

# Food Standards and Smallholders Upgrading in Local Linkages: Evidence from Horticultural-tourism Value Chain in Zanzibar

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**Abstract** The study examines the influence of food safety, health and quality standards on smallholders upgrading in local linkages between agriculture and tourism sectors in developing countries. It draws evidence from horticultural-tourism value chain in Zanzibar as a case study. In-depth interviews with the tourist hotels' procurement managers/chefs, intermediaries, individual smallholders, key informant from farmer organization, focus group discussions, observation and documentary review were conducted. Collected data was qualitatively analyzed through pattern matching technique. The results show that smallholders are heavily challenged to comply with food standards given their small size and lack of resources and support among others. These limit their ability to upgrading farming activities and access tourist hotels' market. As a result the local linkage between agriculture and tourism in Zanzibar is persistently weak. This suggests that rural policies need to be redesigned to enhance smallholders upgrade and comply with food safety, health and quality standards.

**Keywords** Standards, Smallholders, Upgrading, Value Chain, Local Linkage, Horticulture, Zanzibar, Tourism

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## 1. Introduction

Global linkages between agricultural smallholders in developing countries and consumers in developed world has received amount of analytical attention in global value chain literature over the past decades. Much of the debate has been centered on either, 1) governance (*i.e. authority and power relations that determine how financial, material and human resources are allocated and flow within the chain*) and its impacts on smallholders upgrading [5; 19], or 2) the influence of standards on value chain governance [23; 26]. Literature discussing the role of standards in determining smallholders upgrading in developing countries is still underdeveloped.

Besides the existing literature to a large extent has heavily focused on different ways in which small producers are linked to the global market and their potential or impediment to the smallholders upgrading; and how these different global linkages are influenced by prevailing standards in global value chain. While this phenomenon is now widely recognized in global agro-food value chain literature, less attention has been given to the evolving food standards and the consequences that these can have on smallholders upgrading. In addition, few studies that have looked at standards and upgrading paid a particular attention on export markets [2; 25], less is known concerning the influence of standards on upgrading in local value chains linking small farmers to high value markets, such as tourism accommodation sector, within the developing country.

I particularly focus on standards and upgrading in local linkages due to the concern that, the proliferation and enhanced stringency of food safety, health and quality standards that are imposed by high value markets' buyers can, in one way or the other, affect the competitiveness of smallholders in accessing the market. This in turn may have a significant implication on how the linkages between smallholders and profitable markets in other sectors within the country are created and strengthened. In other words, I stress that food standards may have an important say on how smallholders improve farming techniques and product quality to meet high value food (HVF) market's requirements and thereby influence the nature of agriculture and tourism linkages in developing countries.

Whereas Gereffi [10] defines upgrading as a process of improving the ability of a firm to move to more profitable and/or technologically sophisticated capital and skill-intensive economic niches; standards are commonly accepted benchmarks that transmit information to customers and end-users about a product's technical specifications, its compliance with health and safety criteria or the processes by which it has been produced or sourced [23].

For the sake of this study however, I use a broader

definition provided by Riisgaard et al. [29] to conceptualize upgrading as: a desirable change in chain participation that increases rewards and/or reduces exposure to risks. This is due to the fact that for smallholders to participate in a particular value chain and upgrade, compliance to prevailing standards should enable them to reduce risks and maximize profit from their farming activities.

A debatable topic on pro-poor tourism literature to date has been on creating and strengthening 'local linkages' between agriculture and tourism sectors in developing countries. Through these linkages host countries can maximize the benefits from tourism sector and minimize substantial tourism revenue 'leakages' to the external markets to source for agricultural products that are also available in the local production. In addition and in line with USAID's [37] emphasis, since agriculture employs majority of small producers and tourism attracts largest share of foreign exchange revenue in the developing countries, development of local/domestic value chains linking agriculture and tourism sectors within these countries should be prioritized over exports. Once developed and strengthened, HVF domestic value chains can act as a catalyst for smallholders to export by acquiring necessary knowledge, experience and skills to supply their produce to high value markets. Despite this emphasis however the two sectors are still poorly linked thus far and the existing literature does not provide sufficient explanation to this situation.

In this paper therefore I argue that, in order to precisely explain the persistently poor local linkage between agriculture and tourism sectors, it is equally important to examine how evolving food standards impede or enhance smallholders to access high value markets and improve their ability to compete in these profitable value chains within their countries. As smallholders comprises 50-80% of the agricultural sector in most of developing countries [7], compliance to evolving food standards may determine their fate in linking up with tourism accommodation sector in the course of supplying their produce to this high value market. Using evidence from fresh fruits and vegetables (FFV) value chain, this paper examines the local linkages between smallholders and tourist hotels in Zanzibar, with specific attention to the influence of food safety, health and quality standards on smallholders upgrading.

I concentrate on FFV value chain following the argument put forward by Meyer [20]; Rogerson [30] and Torres & Momsen [34] that, the greatest area of potential for creating and strengthening local linkages in developing countries is provision of fresh fruits and vegetables by local farmers to tourist hotels. Moreover, surveys [15; 36] show that for the past ten years the demand for fresh fruits and vegetables by global consumers is high and growing. Therefore this paper is set to look at how food safety, health and quality standards influence smallholders upgrading and shape local linkages between FFV smallholders and tourist hotels in Zanzibar.

This paper is structured as follows. The second section draws together those strands of literature which have bearing

on standards and upgrading. The third section specifies the method used for data collection and analysis. The fourth section presents the findings of the study obtained from the field. The fifth section is the discussion which brings together the theoretical issues and main empirical results as well as policy discussion. Finally, the conclusion is presented in the sixth section which provides recommendations and areas for improvement.

## 2. Literature Review

### 2.1. Food Standards

While the trade in fresh fruits and vegetables has been a major growth industry worldwide [18], yet it has been subjected to a number of strict food safety, health and quality standards over the past two decades. This situation has raised an intense debate among value chain scholars concerning the effect of these standards on developing countries' producers' access to high value and profitable domestic and global markets.

Whereas some value chain researchers acknowledge that food safety, health and quality standards are necessary to protect consumers from unsafe food [8;9], others suggest that these standards inflict serious costs in trade which marginalise smallholders in developing countries due to their small size and low capacity [2; 3]. According to Nadvi [23], compliance with food safety, health and quality standards is now a prerequisite for producers' entry to profitable value chain and networks whereby non-compliance can result in exclusion from them.

In this paper I use a broader definition provided by Nadvi & Wa' ltring [24] to conceptualize standards as agreed criteria or external point of reference by which a product or a service's performance, its technical and physical characteristics, and/or the process and conditions under which it has been produced or delivered, can be assessed. In some markets (such as high value and profitable), compliance with particular standards constitute entry criteria while in others, it is the basis for defining market niches and creating competitive advantage [1].

Additionally, having dependable standards makes it easier for all parties to a deal to recognize what is being dealt in. Therefore, compliance criteria need to be measurable with well-defined procedures. Standards require a degree of authority that ensure that they are legally binding or voluntarily enforced, with sanctions for non-compliance [14].

Looking at it in the lenses of transaction cost analysis and network theory, standards are important factors in smoothing trade relations and efficiently transmitting information to reduce transaction costs [33]. This is because standards provide a codified basis for conveying information and this information provision can be critical in facilitating transactions and coordination between inter-dependent

agents. Thus, standards enhance business-to-business ties by improving co-ordination of production and distribution systems and promote compatibility between diverse actors within the value chain, help organize their linkages, reduce transaction costs associated with chain coordination and lower risks for actors in the chain [3].

Although scholars [18; 23] claim that, standards can lead to improvement in quality practices and provide a basis to differentiate markets and create competitive niches, firms in developing countries have come to realize that their capacity to compete in high value and profitable markets is often linked to their ability to comply with demanding and stringent standards. As argue by Baines & Soon [3] and Reardon, Codron, Busch, Bingen, & Harris [28], compliance with food safety, health and quality standards demands upgrading on process and management issues which might be very difficult for small producers in developing countries to acquire for the fact that they are vulnerable and ill-equipped to comply.

For small firms in developing, standards represent new challenges and create barrier to trade due to short of technical and financial resources needed for compliance making them disadvantaged in meeting the required standards hence marginalized from profitable value chains. Nadvi & Waltring [24] contend that in developing countries support to assist small farmers to comply with increasingly and stringent food safety, health and quality standards is very limited. However, in some countries, small firms have been provided financial subsidies to offset costs of compliance and buyers do assist local suppliers to incorporate the standards [32].

An understanding of how standards influence smallholders upgrading is very important for firms and policymakers in developing countries because, compliance with certain food safety, health and quality standards may restrict prospects for local small producers to enhance capabilities, acquire new forms of knowledge and thus improve their competitive positions and conditions for profitable survival in a particular value chain as claimed by Gibbon & Bolwig [12]. Bolwig, Ponte, Toit, Riisgaard, & Halberg [4] further contend that, standards may be used in the identification of upgrading strategies appropriate for small producers and supplier in developing countries.

## 2.2. Upgrading

In global value chain analysis, the concept of upgrading is used to identify the possibilities for producers to ‘move up the value chain’, either by shifting to more rewarding functional positions or by making products with more value-added invested in them, and/or providing better returns [13]. According to Gereffi [10], the upgrading process is examined through the lenses of how knowledge and information flow within value chains.

In this context however, I focus on the broader definition provided by Riisgaard et al. [29] to see upgrading as something that happens to a specific actor (an economic

group, organization or individual) inside the chain; it directly improves the performance or position of this actor, thereby increasing rewards and/or reducing the exposure to risk. Defining upgrading through lenses of reward structures provides a better understanding on the possibilities of incorporating more smallholders into horticultural-tourism value chain in Zanzibar. In addition, we will understand what are the gains and/or losses if smallholders comply with standards and upgrade to access the tourist hotels’ market, how those that are in the chain maintain their positions, how should those that are not in the chain be included, among others.

Most of the global value chain scholars prefer using typology of upgrading developed by Humphrey & Schmitz [17]. However, to best conceptualize upgrading in agriculture-tourism linkages, I use broader categorization of upgrading as proposed by Riisgaard et al. [29] which is equally important, and may combine some of the Humphrey & Schmitz, [17]’s categories, or even go beyond them. This includes:

(1) process upgrading: improving efficiency or reducing negative externalities; this includes delivery on delivery schedules, invoicing, improving client management, reducing waste, etc.,

(2) product upgrading: moving into more ‘sophisticated’ products with increased unit value, through complying with buyer requirements for physical quality, certification, food safety standards, traceability, packaging, etc. Alternatively, shifting from producing for high-value markets based on economies of scale could also increase rewards or reduce risks,

(3) volume upgrading: increasing the amount of products sold, through increased in yield or area;

(4) functional upgrading: acquiring new functions in the value chain, either by performing downstream activities (e.g. grading, processing, bulking up, transporting or advertising) or by engaging in upstream functions such as the provision of services, inputs or finance,

(5) functional downgrading: moving one node down the chain (for example, from processing the product to focus back on production because of the low profitability of processing),

(6) improve value chain coordination through vertical and horizontal contractualisation. Vertical contractualisation means getting a better deal through closer and longer-term business links with buyers. It involves learning from the buyers interlocking contracts where sales contracts include embedded services from the buyer such as extension, credit, fertilizer, etc. Horizontal contractualisation describes agreements among producers to cooperate over input provision, marketing, certification and crop insurance in order to reduce costs, increase revenues or mitigate individual risks, and

(7) inter-chain upgrading: applying competences acquired in one value chain to a new chain.

While Asfaw et al. [2] claims that compliance to standards

is a necessary step for smallholders upgrading and access to profitable market because it puts firms and economies on potentially dynamic learning curves, Gibbon [11] argues that the first step in understanding upgrading opportunities available to small scale producers (and others) in a particular value chain is to spell out the standard compliance reward structures of these chains.

Based on the fact above, I contend that it is important for scholars to question; does it pay-off for smallholders to comply with stringent food safety, health and quality standards to access tourist hotels' and upgrade? Or does compliance to standards result into more rewards than risks for smallholders? The answers to these questions may depend on the kind of actors these smallholders play for and changes for actors in horticultural-tourism value chain.

According to Riisgaard et al. [29] there are four kinds of actors in any value chain which are:

(1) chain actors, who are directly involved in within-chain exchanges of product, typically estates or small producers, processors, exporters, importers and retailers;

(2) external actors, who are individuals or organizations that do not directly handle the product but that provide services, expertise and exert influence such as NGOs, financial institutions, government agencies, etc.;

(3) expelled actors, who are chain actors who have withdrawn from the value chain due to pressure or coercion; and

(4) non-participants/excluded/marginalized actors, those who never participated in the value chain, by choice or for lack of capability.

There are also four kinds of changes for value chain actors in any value chain which are:

(1) inclusion of new participants, which refers to the incorporation of actors into an existing or newly created value chain;

(2) continued participation under new terms (repositioning), which refers to the alteration of participation for actors already in the chain for example when supermarkets impose quality standards, require conformity to fair trade standards or simply squeeze prices;

(3) expulsion of participants, often the result of value chain restructuring, for example when importers concentrate their sourcing on fewer suppliers or increasingly buy processed products, thus squeezing out small producers. Eviction from the chain may also result from the changes in chain-external factors that undermine participants' ability to meet performance requirements; and

(4) non-participation, which concerns indirect implications of value-chain activities for local people who are not and never have been part of the chain.

In addition Bolwig et al., [4] stress that, even if people are included in a particular value chain, this may not be on advantageous terms, and analysis should look carefully at the costs and benefits of participation. Exclusion or marginality from a particular chain is not necessarily disadvantageous, when people lack leverage within a particular economic or

social field, retreat to the margins or externality from its operations may be an advantage. Small farmers opting out of production for a particular profitable market and choosing instead to produce for less lucrative but less risky local markets, are in one sense becoming more marginal but may experience relatively more market leverage.

Therefore, compliance to food safety, health and quality standards may be connected to different rewards and involve different levels of risks and performance requirements which in turn may negatively or positively affect smallholders upgrading and their linkage to high value markets. While I assume that knowledge on the role of standards on smallholders upgrading in HVF value chain may make significant contribution to our understanding on the nature of local linkage between agriculture and tourism in developing countries, less attention has been given to this area to date. In light of this view, this study is set to examine the influence of food safety, health and quality standards on FFV smallholders upgrading and their access to tourist hotels' market through lenses of reward/risk structure in horticultural-tourism value chain.

### 3. Materials and Methods

This study follows qualitative method approach where case study is the main strategy of inquiry. This is due to the fact that the main aim of this paper is to attain rich understanding of the phenomenon under the investigation by focusing on few individuals. Although case study research has been frequently criticized for its lack of rigor, suggestions from previous studies [6; 21; 38] have been followed to ensure the validity of the study. I draw on secondary evidence and intensive primary interviews, focus group discussions and observation.

In-depth interviews were undertaken with tourist hotels' procurement managers or chefs, intermediaries (consolidators and wholesalers) and smallholders that are currently participating in the horticultural-tourism value chain. Consolidators are enterprises that order/buy and bring together small quantities of fresh produce from different smallholders and resale it in large quantities/orders to wholesalers. Wholesalers are enterprises that order/purchase fresh produce in huge amount from various consolidators and resale it to tourist hotels. For this study, tourist hotels, intermediaries and smallholders are units of analysis.

Zanzibar archipelago was purposively selected based on its highest level of cultural tourism activities in Tanzania. To focus the study, data collection was concentrated at Unguja Island where almost 90% of hotels and guest houses are found. In addition, this Island receives at least 90% of the Zanzibar's annual tourist arrivals [40].

In the course of establishing sampling framework, the respondents for the in-depth interview were selected based on the criteria that:

1) smallholders must be dealing with the fresh fruits and vegetables business,

2) hotels must be accommodating foreign tourists and sourcing from local production among others,

3) intermediaries should be dealing with any activity that links smallholders and tourist hotels like consolidating and packaging as well as wholesaling.

In order to make sure the respondents meet the specified criterion, snowball sampling was used. Tracing of the respondents through chain referral sampling was conducted. It started with the tourist hotels (downstream) that source from the domestic production to the intermediaries and then to smallholders involved in the chain. This way made possible for the researcher to trace the chain and identify other horticultural-tourism participants as the chain goes further upstream.

Prior to data collection, a list of 237 hotels and guest houses in Zanzibar archipelago was established via a website for Zanzibar Commission for Tourism<sup>i</sup>. To establish the appropriate sample frame for the respondents that meet the criteria stated above, the hotels from this list were screen.

First step was to take out the hotels and guest houses located at Pemba Island which amounted to 30 leaving out 207 establishments. In the list, establishments were also graded according to 'Star' (1-Star to 5-Star) hotel rating for the purpose of informing international travelers on basic facilities and features that can be expected in such establishment. According to The Official Hotel Guide (published in the US, and followed worldwide) the hotel or guest house with greater number of stars indicates greater quality, luxury, experience and frequently visited by tourists.

Therefore the second step was to consider and select hotels that were categorized between 2 to 5 stars because to me, I assume they have strong linkage with tourism sector in Zanzibar. 127 establishments out of 207 were excluded from the sample because 73 hotels and guest houses had no grades and 54 were rated as 1-star establishments leaving out 80 establishments.

In addition, I visited two more websites for Zanzibar Association of Tourism Investors (ZATI)<sup>ii</sup> and trip advisor<sup>iii</sup>. The aim was to confirm that the list of 80 hotels obtained from Zanzibar Commission of Tourism includes hotel members of ZATI and hotels that tourists from all over the world are advised for accommodation in Zanzibar by trip advisor.

When I confirmed that ZATI hotel members and those advised by Trip Advisor are included in the list, the third step was to contact these 80 hotels through phone calls to find out if they source fresh fruits and vegetable from domestic production. 15 hotels were closed due to low season (which is between October to May, and the interviews were conducted in April 2014), 5 hotels responded no, 20 hotels responded positively to the question and 40 hotels did not respond after several phone calls.

It was very important to go through this procedure in order to make sure that the hotels involved in the interviews provide right information for the study and I was tracing the right chain. The in-depth face-to-face interviews with 15

identified tourist hotel referred me to 7 interviews with wholesalers, 5 interviews with consolidators and 14 interviews with smallholders who fulfilled the above criteria.

Besides the intense interviews with hotels, intermediaries and smallholders; 3 farmers' focus group discussions in different areas known for FFV farming activities in Zanzibar were conducted. These are the smallholders that are dealing with FFV farming practices but do not have access to tourist hotels' market and therefore excluded from the horticultural-tourism value chain in Zanzibar. Each group consisted between 6 to 8 smallholders for easy management and control of the discussion, as suggested by Morgan [22]. In addition, the study went further to include the in-depth discussion with the key informant from the farmer organization that represents FFV farmers in Zanzibar.

Direct observation of participants was also carried out. As a nonparticipant-observer I had an opportunity to observe interactions between horticultural-tourism value chain actors; I paid visits to the farms and observed the quality of feeder roads, farming practices and presence/absence of cooling systems to mention few. The aim of observation was to witness the natural context in relation to linkage between smallholders and tourist hotels and obtain more information that was not obtained through interviews and focus group discussions.

Similarly, documentary review was conducted to obtain secondary data from various scholarly journal articles, books, websites and reports.

The data collected was qualitatively analyzed and interpreted. As suggested by Yin [39] the analysis of data for this study utilized pattern-matching technique. This is a technique that identifies and compares evident in the data against one or several hypothesized patterns that the analyst has developed through familiarity with the field. Based on this fact, the first step prior to undertaking the study was to develop proposition for the study. This was derived from the literature review and hunches developed from my experience as a researcher in the field and in this context known as *predicted pattern*. To examine the correctness of the proposition, predicted pattern was matched by *experienced pattern*. Experienced pattern was derived from research/field data. In this case therefore:

*Predicted pattern was: Food safety, health and quality standards can influence smallholders upgrading in horticultural-tourism value chain*

*Experience pattern was: Food safe safety, health and quality standards have an impact on smallholders upgrading in horticultural-tourism value chain*

These two patterns were then matched whose process was performed at two levels: within-case analysis and cross-case analysis. Within-case analysis is central to the generation of insights into each case because it helps to deal with the analysis of the large volume of data [31]. In this study, within-case analysis involved the description of individual groups in the value chain (i.e. procurement managers, intermediaries and farmers). Such description allowed the

unique patterns of each case to emerge before generalized patterns across cases were created. Then the researcher performed cross-case analysis where by similarities and differences between groups in the value chain were look at and interpreted.

The interpretation process was meant to bring all analyzed data together in such a way that themes and connections were used to explain the findings. Lessons learned from the case study were presented. These lessons were derived from a comparison of the findings with information gleaned from the literature. Besides, as a researcher my personal interpretation, couched in the understanding that I brought to the study from my own culture, history, knowledge and experience was used to add meaning to the case study lessons. In this way it was possible to suggest if the findings confirmed past information or diverged from it.

#### 4. Results

FFV farming activities in Zanzibar is characterised by scattered, independent and primarily smallholders located at Northern and central parts in Unguja Island with majority of them holding less than two acres of land. The southern part of the Island is not favourable for farming activities due to presence of hard/rocky soil. Majority of smallholders in Zanzibar tend to produce FFV to meet household needs and sell any surplus to wet market. Agricultural practices are still crude with little or no inputs such as fertilisation or modern irrigation. In addition, the farms are not well managed, smallholders lack harvesting, post-harvest and handling skills, and have limited knowledge regarding the market, food safety, health and quality specifications.

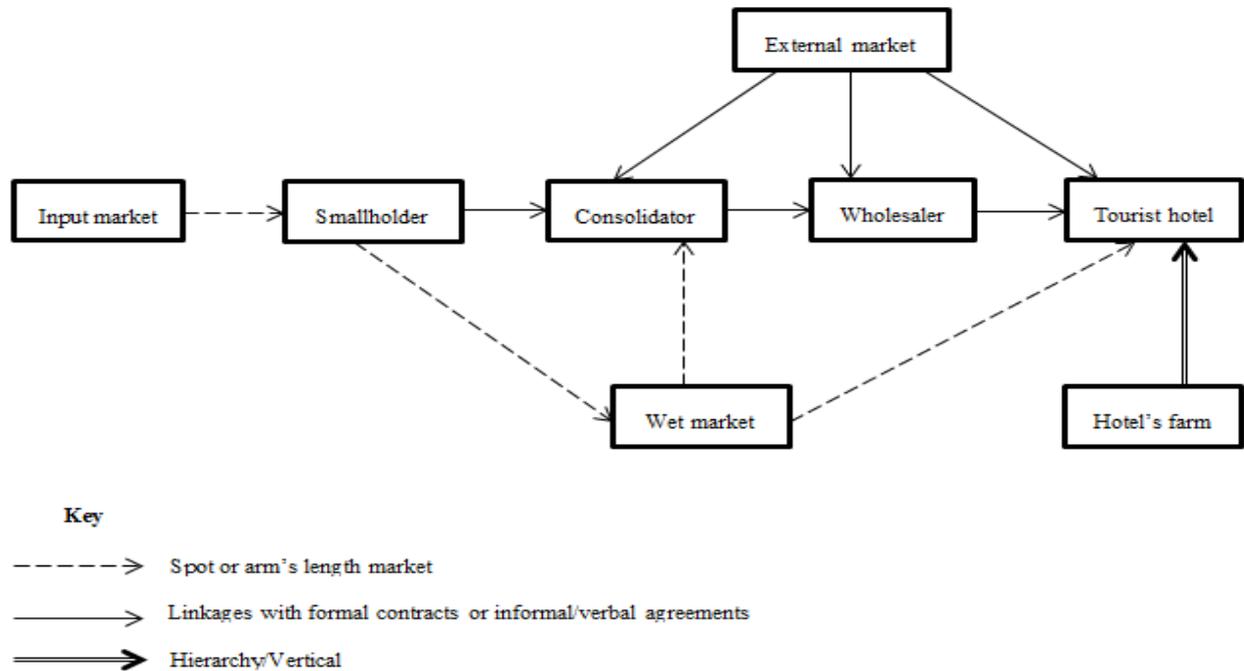
It was revealed from the study that Zanzibar receives above 70% of overseas tourists mainly from Western countries, with UK and Italy being the largest sources. Interviews with tourist hotels' procurement managers/chefs show that tourists demand for year-round availability, food safety, health and a range of quality characteristics (for example less or no use of pesticides). This means that hotels must adapt to the stringent safety, health and quality standards for FFV in a manner that tries to detect and prevent problems in food chain. This is also a strategy to build and protect tourist hotels' reputation and brand so as to attract foreign tourists to seek accommodation services in their

hotels. In response to this, FFV procurement arrangements by tourist hotels have made compliance to food safety and quality standards as a critical condition of market access for the suppliers thus reducing costs and risks in their supply chain.

From the interviews and focus group discussions with both smallholders and hotels, it was noted that smallholders face considerable difficulties meeting food safety, health and quality requirements when supplying directly to tourist hotels. While smallholders lack capacity to invest in commercial farming, tourist hotels incur a lot of coordination costs when procuring FFV directly from scattered, low skilled and individually smallholders. Therefore to reduce monitoring and/or traceability costs, the horticultural-tourism value chain in Zanzibar comprises a network of intermediaries (wholesalers and consolidators) that link few smallholders, who are able to meet the requirements, with tourist hotels. During the interviews with hotels' procurement managers/chefs it was further found that approximately 30% of fruits and vegetables for the tourist hotels' consumption is sourced from local production while the remaining is imported from external markets. This reveals poor local linkage between smallholders and tourist hotels in the country.

The hotels organise the local sourcing of FFV in two different ways. One, tourist hotels source FFV from local production through few selected wholesalers. To meet the requirements of the tourist hotels wholesalers select few consolidators they trust who in turn select some few smallholders to source from. Two, hotels buy directly from the wet market which acts as a consolidation centre for FFV from various places in Zanzibar. Some hotels have their own farms in the island to produce FFV that are not available or available with low volume from the local production. This linkage is known as hierarchy or vertical integration.

The study also revealed that capacity, variety, poor quality and year-round production are major problems facing tourist hotels when sourcing from local production in Zanzibar. As a result of this the hotels opt to also procure FFV from the external markets (usually from some Mainland Tanzania regions, Kenya and South Africa) so as to satisfy the needs of their guests (tourists). Figure 1 below depicts the way tourist hotels link up with FFV smallholders and suppliers both in Zanzibar and external market.



Source: Developed from field data, 2014

**Figure 1.** Local and external linkages created by tourist hotels in Zanzibar

Linkages with contracts is characterised by business relationship that are formalised through written contracts (between hotels and wholesalers; and wholesalers and consolidators) and informal/verbal agreements between consolidators and smallholders. This linkage is preferred by tourist hotels for two reasons. First, is to ensure compliance with food standards by maintaining closer business relationship with their suppliers that communicates clearly the standards with which suppliers upstream must comply. Prior to delivery, the produce is strictly and seriously inspected by either the chef or store department personnel and feedback is provided to the supplier. Second, is to reduce transaction costs involved in coordinating geographically dispersed and unorganised smallholders.

To make sure that they have enough capacity and varieties that meet quality standards to supply to the hotels, consolidators and wholesalers also source from external market especially from smallholders and traders in Mainland Tanzania. This linkage is characterised by strong interpersonal relationship between them because they have been into business for a number of years (more than 10 years). Some consolidators also choose and source the best quality produce from the wet market if they find the quality supplied by the selected smallholders is of sub-standard.

Some hotels link up with smallholders through arm's length market linkage characterized by spot buying. The chef/procurement personnel goes to the market to buy the produce and checks the quality before paying for it. There are three reasons provided by the hotels for using this linkage. First, spot/market price is cheaper than the price charged by the wholesalers which adds to the cost of operation. Second, the hotels are located near the wet market which provides

them with an advantage in terms of cost and time reduction when sourcing FFV. Third, although sourcing through wholesalers guarantees compliance with food standards, these hotels had negative business experience with wholesalers in the past a situation that led to business discontinuation with those local suppliers.

The findings further revealed that there is no/limited direct linkage between tourist hotels and smallholders in Zanzibar. Although this could provide incentives to tourist hotels in terms of reduction of transaction costs and to the smallholders in terms of assured market, improved farming practices and better prices; tourist hotels claim that FFV farming is very underdeveloped in the country.

## 5. Discussion

Market-type transaction between smallholders and buyers as discussed by Riisgaard et al. [29], tend to reduce reward and/or increase risks to producers often with negative ramifications along the entire chain in various ways. It is characterized by small volume and low supplier capabilities; high uncertainty of price; sales to many buyers (implying moral-hazard problems and poor access to reliable market information, finance and other support from buyers); poorly specified grades and standards and lack of means of quality control (implying moral hazard problems and low rewards for quality); and poor transmission of complex product information, which may constrain value addition and compliance to standards.

Moreover, informal or verbal contacts/agreements between consolidators and smallholders that are in the chain

tend to put the smallholder in asymmetric information something that limits information flow and increases risks of participation in the chain for the small farmer. While intermediaries have access to full information on the food safety, health and quality standards required by the tourist hotels through formal contracts, they use this power to exploit smallholders through verbal agreements.

Tourist hotels have showed the interest to source directly from smallholders through contract farming or farmer organisation. This will assist them to reduce the operational costs incurred when they source through intermediaries or from the external markets. Hotels are however constrained by the fact that, farms are small and scattered, operated by individual smallholders and there is no serious farming of FFV in Zanzibar.

According to Prowse [27] contract farming offers numerous opportunities for smallholders: it can allow access to a reliable market and demand information; it can provide guaranteed and stable pricing structures; and most importantly, it can provide access to credit, inputs, production and marketing services e.g. seed, fertilizer, training, extension, transport, and even land preparation. With contract farming there are frequently rewards for smallholders such as higher prices, more stable demand and flows of technical assistance from within the chain as argued by Humphrey [16].

Although the study revealed that the demand for FFV by tourist hotels in Zanzibar is greater, very few smallholders access this market through intermediaries, whereas majority of them have no access to it due to production of inferior standard products. Among important food safety, health and quality standards demanded by the tourist hotels to source from local production are: less or no use of chemical fertilizers and pesticides, freshness of the produce, product varieties, reliability of delivery, consistent volume of the produce and year-round availability and supply of the produce (sustainability).

Concerns about exclusion of majority of smallholders in FFV value chain in Zanzibar is most acute due to the fact that efforts of these farmers to provide tourist hotels with stable, year-round supply of safe, high quality produce at competitive prices are very minimal. To comply with these standards and directly access tourist hotels' market, smallholders are required to have economies of scale and capabilities they cannot offer given their small size. Given this fact, very few smallholders are chain actors by being included in this profitable value chain; others that once tried to supply to intermediaries who sell to these hotels are expelled actors since it was difficult for them to comply with the standards; and majority of them are non-participants or marginalised due to lack of capabilities.

The study shows that, tourist hotels and intermediaries prefer to source major share of FFV that is demanded by tourism sector in Zanzibar from Kenya and South Africa because horticultural sector is very developed in these countries unlike Unguja and Mainland Tanzania. According to Tschirley [35] growth of horticultural sector in these

countries is to a large extent supported by external actors to the value chain who are individual organizations that do not directly handle the produce but that provide services, expertise and exert influence such as NGOs, financial institutions, farmer organizations and government agencies to mention few.

There is a major difference between few smallholders that are included in, and majority of those that are excluded from the horticultural-tourism value chain in Zanzibar. Compliance with food safety, health and quality standards has resulted in improvement of farming activities for the smallholders in the chain. They practice organic farming (process and product upgrading), they sell almost everything they cultivate (volume upgrading) and they supply the produce to the intermediaries at the price higher than the market price for the produce sold through open/wet market (vertical contractualisation). Since they have been working with intermediaries in a long-term business relationship these smallholders gained knowledge on the standards required by tourist hotels and they acknowledge that their experience in dealing with the tourist hotels' market has increased as compared to when they started the business years back. For these smallholders, the ability to comply with the standards and upgrade has been contributed by the trainings (focusing on agricultural practices) that they attended organized by various NGOs, personal access to loan from commercial banks and informal financial institutions (those that are not registered) to purchase farming inputs and facilities and their determination to practice commercial farming.

The excluded smallholders are aware of the opportunities available in tourist hotels' market, however a lot of factors constrain them to comply with the standards in order to access this profitable market and therefore upgrade. Food safety, health and quality requirements require fixed investments like irrigation systems which surpass the financial capacity of these small farmers. Usually financial institutions in Zanzibar do not provide loans for farming activities as they perceive this to be a very risky business and these smallholders lack collateral to offer to these institutions to get a loan.

The input market is weakly regulated resulting to flooding of fake fertilizers and pesticides where only knowledgeable smallholders are able to recognize an original input from the fake one, majority of them can't. Limited agricultural extension services and out-of-date trainings from government agencies officials to farmers constrain these smallholders to acquire knowledge that would support them to comply with tourist hotels' requirements and upgrade.

Apart from the fact that smallholders are scattered in Zanzibar, they are either passive or not members of any farmer organization as they see no value in the existing organizations. This situation restricts the opportunity for them to access farming inputs, trainings, extension services and market that is provided through the farmer organizations as claimed by Jensen [18]. Hence horizontal contractualisation is limited.

In the light of the above discussion that support Reardon et al. [28]'s argument, majority of FFV smallholders in Zanzibar, who are also poor, are least able to respond to the stricter food safety, health and quality standards required by tourist hotels. This in turn restricts them to upgrade their farming practices resulting to persistent poor local linkage between these small farmers and tourism sector.

Therefore, access to information through trainings, capital, agricultural extension services and external actors support to mention few, are major factors influencing ability of smallholders in complying with standard and therefore upgrade, hence fostering the local linkage between FFV and tourism sectors as claimed by Asfaw et al. [2].

For policy implication, I recommend that the government need to strengthen its commitment to collecting and disseminating the information (about standard requirements in tourist hotels' market) to smallholders through trainings, seminars, workshops and provision of agricultural extension service. For smallholders to comply with standards, upgrade and link up with tourist hotels, they need access to production inputs and updated information to ensure safety, productivity, quality and timeliness in order to supply FFV to this high value market as suggested by Tschirley [35].

The government also need to correct specific input and output market failures and work together with the private sector in the course of providing appropriate expertise to smallholders. The government should further facilitate the linkage between smallholders and private and development agencies to ensure that smallholders have access to materials, financial and technical support.

I further recommend that the overall master plan for tourism development should be integrated with that of agricultural development.

## 6. Conclusions

This paper sought to provide an understanding on the influence of food safety, health and quality standards in smallholders upgrading in the local value chain that links FFV smallholders and tourist hotels in Zanzibar. Although there is evidence from the study that standards can help promote the codification of knowledge in ways that lower transaction costs within value chain, yet its compliance excludes majority of smallholders from the profitable and high value markets in developing countries such as tourist hotels' market.

While smallholders exclusion from tourist hotels' market is a reality, rural policies aimed at supporting such farmers need to be realistic about the prospects for smallholders upgrading and how to respond to the new challenges posed by standards compliance to enhance smallholders access this profitable market. That's to say that rural policies and programs in Zanzibar need to be redesigned to improve smallholders' access to tourist hotels' market.

Moreover, government intervention is necessary to support smallholders' capabilities to upgrade their farming

activities that will make them comply with stricter food safety, health and quality standards and access tourist hotels' market.

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## REFERENCES

- [1] Asfaw, S., 2007. Does EurepGAP standard marginalize poor farmers? - Evidence from Kenya. *Entwicklung + Landlicher Raum*, 41(1), pp. 7-9.
- [2] Asfaw, S., MITHOFER, D. and WAIBEL, H., 2010. What impact are EU supermarkets standards having on developing countries' export of high value horticultural products? Evidence from Kenya. *Journal of International Food & Agribusiness Marketing*, 22, pp. 252-276.
- [3] Baines, R.N. and Soon, J.M., 2013. Private food safety and quality standards: facilitating or frustrating fresh produce growers? *Acta Horticulturae*, (1006), pp. 85-92. 46 ref.
- [4] Bolwig, S., Ponte, S., Toit, A.D., Riisgaard, L. and Halberg, N., 2010. Integrating poverty and environmental concerns into value-chain analysis: a conceptual framework. *Development Policy Review*, 28(2), pp. 173-194. many ref.
- [5] Dolan, C. and Humphrey, J., 2000. Governance and trade in fresh vegetables: the impact of UK supermarkets on the African horticulture industry. *Journal of Development Studies*, 37(2), pp. 147-176.
- [6] Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- [7] Emongor, R. A., & Kirsten, J. F. (2006). Supermarkets in the food supply systems in Southern African development community: A case of Zambia. *Journal of Applied Sciences*, 6(4), 800–809.
- [8] Fold, N. and Larsen, M.N., 2008. Key Concepts and Core Issues in Global Value Chain Analysis. In: N. Fold and M. N. Larsen (eds.): *Globalization and Restructuring of African Commodity Flows*, Uppsala; Nordiska Afrikainstitutet, pp. 26-43.
- [9] Fromm, I., 2007. Upgrading in Agricultural value chains: The case of small producers in Honduras. . *Working Papers No. 64.*, German Institute of Global Area Studies.
- [10] Gereffi, G., 1999. International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics*, 48, pp. 37-70.
- [11] Gibbon, P., 2003. Commodities, donors, value chain analysis

- and upgrading. *Paper prepared for UNCTAD*, Danish Institute for International studies.
- [12] Gibbon, P. and Bolwig, S., 2007. The economic impact of a ban on imports of air freighted organic products to the UK. *DIIS working paper 23*, Copenhagen: Danish Institute for International Studies.
- [13] Gibbon, P. and Ponte, S., 2005. Trading down: Africa, value chains and the global economy. *Philadelphia, PA: Temple University Press*, .
- [14] Henson, S. and Reardon, T., 2005. Private agri-food standards: Implications for food policy and the agri-food system. *Food Policy*, 30(3), pp. 241-253.
- [15] Hewett, E.W., 2012. High-value horticulture in developing countries: barriers and opportunities. *CAB Reviews*, 7(054), pp. 1-16.
- [16] Humphrey, J., 2006. Policy implications of trends in agribusiness value chains. *European Journal of Development Research*, 18(4), pp. 572-592.
- [17] Humphrey, J. and Schmitz, H., 2002. How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies*, 36(9), pp. 1017-1027.
- [18] Jensen, M.F., 2008. Changing food safety requirements and the export of fresh horticultural products by Kenyan smallholders. In: *N. Fold and M. N. Larsen (eds.): Globalization and Restructuring of African Commodity Flows*, , pp. 103-128.
- [19] Lee, J., Gereffi, G. and Beauvais, J., 2012. Global value chains and agrifood standards: challenges and possibilities for smallholders in developing countries.(SPECIAL FEATURE: SUSTAINABILITY SCIENCE: SOCIAL SCIENCES)(Author abstract)(Report). *Proceedings of the National Academy of Sciences of the United States*, 109(31), pp. 12326.
- [20] Meyer, D., 2007. Pro-poor tourism: from leakages to linkages. A conceptual framework for creating linkages between the accommodation sector and 'poor' neighbouring communities. *Current Issues in Tourism 2007 Vol. 10 No. 6 pp. 558-583*, 10(6), pp. 558-583.
- [21] Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage, Thousand Oaks, CA,
- [22] Morgan, D. L. (1998). *Planning focus groups*. Thousand Oaks, CA: Sage, (Journal Article).
- [23] Nadvi, K., 2008. Global standards, global governance and the organization of global value chains. *Journal of Economic Geography*, 8, pp. 323-343.
- [24] Nadvi, K. and Waring, F., 2004. 'Making sense of global standards'. In *Hubert Schmitz (ed), Local Enterprises in the Global Economy: Issues of Governance and Upgrading*, Cheltenham: Elgar, forthcoming., .
- [25] Perezaleman, P., 2012. Global standards and local knowledge building: upgrading small producers in developing countries. *Proceedings of the National Academy of Sciences of the United States of America*, 109(31), pp. 12344-12349.
- [26] Ponte, S. and Gibbon, P., 2005. Quality standards, conventions and the governance of global value chains. *Economy and Society*, 34(1), pp. 1-31.
- [27] Prowse, M., 2012. Contract Farming in Developing Countries – A Review. *Agence Francaise de Developpement*, vol. 12. *À Savoir*, France, pp. 1-99.
- [28] Reardon, T., Codron, J., Busch, L., Bingen, J. and Harris, C., 2001. Global change in agrifood grades and standards: agribusiness strategic responses in developing countries. *The International Food and Agribusiness Management Review*, 2(3-4), pp. 421-435.
- [29] Riisgaard, L., Bolwig, S., Ponte, S., Du Toit, A., Halberg, N. and Matose, F., 2010. Integrating Poverty and Environmental Concerns into Value-Chain Analysis: A Strategic Framework and Practical Guide. *Development Policy Review*, 28(2), pp. 195-216.
- [30] Rogerson, C.M., 2012. Strengthening agriculture-tourism linkages in the developing World: Opportunities, barriers and current initiatives. *African Journal of Agricultural Research*, 7(4), pp. 616-623.
- [31] Sheu, C., Yen, H. R., & Chae, B. (2006). Determinants of supplier-retailer collaboration: Evidence from an international study. *International Journal of Operations & Production Management*, 26(1), 24-49.
- [32] Selwyn, B., 2008. Institutions, Upgrading and Development: Evidence From North East Brazilian Export Horticulture. *Competition & Change*, 12:4(4), pp. 377-396.
- [33] Tallontire, A., Opondo, M., Nelson, V. and Martin, A., 2011. Beyond the vertical? Using value chains and governance as a framework to analyse private standards initiatives in agri-food chains. *Agriculture and Human Values*, 28(3), pp. 427-441.
- [34] Torres, R. and Momsen, J.H., 2011. Introduction. In *R. Torres & J. Momsen (eds.) Tourism and Agriculture: New Geographies of Consumption, Production and Rural Restructuring*. London: Routledge, , pp. 1-9.
- [35] Tschirley, D., 2007. Supermarkets and beyond: Literature review on farmer to market linkages in sub-saharan Africa and Asia. *Paper prepared for the AgInfo Project funded by the Bill and Melinda Gates Foundation*, , pp. 1-14.
- [36] UNCTAD, 2008. FDI and Tourism: The development dimension. East and Southern Africa. *UNITED NATIONS*, New York and Geneva.
- [37] USAID, 2005. Global horticulture assessment. *University of California, Davis*,.
- [38] Yin, R. K. (1994). *Case study research: Design and methods*. Sage, Thousand Oaks, CA,
- [39] Yin, R. K. (2014). *Case study research: Design and Methods*. (5th Ed.) Thousand Oaks, CA; Sage, (Journal Article).
- [40] Zanzibar Commission of Tourism, 2014

## Endnotes

i <http://www.zanzibartourism.net/hotels.php>

ii <http://www.zati.org/?wpbdm-category=hotels>

iii

[http://www.tripadvisor.co.uk/Hotels-g482884-Zanzibar\\_Zanzibar\\_Archipelago-Hotels.html](http://www.tripadvisor.co.uk/Hotels-g482884-Zanzibar_Zanzibar_Archipelago-Hotels.html)