepts identify important roles of intermediaries and assume that they are professionals in their undertakings and are in a better position of facing such challenges. There was a distribution that acknowledged the presence of challenges in form of know how. Thus, by taking the Tanzanian experience where a large number of intermediaries are primary school leavers, poor and only become intermediaries for survival, such challenges are a common phenomenon. These findings correspond well with former studies conducted by (Magesa *et al.*, 2014; Report, 2014; Date, 2016; Issa & Munishi, 2020; Raj, 2018). An interesting discussion in this aspect was lack of fruits and vegetables processing industries after harvesting fruits and vegetables. Also, this finding had not been reviewed from the available literature. Therefore, this could be among the unique contribution of this current research.

### **Constraints to geographical location and market infrastructures**

Findings show that several factors constraining the intermediaries from facilitating marketing services by reaching to geographical location and market infrastructures. One of them was related to remote location of cultivating areas. It thus proved impossible for the various fruits and vegetables to reach timely to the urban markets. This showed that on the part of to poor roads, non-tarmac roads, sands, mud and bridges. Some of the cultivating areas mentioned by intermediaries include Kahama, Mbeya, Njombe and alike were slippery with non-passage road during the rainy season. Also, lack of space specifically for parking the loads and trucks is another hindering factor for the intermediaries' role in completing their marketing services. For example, it was found that, at the market place, Lorries and canter carry out fruits and vegetables and are supposed to wait until the other truck finishing the unloading of fruits and vegetables. Three respondents narrated here under:-

*This stereo market has a problem of parking facilities, still it is hard to say that, the market was not constructed with specific parking reserves for the lorries and canters, simply they used to force to park around the market left and right-hand side of market wall due to lack of specific structural parking reserves for loading and unloading of fruits and vegetables (Male trader (45), male intermediary (21) and market officer (38), Temeke stereo market)*

On top of that intermediaries were confronted with the problems of storage facilities at the market place. The results indicated that market infrastructure especially storage facilities such as deep freezers and refrigerators were missing to various categories of intermediaries. This made the intermediaries ending up using less convenient and traditional storage facilities like wooden crates, leaves, canva sheets and woven sacks.

It can be reported from the above findings that, critically intermediaries' inability to play their role to geographical and market infrastructure was associated with remote location of the farmers, lack of space utilization as well as poor storage facilities. These findings reflect various studies as conducted by (Issa & Munishi, 2020; Date, 2016; Mgonja & Utou, 2017; Magesa *et al.*, 2014). Despite the reality of findings as obtained in the study, researchers never expected remoteness and poor infrastructure to be among the challenges facing intermediaries. This is due to the fact that in the recent years the government of Tanzania has taken serious initiatives of constructing standard roads from one region to the other and even districts have been connected. Moreover, serious attention was given on food producing regions and districts. However, lack of storage facilities was considered a serious problem that hinders intermediaries' role in transporting fresh fruits and vegetables. Storage becomes a problem after harvesting and even during transporting. Findings concur with those in earlier studies (Kimaro & Msogya, 2012; Mwangike & Mdoe, 2015; Mgonja & Utou, 2017) in which lack of transportation was among challenges leading to serious post-harvest losses across developing countries. An interesting discussion was poor storage facilities existing to the market by intermediaries. This was discussed in deeply that, intermediaries could not afford to buy modern storage facilities an aspect that emphasized the government and stakeholders to invest them to various categories of intermediaries.

### **Constraints to transportation and distribution of fruits and vegetables**

Findings revealed other factors constraining the role of intermediaries in the transportation and distribution of fruits and vegetables. One of them was lack of transportation facilities within the trucks. Indeed, they stated that lorries and trucks were not installed with facilities for loading, handling and off-loading fruits and vegetables. Moreover, poor distribution and warehousing (storage) were among the complicated factors for facilitating it. Findings revealed

that fruits and vegetables were coordinated and integrated by few intermediaries. For example, while a few wholesalers and agents get commodities from farmers, retailers wait for the agents and wholesalers to complete the role of distribution of fruits and vegetables.

Closely related to this was poor packaging and labelling of loads carrying fruits and vegetables. This was proved that; intermediaries use traditional packaging and labelling owing to lack of modern one. On the other hand, long distance to the market place jeopardizes the intermediaries' role from completing to the distribution and transportation for fruits and vegetables. It is reported that intermediaries pick the loads from Kisarawe, Mwanza, Kenya, Iringa, Ilula and Pwani to urban markets. Transportation and distribution of fruits and vegetables was further complicated by corruption and bribery. Respondents stated that, while on their ways to urban areas, vehicle drivers were stopped unnecessarily by police officers to pay unjustifiable charges or bribery. This delays delivery time for fruits and vegetables in urban areas.

Another factor was poor technology. It was stated that due to poor technology, loading and offloading of fruits and vegetables was done manually thus taking a lot of time to deliver to the market. Findings revealed also that trucks were not equipped with modern storage facilities such as freezers and refrigerators, thus forcing the intermediaries to use poor devices such as wooden-boxes, wooden crates which resulted to poor handling when transporting the fruits and vegetables as confirmed by one of the respondents below:

*Sometimes our transporters use lorries to transport fruits and vegetables, which do not have advanced loading and offloading equipment as well as storage equipment. In this case transporters and workers in the Lorries use free hands to offload and load the fruits at market places without considering the nature of fruits and vegetables like mangoes and water melon, or other kind fruits that can easily get spoiled. (Male trader (38), Temeke stereo market, 8-05-2021)*

Moreover, it was noted that most of the intermediaries did not have transport and distribution insurance cover for their fruits and vegetables. Insurance cover could help guarantee compensation of fruits and vegetables against any kind of spoilage, loss and delays specifically if accident occurred when transporting them.

To conclude, the above findings show that intermediaries are affected by poor transportation and distribution to play the marketing services for fruits and vegetables. These included lack of transportation facilities, poor distribution channels and storage, poor packaging and labelling, long distance, corruption and bribery, poor technology and lack of insurance. Most of these findings correspond well with available studies as conducted by (ACP, 2009; Efficiency *et al.*, 2012; Raj, 2018; (Marketing, 2001; Report, 2014; Ayalew, 2017; Supply *et al.*, 2020; Mwagike & Mdoe, 2015). However, an interesting part of this discussion relates to corruption and bribery among the police officers who forces the intermediaries and lorry drivers to pay unjustifiable charges unnecessary for distribution and carryout fruits and vegetables. On the other hand, the factors relating to poor technology, and lack of insurance cover could not be stated in the literature review. These could be among the unique features of this current study.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The main objective of this study was to examine the factors constraining the role of intermediaries in the provision of market and marketing services for urban fresh fruits and vegetables supply chain and recommending factors for improving the intermediaries' role in this respect. Results obtained in this study imply that, even though intermediaries try their level best to ensure availability of fresh fruits and vegetables in the market, challenges they face lead to more losses than gains. For instance, it is evident that in the fresh fruits and vegetables sub sector, unless serious initiative is taken, post-harvest losses in this sub sector will be a continuous phenomenon leading to losses with spill-over effects from farmers, intermediaries, wholesalers and retailers. Such losses have a great implication in terms of the country's economy.

It is further argued from such findings that the fresh fruits and vegetables are hot ventures with a reason that market pool intermediaries to place and send their goods to the large extent, however due to poor handling mechanisms in the transportation, storage and other marketing related services, the fresh fruits and vegetables only attract local market of



low income earners leaving other classes of people in urban centres and the other market across borders, which would serve the country with foreign currency unattended. In order to make this sub sector attain its fullest performance, intermediaries and other interested stakeholders need to make serious investment in human, infrastructure and financial resources.

### **Recommendations**

In order to alleviate the above-mentioned impediments, the following recommendations should be taken into account. The Tanzania Chamber of Commerce Industry and Agriculture needs to ensure that market information on fruits and vegetables is provided timely to intermediaries and whole sellers and those interested in international trade. Such information will ensure the right quantity in the right quality is harvested and delivered to the required market in time and conveniently. Furthermore, the chamber in collaboration with higher learning institutions needs to take serious initiatives in training farmers, intermediaries and other interested stakeholders regarding organic farming, crop husbandry, quality harvesting, sorting, grading and packaging. This will ensure improved quality of the produce and income on the other hand.

The government through the ministry of trade and industry, local governments and other interested parties to invest much in the sub sector through building storage facilities in markets, obtaining refrigerated trucks to ensure easy, swift and quality transportation of fresh fruits and vegetables to the required markets. The government should identify source regions and build collection facilities in these regions from which intermediaries can obtain these produces.

The study recommends the government through Tanzania National Roads Agency (TANROADS) and Tanzania Rural Roads Agency (TARURA) to construct road both in urban areas to ensure that all roads through which intermediaries transport fresh fruits and vegetables. This might be attained through constructing a well-connected road network across the country. This will ensure nice flow of produce from where they are produced to the right market, minimise the amount of post-harvest losses registered in the entire supply chain continuum of fresh fruits and vegetables.

Nevertheless, the government through municipals should identify serious intermediaries and provide insurance to them to cover fruits and vegetables damage and deterioration. Finally, it was suggested that responsible authorities PCCB and police should effectively address the problems of corruption and bribery among the road traffic police and other individuals involved in public transport.

### **Area for further studies**

Due to the fact that a number of constraints have been identified to impede the role of intermediaries in marketing fruits and vegetables, a quantitative study should be carried to determine the extent to which such impediments escalate the problem of post-harvest losses. Moreover, the study should determine the monetary losses incurred by farmers as a result of such impediments which result in failure of intermediaries to carry their roles effectively.

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