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ASSESSING SPATIAL IMPACTS OF TRANSIT TRADE ON LOCAL COMMUNITIES: EVIDENCE FROM TANZANIA

By

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ASSESSING SPATIAL IMPACTS OF TRANSIT TRADE ON LOCAL COMMUNITIES: EVIDENCE FROM TANZANIA

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

The benefits of transit trade have mainly focused on the landlocked country creating gaps in the knowledge of how the transit/coastal country such as Tanzania gains from facilitating transit trade. The literature on the benefits of transit trade is scanty, and the few existing studies have tended to focus on the impact of transport infrastructure and less on the benefits to local communities in which transit cargo pass by. Using Tanzania as a case study, this study provides a systematic assessment of economic benefits of transit trade to four transit locations in Tanzania. The results show that, facilitating transit trade generates enormous benefits to the economy of a transit country, and that such benefits are largely contingent to changes in the volume of transit trade operations. Specifically, transit trade is shown to have been a catalyst of local economic development, including a magnet for rural-rural migration in the transit townships which would have otherwise been economically deprived rural areas. Emergence and growth of local business enterprises in the transit and border townships provide reliable source of jobs, incomes and investment. Finally, while the spatial impact of Transit trade is largely positive, it is often associated with some social ills, including crime, prostitution, environmental impacts, and accidents.

1.0 INTRODUCTION

Transit trade is the business of moving goods across one border from origin to destination or multiple borders under customs control (Arvis et al., 2007). Multiple borders mean movement in which goods move through several borders from their origin (say Japan) to their destination (say Zambia) through another country (say Tanzania). Owing to its indispensable role in facilitating international trade, countries have invested substantial resources in trade facilitation (Ma and Zhang, 2008). In coastal countries such as Tanzania, transit operations give prominence to the transport services sector. For instance, transport services sector accounts for nearly a third of services receipts (second after tourism sector) and is one of the largest contributors to GDP growth in Tanzania. However, despite its economic importance and indispensable role in facilitating international trade of landlocked countries, transit trade has been one of the less studied area of international trade (Ma and Zhang, 2008).

Much of the current evidence on the benefits of transit trade to the transit countries arise from ad hoc analyses and anecdotal sources, which are not sufficient to support the significant policy and institutional reforms needed promote transit trade. In addition to its role in international trade, transit trade is also considered beneficial to the wider economy as a source forex, jobs, incomes, as well as revenue to Government from various charges or levies. However, empirical evidence on these benefits is rather scanty. Indeed, other than the more obvious benefits attributed to handling or facilitating transit cargo, distinguishing between effects due to transit as opposed to non-transit operation is onerous. For instance, it is challenging to distinguish employment generated by a filling station, restaurant, CFA or shipping services between transit and domestic cargo.

To address the above issues, this paper uses Spatial Development approach to assess the benefits of transit trade along the central and Dar transit corridors of Tanzania. First, existence and proximity to the transport infrastructure along the transit corridor provides transport services and access to markets that are key in unlocking the economic potential

of those areas. Secondly, economic and social activities develop spontaneously around the transit points/stops along the corridor. Notably, spatial development approach provides a microeconomic focus, including how individual households and enterprises benefit from, or are affected by transit trade operations (e.g. increase in income opportunities, security, as well as availability of goods and services), effects which can be conveniently captured using a survey methodology.

Tanzania is an interesting case study for various reasons. Most importantly, it serves a sizable number of land locked neighbors, with which are members of the regional economic block (EAC and SADC). Secondly, the Government is undertaking enormous infrastructure investments along the transit corridors, whose return requires justification of anticipated benefits. These include expansion of Dar Port, standard gauge railway – SGR, one stop inspection service (OSIS), and One Stop Border Posts (OSBPs). Third, the study serves as pilot for possible extension to other competing corridors, notably the Northern Corridor. Finally, Tanzania has potential to develop both rail and road transit infrastructure, for which impact may be worth comparing for policies aimed to improve the two modes of transport.

The paper begins by describing the structure and performance of transit trade in Tanzania using secondary data (section 2). Section 3 outline the methodology, results of which are presented and discussed in section 4. Finally, section 5 concludes and provides some policy recommendations.

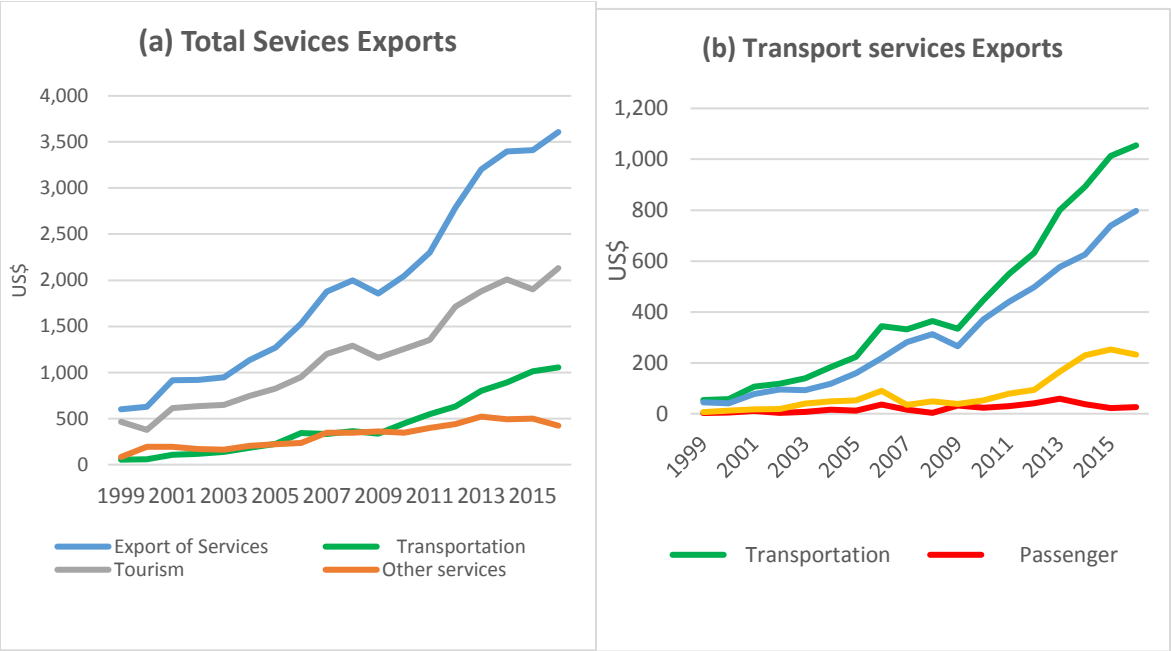
2.0 STRUCTURE AND PERFORMANCE OF TRANSIT TRADE IN TANZANIA

Using data from various institutions, below we examine the structure, growth and performance of transit trade for Tanzania, starting with description of the transport services sector to provide a broad and sectoral context.

2.1 Transport Services Sector

Based on the National Accounts data, the contribution of transport sector to GDP has averaged 6 percent over the past 10 years, increasing to 8 percent in 2016. In addition to overall contribution to GDP, Transport sector has also been a key source of foreign exchange earnings from export of transportation services. The Balance of Payments data reports exports and imports of services, which is decomposed into Transportation, Tourism (travel) and other services. The Transportation services is further disaggregated into passenger, freight and other transport services. However, the level of disaggregation does not allow distinction between exports and imports of transit vs. domestic transport services. With this limitation, we can only examine trends in the share of freight services in total transport services that *inherently* include transit services. Figures 1 and 2 illustrates respectively, the trends in the growth of transport services exports and imports. Clearly, transportation services export has been growing dramatically, from below $60 mill in 2000 to over $1 billion in 2016. Indeed, the share of transport in total services exports has also increased significantly from 9 percent in 2000 to 30% in 2016. Given the focus of the study, we examine the contribution of freight services in the transport services exports. Out of the transport services exports, freight services accounts for a dominant share (averaging around 80%), where its value increased dramatically from $40.7 m in 2000 to nearly 800m in 2016.

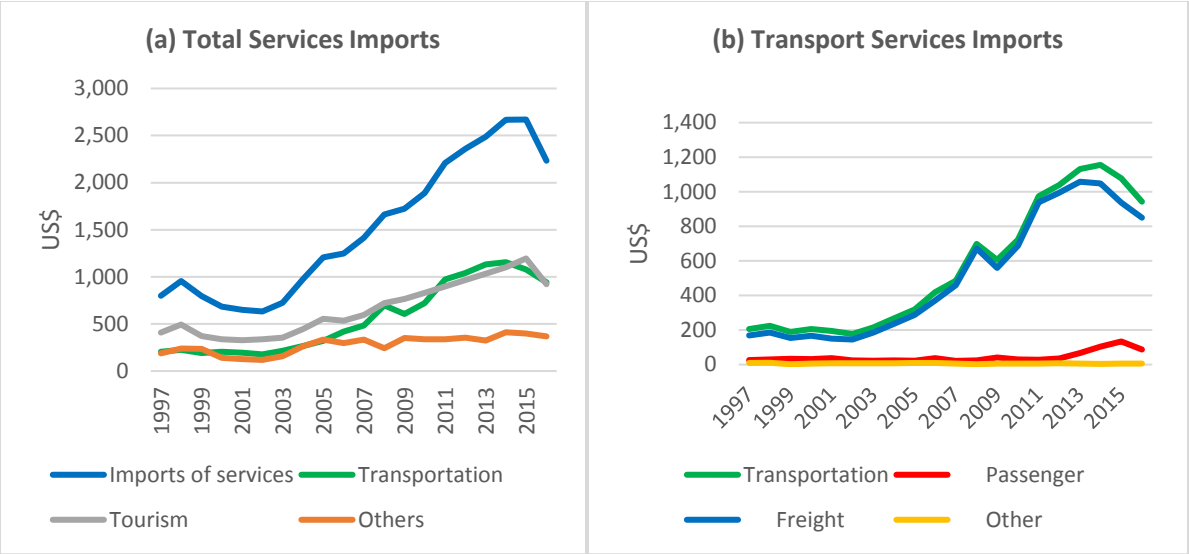
Figure 1: Trends in Transport Services Exports: 2000-2016 (US$ Million)



Source: Authors computation from the Balance of Payments Data, Bank of Tanzania

Although the imports values are much higher than exports, trends in the growth of freight services imports has been less dramatic. The share of transport services in total services imports increased from 30% in 2000 to 42% in 2016, while the value of transport services imports increased from $200 mill in 2000 to over $2 billion in 2016. Similarly, the share of freight services in transport services imports increased less dramatically from 81% in 2000 to 90% in 2016, and its value from $167m in 2000 to $850m in 2016. Although at this stage we cannot say how much of the freight services exports or imports is transit vs. domestic, the notable growth of the value of transit goods during the period imply a significant contribution.

Figure 2: Trends in Transport Services Imports: 2000-2016 (US$ Million)

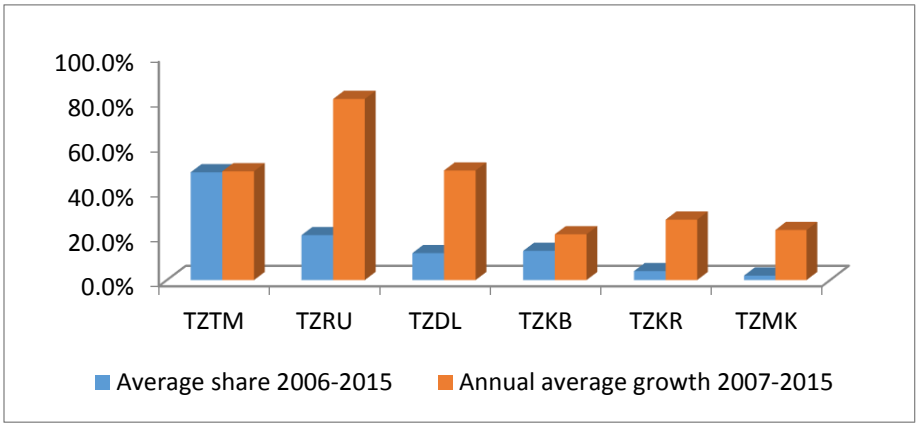


Source: Authors computation from the Balance of Payments Data, Bank of Tanzania

2.2 Structure and Performance of Transit trade

According to TRA data, transit trade is handled mainly by four borders, which in aggregate account for 93% of the total transit volume. The rest of the borders handle the remaining 7% of the cargo. As shown in Fig. 8, Tunduma is the busiest border, handling 48%, followed by Rusumo (TZRU, 20%), Kabanga (TZKB, 13%), and Dar es Salaam Long Room (TZDL, 12%). However, in terms of growth rate of value of transit trade through these borders, Rusumo holds the highest growth rate of 80.7% for the past 10 years (2006-2016), while Tunduma has the largest share. Other borders with their average annual growth rates are presented in Figure 3.

Figure 3: Shares and growth rates of transit volumes in key borders



Source: *Author's analysis from TRA Transit data (2016)*

While transit trade is indeed a service trade, the Tanzania Revenue Authority (TRA) like all other customs' authorities reports the various dimensions of the transit trade merchandise, including value (c.i.f), type of products, and borders involved in transit trade etc. This data allows us to analyse the characteristic profile of the transit trade through Tanzania, including the infrastructure for transit trade, its volume, structure, geographical and product distribution.

Overall, as shown in Figure 4, transit trade volume through Dar Port has been growing over the last decade, albeit the fluctuations. In the period 2006-2012, the level of transit trade increased significantly at an average annual growth rate of 14 percent, reaching a growth peak of 29% in 2015, before declining in the year 2016. The average number of ships calling at Dar port increased from 10 to 28 ships between 2015 and 2017. As an example of increased turnover, Simba Logistics reported an increase in average monthly cargo from 4,000 tonnes in 2015 to 10,000 tonnes in 2017. On aggregate, according to report by Tanzania Ports Authority (TPA), Dar Port handles an average of 4.1 million tonnes of dry cargo, and 6 million tonnes of bulk liquid cargo annually.

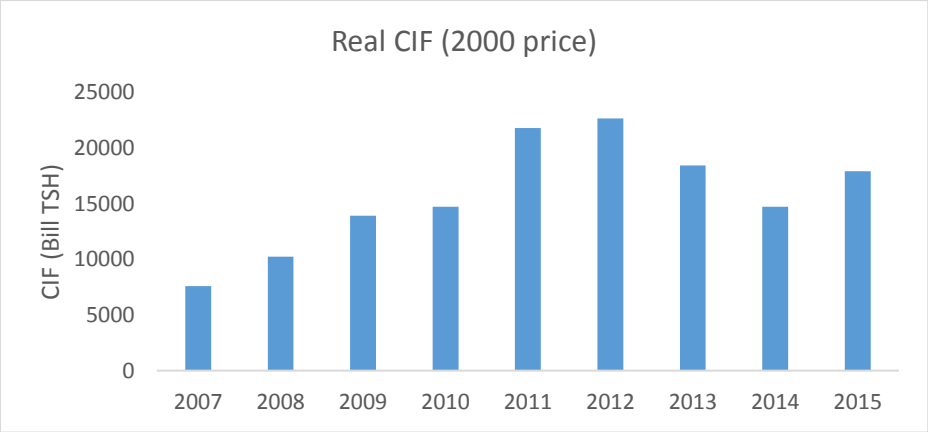
Table 1 highlights the top products in the transit exports and imports through Dar Port.[1] The data show most of the imports through Tanzania as vehicles (23%) and copper

[1] Understanding product composition of transit trade is important, since some benefits of transit trade are more or less pronounced depending on the nature of transit goods. For instance, impact of transit trade on job creation is

(20%). Other products with significant share include appliances and machinery (8%), electrical equipment and electronics (6%). Furthermore, the growth of transit volume has increased almost across all product categories regardless of the respective shares in transit volume.

Figure 5 shows the structure of transit trade by country of destination (importing country) and country of origin (exporting country). The average growth rates of transit trade shares for the past 10 years (2006-2015) reveal that Congo (CG) has had the highest growth (averaging 143%), while China (CN) ranks second with an average growth rate of 112%, reflecting increased trade relations between China and the land locked countries through Dar Port. In terms of sources/origin of the transit goods through Tanzania, UAE holds the largest share of the total transit import volumes through Tanzania (averaging 39%) for the past 10 years, followed by Zambia, which accounts for 17% of the goods through Tanzania. In general, China exports much more to the land locked countries linked to Dar port than they export to China.

Figure 4: Performance of Transit Trade in Tanzania



Source: *Author's analysis using TRA Transit data (2016)*

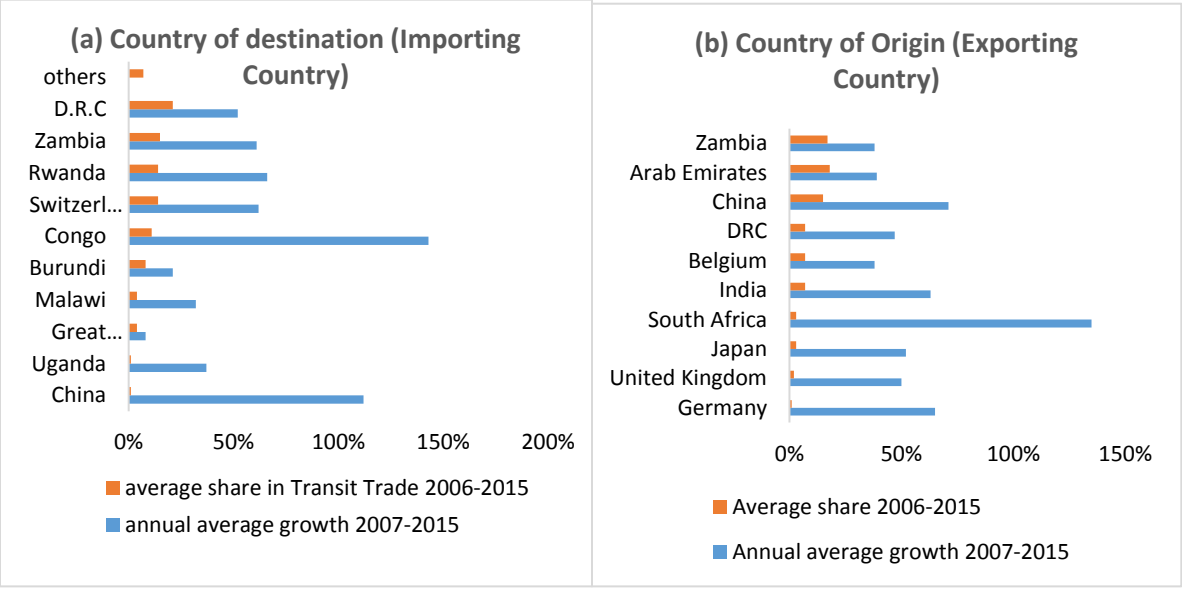
much more direct or vivid if the transit good is vehicles than a merchandise cargo carried over rail or land. The more vehicles are imported through Tanzania, the more fuel they consume, and the more people are employed to drive them. As of 2017, fuel levy is Tshs 313 per liter.

Table 1: Top Products in the transit imports and exports through Dar Port

Top products through Dar port from neighboring Landlocked Countries	*Top products through Dar port from Overseas Countries to Landlocked Countries*
1. Copper 2. Mineral fuels 3. Animals and vegetable fats 4. Cereals 5. Cocoa and cocoa preparations 6. Cotton 7. Lead and articles thereof 8. Oil seeds and oleaginous fruits	1. Vehicles 2. Nuclear reactors, boilers, machinery, and mechanical appliances 3. Electrical machinery and equipment, TVs, sound recorders 4. Articles of iron or steel 5. Textile articles: sets, worn clothing, and worn textile articles; rags 6. Furniture; bedding, mattress supports, cushions, and similar products 7. Plastics and articles thereof

Source: *Authors compilation from TRA Customs data*

Figure 5: Transit Trade through Tanzania by Country



Source*: Author's analysis using TRA Transit data (2016)*

3.0 METHODOLOGY

3.1 Literature Review

The literature on transit trade or more specifically, its benefits to a transit country is scanty and unstructured. Some studies have relied exclusively on survey data to conduct qualitative analysis and a few use quantitative analyses. For instance, Nathan Associates (2011), used surveys and stakeholders' consultations to analyze freight costs along the Northern and Central corridor in East Africa. Using similar methodology, Phyrum et al., (2007) analyzed impact of transit trade in Economic Corridor in Cambodia; and Cheewatrakoolpong and Rujanakanoknad (2011) in Thailand. While such studies are certainly useful in demonstrating the impacts of transit costs on trade, they fail to show the channels and extent through which the transit communities do benefit from the transit trade.

A few studies on Tanzania focus more generally on the impact of improvement of transport infrastructure on transport costs or market access than specific on transit trade. Kweka (2004) analyzed the impacts of transport costs on trade performance, concluding that transport costs are a significant constraint to exports. Adam et al., (2012) analyzed the effects of high domestic transaction costs on quasi-subsistence agricultural sector, and how exogenous shocks (such as changes in world food prices) affect the economy. These types of analyses have also been conducted at the global level using rigorous quantitative analyses. These include Limao and Venables (2001) which concluded that an increase in transport costs by 10 percent reduces trade volume by 20 percent; and Radelet and Sachs (1998) who found that doubling of shipping costs diminishes GDP growth by 0.5 percent. At the regional level, the literature confirms a stylized fact that, a decrease in transit costs and time leads to increase in the overall regional trade. For instance, Amoako-Tuffour et al., (2016) present the trade concentration index (TCI) of 9 African countries (3 East African countries), which provides a good guide on the analysis of the roles of transit trade in regional trade. Due to increased trade facilitation measures

that benefits Tanzania as a transit country, Tanzania is shown to have performed well on TCI compared to the other EAC countries.

In general, the previous studies examined various aspects of the impact of transit trade but with less emphasis on the benefits accruing to the transit communities. Apparently, owing to the nature and mechanisms through which operations of transit trade translate into real benefits to multiple stakeholders in an economy, we use spatial impact analysis to capture the benefits of transit trade to communities through which the transit cargo passes by. However, the literature on spatial analysis of transit trade is equally less developed and has tended to focus more on the environmental aspects than local economic development aspects. For instance, Fourkas (2006) developed a system of indicators that can be used to assess the spatial impacts of transport infrastructure and corridor performances. Building on Fourkas (2006) framework, Kafkalas and Pitsiava (2010) assessed the spatial impacts of transport infrastructure by giving special attention to the environmental aspects of spatial impacts. They examine the role that accessibility plays in changing the patterns of spatial profile by influencing geographical allocation of economic activities and related changes in land use. In their methodology, they distinguished direct impacts (those related to changes in accessibility) from indirect impact (those resulting from change in behavior of households and enterprises); and induced impacts (environmental impacts resulting from changes in the direct and indirect impacts).

In this study, we use spatial analysis to capture influence of transit trade operations on the local economic development of four transit locations in Tanzania. Below we provide a survey methodology employed for the study.

3.2 Sampling

The study uses a structured and semi-structures survey administered on a purposive sample of 100 respondents from transit and border points in four locations (two transit and two border townships). The two transit points are Igunga (in Igunga District, Tabora region) and Igurusi (in Mbarali District, Mbeya region), while the two border points include Tunduma (at a border with Zambia in Songwe region), and Rusumo (at a border with Rwanda, Ngara District, Kagera region). The survey also included in-depth interview with the Local Government leaders (Ward Executive Officers - WEO) who coordinated the exercise at their respective locations. A two-stage sampling framework was used. At the first stage, the survey team visited the District Executive Director's office to list all relevant wards in the target community, out of which one or two wards were randomly selected. Subsequently, at the second stage, the survey team engaged the WEO of the respective ward(s) to list potential businesses and households out of which a sample is drawn randomly for the required number of respondents. WEOs introduced the enumerator to the respondents and helped to replace any missing household/enterprises with similar profile.

3.3 Instruments

Appendix A shows the instruments used to interview the sampled households and enterprises. A structured questionnaire was administered to all 100 respondents (with a 92% response rate). Interview with operators was semi-structured, while that of WEOs used guiding questions (available on request). All the interviews were carried out face-to-face with respondents. The unit of analysis included both an individual household and an enterprise. The survey collected information that describes the characteristics of individual households, occupations, activities, operations, growth and business dynamics of the enterprise in view of understanding the role of transit trade in that location. In

addition, the interview collates the views and opinions of the respondents on the positive and negative impact of transit trade, including suggestions of how it could be leveraged to amplify its positive role in the LED or address its negative effects to the community. The survey data was analysed using SPSS software to generate tables and figures based on the key themes for assessing the benefits of transit trade to the local communities as shown in the questionnaire.

3.4 Scope of Analysis

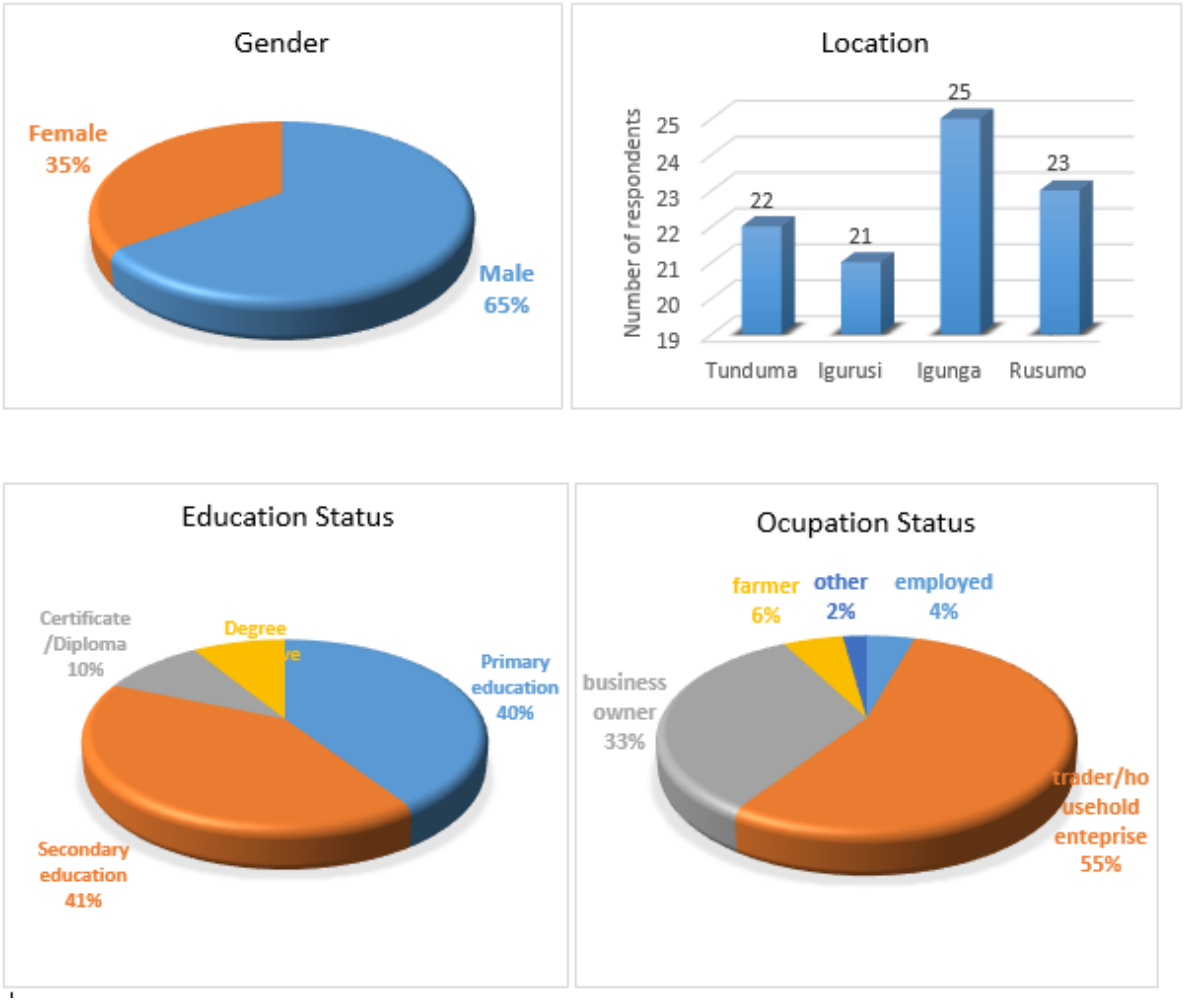
One of the challenges in analyzing spatial impact of transit trade on LED is lack of reliable data for establishing a baseline to support the counterfactual arguments. In particular, we need information for analyzing growth of business as a result of increased transit trade operations in the area. This data was not available. In the absence of this data, we asked respondents some recall information on what was the situation in the past 5 to 10 years. In any case, even if transit trade is generally considered to plays a critical role in influencing some activities or growth of others, our findings reflect contribution rather than attribution. Appendix B summarises key points from interviews with the local community leaders (WEOs) including anecdotal profiles of the locations. Finally, we assess the impact of transit trade in terms of plausible multiplier effects, whereas the growth of economic and social activities leads in turn, to further growth. These effects occur through a multiple of three levels – initial round (direct effects), secondary round (indirect effect) and third round (induced effects), which in total contributes to LED. Our purpose is less on discerning these effects but to describe the resulting growth and mechanism through which they occur (including type of activities and extent of reliance on transit trade).

4.0 FINDINGS

4.1 Profile of the Respondents

We first examine the profile of respondents to understand key characteristics of the sample for interpreting the results. Figure 6 shows the profile of sampled respondents in terms of sex, education and occupation, including distribution of respondents by location. Most of the respondents were male (65 percent) compared to female (35 percent). Over 80% of respondents have basic education (41% secondary and 40% primary education). Clearly the main activity in the locations is retail trade (household enterprises) in which traders account for 55 percent, compared to business owners (33 percent) as summarised in Figure 7. Furthermore, the age profile show that majority of respondents are youth, which account for 49 percent, compared to 46 percent for mid age and 5 percent by old age.

Figure 6: Profile of sampled respondents in the transit locations

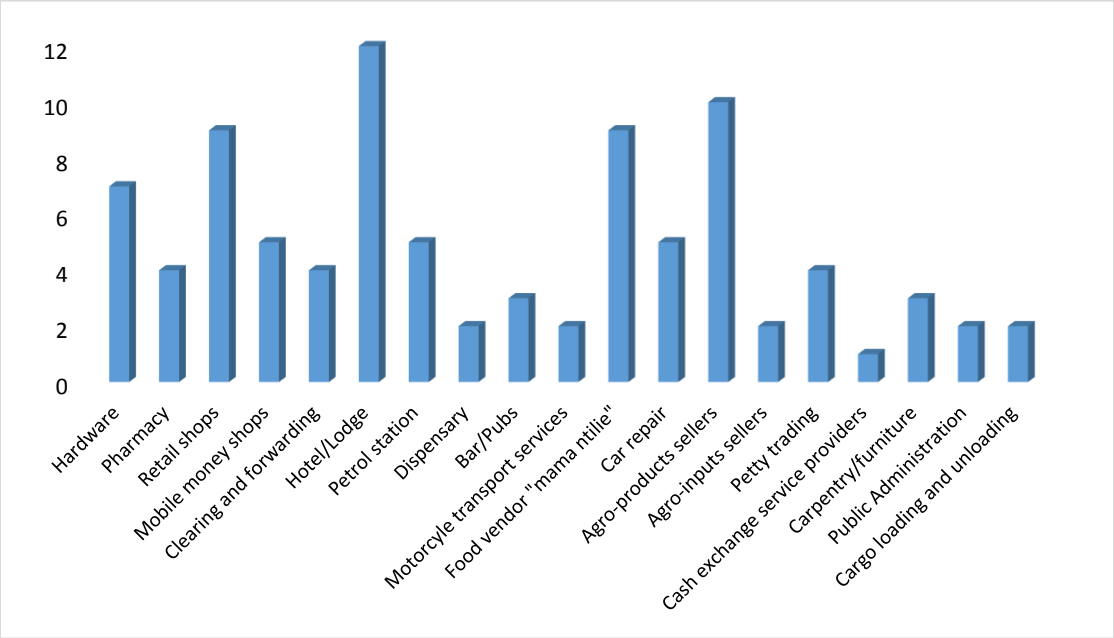


***Source**: Survey of transit locations (2017)*

4.2 Local Business Enterprise Development

Transit trade has influenced emergence and growth of local business enterprises as reliable source of jobs, incomes and livelihood. Clearly, the presence (or passage) of transit trade operations in the selected locations is a windfall market by way of increased demand, which creates multiplier effects and resulting urbanization. Provision of goods and services to support rising population and intermediate demand required to produce those goods and services ultimately stimulate more demand. The result also shows that, rural-rural migration has happened to tap opportunity of direct supply to transit trade but more so to tap opportunity of bourgeoning urbanization (access to higher/better standard of living and social services, availability of job and business opportunity). Figure 7 shows various types of businesses activities in the surveyed locations. Examples of these businesses include; petrol stations, hotels and lodges, bars, clearing agents at the borders, food services providers, as well as car repair and workshop service providers. The leading type of business with highest frequency include hotel and lodges (Guest Houses), agri business (crop trade), food vending and retail shops. Some have grown faster than others. While these businesses can be found in any townships, some are more particular to a transit location (e.g. clearing agents at border stations, parking services or filling stations along the main road).

Figure 7: Types of Local Business Enterprises in the Surveyed Locations



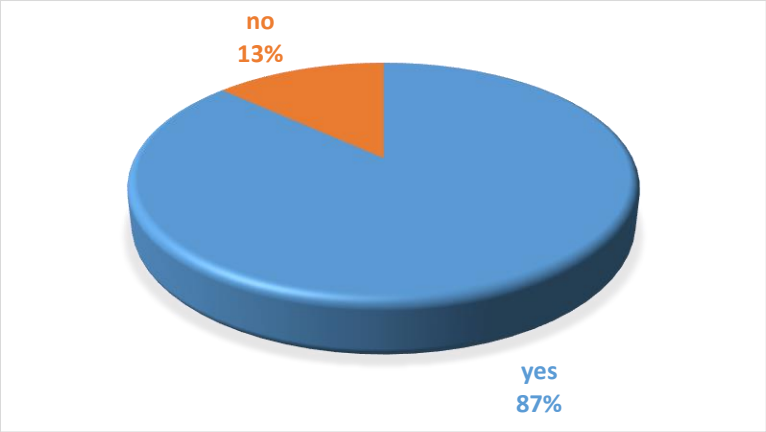
***Source**: Survey of transit locations, 2017*

It is important to note that, some of the businesses are directly dependent on direct sales to transit trade operators. Examples include, hotel operators, food vendors, as well as watchmen who guard trucks at night. To demonstrate potential income multiplier from initial direct injection from transit trade, we take example of Tunduma, where it is reported that, an average driver spends about 20,000 Tshs a day for food and accommodation services. For an average of 200 trucks a day, it is estimated that 4 million Tshs is directly spent by individuals on food and accommodation services per day. Notably, Tunduma has a reputation for long queues, where a truck could wait for 3 days before it is cleared to cross the border. This means that, total amount of money spent on food and accommodation could roughly be estimated at Tshs 4.3 billion (over USD 1.9 million) per year.

Although respondents generally consider their occupations as reliant on transit trade (see Figure 8), in practice the nature of business determine how vulnerable a business may be to changes in the volume of transit operations. Reduction in transit times would likely

result into increased number of trucks crossing border, which would directly benefit the businesses that depend on number of trucks. For instance, petrol stations and auto workshops. Some businesses would be expected to gain regardless of the increase in trucks or decrease in nights spent at the border. These businesses would benefit due to the bourgeoning urbanization process. For instance, Tunduma border would be expected to still perform well, and so are most of its businesses that do not directly depend on transit trade; contrary to the case of Rusumo border where the level of economic activities and business development has declined after the establishment of the OSBP.

Figure 8: Share of Respondents whose Activities rely on Transit Trade



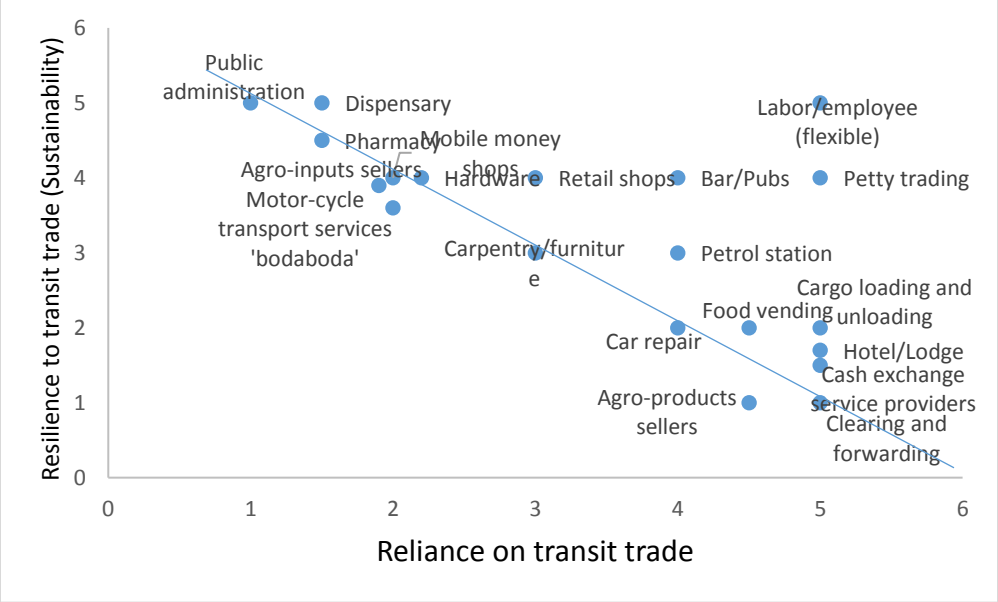
***Source**: Survey of transit locations, 2017*

Clearly, while reduction in border crossing time (iceberg costs) result to increased efficiency and growth of transit trade, it has adverse short run effects to the households/businesses whose livelihood/incomes depended significantly on the long delays of trucks[2]. As noted earlier, these short run adjustment costs dissipate in the long run. We therefore categorise business activities into those that rely directly to transit trade from those that are indirectly associated with transit trade operations. As shown by Figure 9, most of existing business are vulnerable to changes in the volume of transit operations, but with potential to attain resilience, presumably depending on the level of urbanization.

[2] For instance, we find a strong positive correlation between hotels incomes, small trading sales, and the presence of parking spots in the transit locations.

Clearly, in some locations such as Igurusi and Igunga, individual farmers have benefited from increased direct sales of their agricultural products and increased income as a result of increased salaries (wages). Consistent with growth of transit traffic, businesses have reported an increase in sales over the past years; and recently a decline due to fall in the volume of transit cargo at Dar Port in 2015/2016. Notably, 56 percent of the respondents have reported that their sales increased, while 14 percent report that sales have been moderate. Of these respondents, 86 percent have reported to offer goods and services directly to individuals involved in transit trade. These include the hotels and lodges, petrol stations, food services providers, as well as farmers who sell directly to truck drivers. There businesses/household enterprises also report to have served a significant number of transit truck drivers per day. About 13 out of 92 respondents said that serve more than 20 people per day, compared to two businesses which said they serve between 10 and 20 transit individuals per day. A larger share (about 70%) of businesses serve less than 10 individuals per day, reflecting dominance of household enterprises in the sample.

Figure 9: Contingency of Business Activities to Transit Trade



***Source**: Survey of transit locations, 2017*

Furthermore, sensitivity of businesses in transit locations to changes in transit trade can be illustrated by examining impact of declines in cargo volume at Dar Port. For instance, a decrease in number of trucks leads to decrease in number of drivers (and transit agents) who lodge in hotels, and decrease in profits for businesses that sale products or services directly to transit operators, such as petrol stations, food vendors, farmers, spare parts dealers, border clearing agents, etc. Tanzania saw a large decrease in cargo volumes for transit to various LLCs from the end of 2015 to the end of 2016, as summarized in Table 2.

Table 2: Declines in transit cargo for selected LLCs through Dar port

	Country	**Nature of goods**	**Imports decline**	**Exports decline**
1	Zambia	Total cargo	47.6%	5.9%
		Copper		65%
		Vehicles	55.4%	
2	D.R Congo	Total cargo	19.7%	13.3%
		vehicles	50%	
3	Uganda	Total cargo	78.2%	
4	Malawi	Total cargo	36.4%	

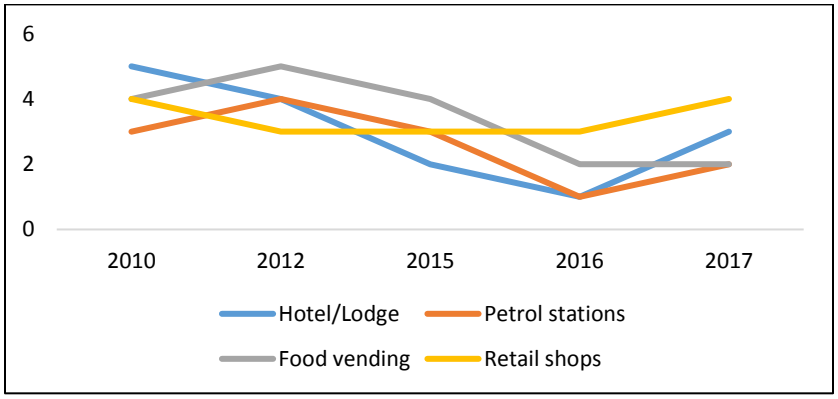
Source: *TPA transit traffic data (2016)*

Decline of transit cargo translated into decrease in number of trucks along the central and Dar corridors. Zambia is one of the largest users of Dar port, with movement of over 1.9 million tons of transit cargo in the year 2015 (which is 34% of the total 5.6 million tones transit cargo in Tanzania). However, Zambia reduced the export copper and import of vehicles via Dar port in favor of Durban due to various issues. For instance, importation of cars to Zambia declined from 6,042 cars in the period January to February in 2015 to 2,692 in the same period in 2016 (see Kweka and Michael, 2016). Other LLCs such as Malawi changed their transit routes to Beira, where it uses a standard gauge railway, and transit time is only 2 days.

Consultations with industry operators revealed that Tunduma would handle nearly 200 trucks a day, but the number went down to nearly 60 trucks in 2016. This led to a decline in business at the border and in the transit points surveyed. Lodges and hotels which had the capacity of accommodating 15 customers per night (most of whom were truck drivers) ended up accommodating 3 customers a night. Either retail sellers of agricultural products such as rice (mostly women) witnessed a stiff price competition for the small market (since truck drivers were their major customers).

Although most businesses surveyed did not report any cases of shutting down, severe losses were incurred. The respondents reported that, most of the businesses defaulted their loan repayment (to such organisations as SACCOS), and some opted to relocate either to hide from their debtors or to search for new opportunities. Figure 10 summarises trends in profit estimates for various businesses in different periods, where 5 reflects very high profit, and 1 very low profit. Nonetheless, businesses have started regaining as a result of stabilisation in transit cargo.

Figure 10: Trends in Reported Business Profits



Source: Survey of transit locations, 2017

Clearly, the businesses serve a significant number of customers in the transit locations. According to the interviewed respondents, on average customers spend 536,000Tshs per a business day, ranging from a minimum of 2,000 Tshs to a maximum of 1.2 Million Tshs per day with most expenditure taking place at Tunduma (in Dar corridor) and Igunga (in Central Corridor). The maximum amount occurs in cases such

as purchase of spare parts and re-fueling. Individual farmers who sell directly to truck drivers (who purchase for further re-sell) earn an income which varies depending on sales but earn up to 300,000 per week during harvest seasons, and 50,000 Tshs during ordinary seasons. These individuals sell products such as rice (24,000 Tshs for 34 kg), maize and maize flour (35,000 for 35 kg), and bananas. The truck drivers purchase these products for further re-sell in Dar and other towns. Other petty businesses selling directly to truck drivers are "*mama lishes*" who earn an average of 30,000 Tshs per day on average.

Transit trade has increased availability and demand of raw materials in transit locations. Owing to the growth of transit townships, prices of goods and services have increased as well as availability and variety of goods. In particular, the study investigated changes in the prices and availability of raw materials. Most respondents reported that prices of raw materials have increased (76 percent) but are more available now compared to previous years partly owing to increased competition (number of traders) and improved transport services. Examples of raw materials include; (1) food products, and drinks for hotels and lodges; (2) fuel for filling/petrol stations, (3) fertilizers, pesticides, seeds, etc. for agriculture; and (4) auto parts for hardware stores and workshops. The respondents reported that, 61 percent of these raw materials are available in their locations, and the rest are sourced from other locations. All the surveyed businesses in the four locations had a total of 263 full time employees, and 144 part-time employees, implying an average of 3 jobs per local enterprise. Most of the part time employment is due to the agriculture occupation. As shown in Table 3, there is a reasonable gender balance, where women constitute 49% of total employment.

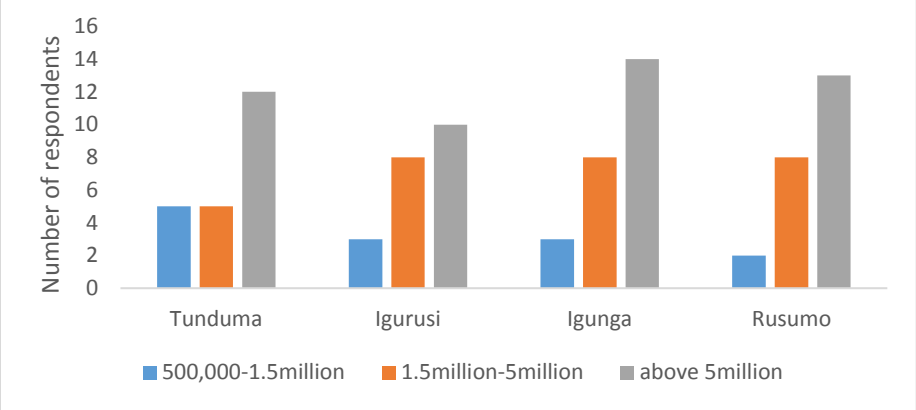
Table 3: Gender disaggregation of employment

	Employment status	Male	Female	Total
a	Full time	133	130	263
b	Part time	73	71	144
	Total	206	201	

***Source**: Survey of transit locations, 2017*

Annual income earned by individuals from various occupation and business enterprises range between 200,000 Tshs to above 50 million Tshs. For convenience, we distinguish income levels below and above poverty lines as shown in Figure 11[3]. Majority of respondents (over 53%) reported annual income far above 5 million, implying that most activities are lucrative and profitable businesses. According to the respondents, 70% of the income is spent on goods and services in the same transit location, while the rest is spent in other towns and cities. Food dominates the expenditure shares of individuals (46.6% of income), followed by 21% on social services (i.e. education and health) and 19% on leisure. The average annual income earned is consistent across the four locations. Similarly, there are no significant differences in the number of respondents by level of income across the four locations.

Figure 11: Number of individuals vs. Level of Income by Location

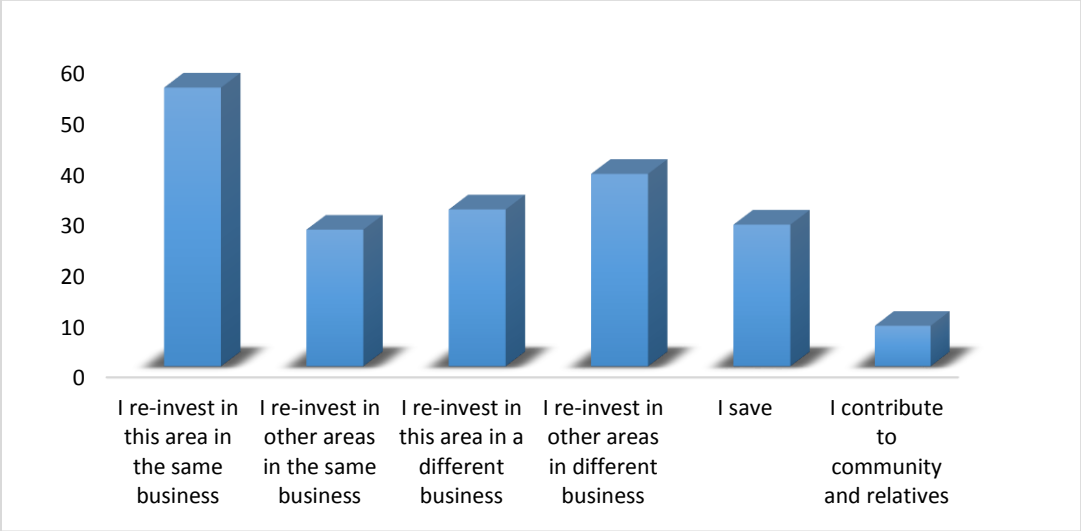


***Source**: Survey of transit locations, 2017*

Business activities generate profit income which is re-invested to generate further growth. We analysed extent to which the re-invested profits generate other businesses or growth in the same businesses. Results in figure 12 show that 55 percent of generated profit is invested in the same location and in the same business "expansion effect", compared to 38 percent invested in other areas in a different business.

[3] According to National Bureau of Statistics and the World Bank, annual poverty threshold is Tshs 1.5 million (2015/16).

Figure 12: Distribution of profits from businesses



***Source**: Survey of transit locations, 2017*

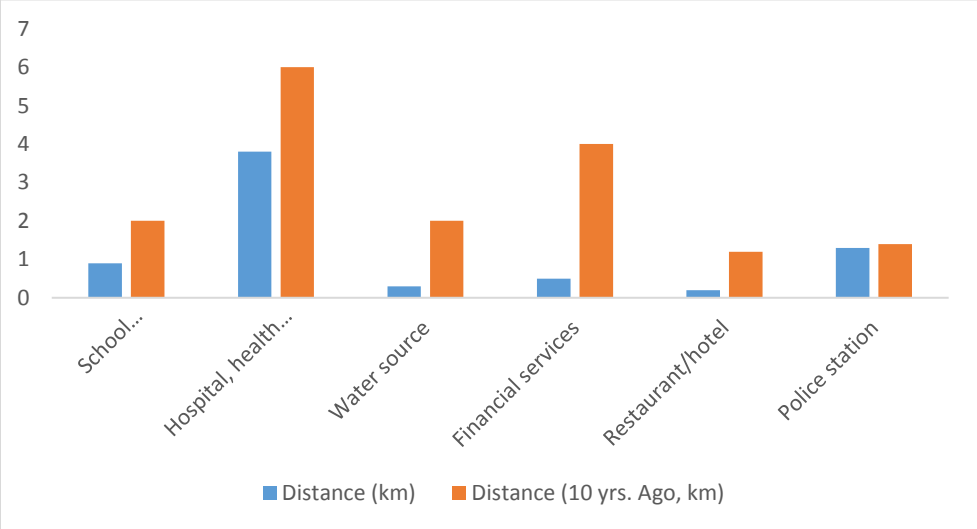
4.3 Access to Social and Economic Services

We asked respondents about availability (access/proximity) and quality of social services in their location. Results are shown in Figure 13. Although we report results as average, the locations differ markedly on the extent of availability and quality of these services. Given its relatively higher level of urbanization, Tunduma had highest access and quality strands compared to other locations which are still experiencing poor services (such as Rusumo). Overall, health facilities are less accessible, compared to water. Given the Mobile money revolution, financial services is the most accessible; while not much difference is made on the number of police station (security). Presumably, these results reflect extent to which services can be provided by the private sector. These distances are closer than the general average distances to key social services in the rural areas in Tanzania. Mkenda and Van Cmpenhout (2011) find that distances to key social services in rural areas was high. For instance, distance to nearby bank was estimated to be 38 km, while public transport was 3 km away, while markets were 3.3 km away in 2007. Due to changes in incomes and purchasing power, private service providers have emerged,

providing various services such as loans, legal services gender related services, as well as health services.

A more competitive supply of goods and services, including pricing and variety. Apart from the improved social services, other induced benefits include increased availability of goods and services, increased variety of goods. Some of the goods which are now available and previously not available include foods, drinks (juices and water), cosmetics, transport modes, financial services (from number and type of banks to mobile financial services), etc. To get a picture of the impact of transit trade on prices, we asked the respondents to compare prices at these transit locations with prices in other places they have lived, as well as availability of these goods and services. Results show that most goods have the same prices as in other areas, except agricultural products, transport, and accommodation services, which were reported to be cheaper than in other locations. In addition to price, availability of most of the products was reported to be higher than in previous locations where respondents lived.

Figure 13: Distance to various social services



***Source**: Survey of transit locations, 2017*

Since transit corridor involve huge public infrastructure investment, the communities around it also benefit in the form of access to transport services that would further unlock

economic potential of those areas. The survey found that, 80 percent of respondents use transport services to support their day to day business activities. In particular, we asked whether being near a transit corridor could be beneficial to farmers in terms of access to markets and inputs. Nonetheless, the sample had a total of 5 farmers, although a lot more respondents do farming on part time basis or as a side business. The five farmers reported that availability of transport services has increased availability of raw materials and reduced the price. In the case of consumers, all respondents reported that goods are now more available in stores compared to the last 10 years and attributed this improvement to easier access to market (availability of transport services) and increased number of traders (competition). However, most respondents reported that prices of goods have generally increased in their respective areas (90 percent).

4.4 Gender Dimensions of Livelihood Impact

The livelihood impacts are associated with strong gender dimensions, reflecting occupational biases and clear role of women and youth in transit operations and in cross border trade. The survey examined opportunities for women, and for youth; and the gender composition of employment. We find women actively engaged in various activities, most significant being processing of agricultural products and food catering services. Some specific activities favorable to women have developed at some areas, including washing clothes for truck drivers (at Tunduma) where they earn up to 5,000 Tshs a day, retailing water for washing trucks (at Tunduma) where they earn up to 6,000 Tshs a day. Most of the youth activities are a result of urbanization more than transit operations *per se*. For instance, about 100 youths at Igurusi are engaged in motorcycle transport service (*"boda boda"*), making an average of 10,000 Tshs a day. In Tunduma, the number of youths benefiting from similar business is three times that of Igurusi which is less urbanized. Youths are also engaged in informal currency exchange in the border towns.

The benefits from transit trade operations are contingent upon the volume of transit cargo passing through these points. For instance, while both are border points, Tunduma has expanded more rapidly than Rusumo. Growth of Rusumo is notably affected by the OSBP, since trucks are not allowed to park at the border post. Instead, the trucks shifted to a nearby township area called Benako, which has since grown significantly to levels higher than the main border post (Rusumo). Reportedly, Benako is currently the main source of supplies of raw materials to businesses and individuals in Rusumo. Furthermore, the respondents find life to be much better in their current locations than where they previously lived.

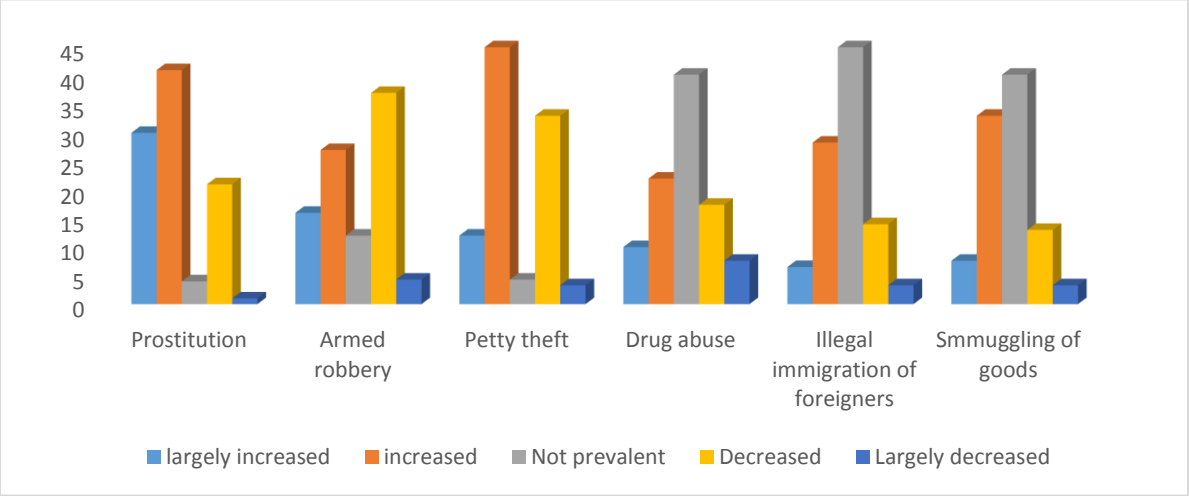
4.5 Drawbacks of Transit Trade to the Communities

Trends in Crime rates

Transit trade is often associated with such social ills as crime, prostitution, congestion and accidents, which are rather fueled by the growth of urbanization and migration. As in the case of benefits, transit trade is also associated with costs. Indeed, some are more social than economic costs. Examples of economic costs include those resulting from localization and road congestion. Social costs include those resulting from urbanization and displacement of people to give way to various establishments serving transit trade. Environmental costs emerge from emission from motoring activities (trucks), accidents and other impacts due to urbanisation. Typical negative impacts include spread of HIV/AIDs and STDs, accidents, rising cost of living due to rise in the prices of goods and services. Another most evident cost of transit trade is pollution (noise and air), which adds to the current issues of climate change. Survey results indicate that crime rates have generally increased, with more than 50 percent respondents reporting the increase (see Figure 14). However, only 40 percent of the respondents attribute the reported prevalence of crimes to the operation of transit trade. It suffices to say that most of the effects are induced.

Prostitution has been the most prevalent feature of transit locations, largely associated with truck drivers. Most drives alleged to have concubines/mistress along various transit locations. Indeed, anecdotal evidence show that women moved into these locations attracted by potential income generation through prostitution. Some of the female respondents confirmed this, while pointing to related consequences such as unwanted pregnancies and HIV/AIDs. More than 75 respondents cited HIV and other sexually transmitted diseases as key threats affecting lives of men and women (especially youths) in the locations. A World Bank's study in South East Asia reported that up to 80 percent of long-distance truck drivers use the services of prostitutes. Figure 14 shows opinions of respondents regarding trends in various types of delinquencies, by examining current incidences compared to the last 5-10 years. Clearly, three types of crimes have had increased prevalence: prostitution, armed robbery and petty theft, compared to less prevalence on illegal immigrants, drug abuse or smuggling. Some interesting trends are also notable for specific crimes. For instance, in the case of prostitution, over 70% of respondents suggest it has increased compared to 21% who think it has decreased. In contrast, majority of respondents think armed robbery has decreased.

Figure 14: Nature of crimes and trends



Source: Survey of transit locations, 2017

Economic costs of transit trade

One of the familiar challenge of managing transit trade for transit/coastal country is fiscal leakage, which may come in different forms (such as localization and fuel tourism) leading to tax avoidance in the domestic economy of the transit country. The most notorious transit good for *fiscal leakages* is fuel. Despite being highly demanded, it is one of the heavily taxed good. Truck drivers may opt to refill from neighboring countries, a phenomenon known as *fuel tourism*. For instance, some respondents reported that, fuel in Tanzania is Tshs 550 per liter cheaper than fuel in Zambia and Rwanda. However, anecdotal evidence reveals that apart from Kenya, most of the neighboring countries have higher fuel prices, which make truck drivers in these countries refuel from Tanzania, hence adding to fuel levy collections. Secondary data from EWURA shows that, the volume of localized fuel in 2014/2015 has more than doubled compared to that of 2013/2014. Almost 25 % of the imported transit fuel was localized by the end of 2014/2015 as compared to the 11% in 2013/2014[4].

Finally, an important aspect of the bourgeoning urbanization is the rising value of land and imperative of land use planning. Indeed, increased demand for land brings about conflicting land use options, since farmers face shortage but land owners and developers enjoy benefits of increased land value. It is difficult to arrive at a conclusion on whether the net effect is positive or negative, but suffice it to say that, urbanization is widening opportunities for high income, job creation and access to social services for poverty reduction. The resulting increased shortage of land for farming may lead to invading reserved land, as in the case of Igurusi where local communities are reported to have invaded land that is reserved as national park (hence conflict with TANAPA). In addition, there are claims that increased transit operations have led to congestion, which together with uncontrolled construction of illegal settlements, have led to adverse environmental impacts of transit trade. These issues underline the imperative of public policy in

[4] Localization may also occur in goods other than fuel, where importers declare goods as “for transit” and later offload them for sale in the domestic market, with an aim of evading import taxes.

managing the beneficial impact of transit trade through such measures as peri-urban planning and land use planning.

5.0 CONCLUSION AND RECOMMENDATIONS

Using Tanzania as a case study, this study provided a systematic assessment of economic benefits of transit trade to a transit country in order to create a better understanding of the role of transit trade in the economy of a transit country such as Tanzania, and in identifying policies for amplifying its benefits. The profile of transit trade including trends and performance has been examined, and literature reviewed to provide analytical context for which to pursue the study objectives. The study proposed multiple complementary methodologies and mechanisms for assessing the magnitude of benefits to the economy, one of which (spatial impact analysis using survey data) was fully implemented and findings presented. Below is a summary of results and implication for policy actions.

The results show that, first, facilitating transit trade generates enormous benefits to the economy of transit country. Clearly, transit trade has been a catalyst of local economic development, including a magnet for rural-rural migration in the transit townships which would have otherwise been economically deprived rural areas. However, these benefits are contingent to changes in the volume of transit trade operations. Finally, while the spatial impact of Transit trade is largely positive, it is often associated with high incidence of crime, prostitution, environmental impacts, and accidents. Like in the case of positive impacts, these effects are largely fueled by rural-rural migration and the bourgeoning urbanization.

These findings imply the need for Government to amplify and secure the benefits of transit trade by providing public services (including basic infrastructure) to support the bourgeoning effects of urbanization. In addition, the findings raise the need for extending the analysis in several fronts. First, the focus of the current study was limited to trucking industry, which is interesting but raises the question of whether the results are similar or different if we examine railway as alternative mode of transport. Such analysis would

establish, for example, impact evaluation that compares the transit location with a treatment location in the context of Spatial Development theory[5]. Finally, the benefits of transit trade come with negative externalities in terms of economic and social costs, which were cited but not analyzed in this paper.

[5] Spatial development theory is useful for identifying measures for removing bottlenecks to investment, and identifying strategic investment opportunities within geographical space.

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Appendix A: Main Questionnaire for Households and Enterprises

Dear Sir/Madam, these questions are aimed at capturing your views on the spatial benefits of transit trade in Tanzania, as well as recommendations on ways in which Tanzania can make best use of its geographical advantage and reap the benefits that accrue from being a transit country.

Questionnaire No.	
Interviewer's name	

A. BACKGROUND INFORMATION

1. Name of the respondent/firm: …… 2. Date: ……

3. Sex: Male [] Female [] 4. Year started ……5. Age: …… 6. Education level

1=No school	2=Primary ed.	3=Secondary	4=certificate/diploma	5=Degree and above

7. Location

1=Tunduma	2=Igurusi	3=Igunga	4=Rusumo

B. ECONOMIC ACTIVITIES

8. What is your occupational status?

	Occupation (main source of income)	*Nature of activity*
a	Employed	
b	Trader/household enterprise	
c	Business owner	
d	Unemployed	
e	Farmer	
f	Other, (specify)	

9. (a) Does your occupation benefit or affected by the transit trade? (Transit trade reflecting trucks carrying cargo destined to (or originating from) neighboring countries, (not Tanzanian cargo)

Yes	No

(b) If yes, please explain how

……..

10. (a) Do you participate in agriculture?

Yes	No

(b) If yes, do you participate in full time or part time? (Full time=self-employed in agriculture as a major source of income, more than 8 hours a day; Part time=seasonal, mostly as an additional source of income)

Full time	Part time

(c) Which crops do you farm? ----------

11. If yes to question 10 above, where do you sell your agriculture products? Please rank based on the main customers

a	Local hotels/restaurants	
b	Local markets	
c	I produce for own consumption	
d	Sell to traders in Dar es Salaam	
e	I sell to neighboring countries	

12. How many employees do you have in your business/activity?

		Total
a	Full time	
b	Part time	

13. Of the full time and part time employees, how many are males and females?

		Male	Female
a	Full time		
b	Part time		

14. To what extent has the cost of production changed over the last five or ten years?

		Last ten years	Now
a	Labour costs (Shs/month)		
b	Cost of Fertiliser (Tsh per bag)		
c	Other materials (Please list based on your activity)		
d			

15. Do you incur transport costs in your business/activity?

Yes	No

16. What are these transport costs? And how have they changed over the last five/ten years (Tsh/kilometer)?

	Nature of transport costs	Last ten years	Now
a			
b			
c			

17. Who are the main/primary customers of your business? (Please use percentage)

a	Traders	
b	Consumers in this town	
c	Consumers in other towns	
d	Consumers in neighboring countries	
e	Own Consumption	
	Total	100%

18 (a) How has demand for your products (sales) changed over the last 10 years?

1= Largely decreased	2= Decreased	3= Not changed	4= Increased	5= Largely increased

19(a) Are there any goods and/or services you offer specifically to individuals involved in transit trade?

Yes	No

19(b) If yes, please mention these goods/services?

19(c) If yes, how many individuals involved in transit trade (such as drivers) do you serve per day?

19(d) What amounts of profit/income do you receive from these individuals per day in your business?

---

20. To what extent have the following factors influenced the growth of your business? Please tick all that applies

1=not at all, 2=limited extent, 3=moderate extent, 4=large extent, 5=fullest extent

		1	2	3	4	5
a	Urbanization, hence increased market					
b	Increased access to market, due to improvement in infrastructure					
c	Proximity to neighboring countries due to improved infrastructure (and/or distance)					

C. GROWTH OF LOCAL MARKET AND LINKAGES

21. From where (location) do you purchase your raw materials/inputs for your business or activities?

a	This area	
b	Dar es Salaam	
c	Neighboring country	
d	Other areas (specify) ----------	

22. What raw materials/inputs are those? i…… ii……

23 (a). Are these raw materials easily available now compared to the last ten years?

Yes	No

(b) If yes, why?

a	Increased number of traders	
b	Availability of cheaper transport	
d	Other reasons (specify) ----------	

24 (a). Are prices of raw materials cheaper now compared to last ten years?

Yes	No

(b) Why?

a	Increased number of traders	
b	Availability of cheaper transport	
d	Other reasons (specify) ----------	

25. What is your approximate annual income?

Less than 500,000	500,000-1.5 Million	1.5 Million-5 Million	Above 5 million

(Where; 1.5 million is the annual poverty threshold)

26. What goods and services do you spend your income on mostly, and where are these goods and services sourced from? (Please provide percentage shares)

		This area	Dar es Salaam	Neighboring country	Other areas	Total
a	Food					
b	Shelter (including rent)					
c	Clothing					
d	Social services					
e	Leisure					
	Total					

27 (a). Are these goods/services easily available now in stores/shops compared to the last ten years?

Yes	No

(b) Why?

a	Increased number of traders	
b	Availability of cheaper transport	
d	Other reasons (specify) ----------	

28 (a). Are prices of these goods/services cheaper now compared to last ten years?

Yes	No

(b) Why?

a	Increased number of traders	
b	Availability of cheaper transport	
d	Other reasons (specify) ----------	

29 (a) Has variety of goods increased over time?

Yes	No

(b) Mention example of variety of goods in the recent years compared to the past ten years

---

30. What is the price of the following goods now compared to last five years?

	Item	**Now**	**10 years**
a	Cement/Bag (Tsh)		
b	Fertilizer/Bag (Tsh.)		
c	Sugar/Kg (Tsh.)		
d	Wheat flour/Kg (Tsh.)		

31. [If business Owner] To what extent do you invest, save or consume part of your profit?

	Activity	% of profit
i	I re-invest in this area in the same business	
ii	I re-invest in other areas in the same business	
iii	I re-invest in this area in a different business	
iv	I re-invest in other areas in different business	
v	I save	
vi	I contribute to community and relatives	
	Total	100%

32. How many adults are in your household?

0	1-3 adults	4 or more

D. EFFECTS OF MIGRATION AND URBANISATION

33. For how long have you been living in this town (area)?

Less than a year	1-5 years	More than 5 years

34. What other places have you lived before moving to this place?

……., ……., ……..

35. To what extent have people moved in and out of this town over the last ten years?
1=not at all, 2=limited extent, 3=moderate extent, 4=large extent, 5=fullest extent

a	Moved out of this town more than have moved in this town	
b	Moved in this town more than have moved out	
c	Moved in this town to similar extent as moved out of this town	

36. How does migration of people to/from other communities affected your business?

		Yes	No
a	Increased market due to increase in population		
b	Increased prices of goods and services due to increased demand		
c	Increased cost of labour due to shortages of labour		
d	Reduced cost of labour due to increased supply		
e	Other effects (specify): ----------		

37. Please compare the areas you have lived previously with your current town, by ticking one that is better in the following. What is the difference between these places and your current town in terms of the following?

(1=very poor, 2=poor, 3=average, 4=better, 5=excellent)

		Previous location	*Current location (Transit point)*
a	Business and market opportunities		
b	Income		
c	Social services		
d	Crimes (petty theft, robbery, etc.)		
e	Pollution and environment		
f	Undesirable behavior (prostitution, loitering, etc.)		
g	Unmanageable population growth		

Note: 1 for crimes, mis-behavior, and pollution means the situation is not alarming, while 5 means alarming situation)

38. How do prices of the following products/services in this area compare to their respective prices in the rest of the districts/areas in your regions?

		Affordability (1=more expensive, 2=same price, 3=cheaper)	Availability (1=less available, 2=more available)
a	Agricultural products		
b	Food		
c	Water		
d	Transport		
e	Accommodation		
f	Social services (health, education)		
g	Real estate/plots/apartments		
f	Other products/services		

39. To what extent have the following facilities influenced/benefited you or your business?

		1=not at all	*2=limited extent*	*3=moderate*	*4=great extent*	*5=fullest extent*
a	Improved transport networks serving transit trade					
b	Borders stations					
c	Petrol stations					
d	Parking areas/repairs					
e	Hotels/restaurants					

40. What is the estimated distance to the following social services? (minutes/kilometers), and how have the distances changed over the past 10 years?
(Where; 15 minutes' walk=1 kilometer)

		Distance	Distance (10 yrs. Ago)
a	School (primary/secondary)		
b	Hospital, health center/dispensary		
c	Water source		
d	Financial services		
e	Restaurant/hotel		
f	Police station		

41. What opportunities/benefits have you witnessed specifically to women as a result of growth of business in this town? ……

42. What opportunities/benefits have you witnessed specifically to youth as a result of growth of business in this town? …….

43. How would you compare crime rates and social misconducts in your area now and 10 years ago?

Largely increased	Increased	unchanged	Decreased	Largely decreased

44. Would you attribute growth of crime or social misconduct to the growth and operation of transit trade?

Yes	No

45. What has been the trend of the following crimes in your area overtime?

		Largely increased	*Increased*	*N/A*	*Decreased*	*Largely decreased*
a	Prostitution					
b	Armed robbery					
c	Petty theft					
d	Drug abuse					
e	Illegal immigration					
f	Smuggling of goods					

46. Have there been cases of fuel tourism in your area? (Border point question)

Yes	No

47. What other crimes/misconducts do you attribute directly to the operation of transit trade in this area?
……..

48. What negative impacts has transit trade brought specifically to women?

(a) Negative effects ----------

49. What negative impacts has transit trade brought specifically to youths?

(a) Negative effects ----------

50. What are your suggestions on how the challenges above can be addressed in order to make transit trade more beneficial to your community?……..

Appendix B. Summaries of Field Notes on the Transit and border Communities

1. Igunga (Transit point in Igunga district, Tabora region): *Total respondents=25*

Rice is the leading crop being produced and traded in Igunga. Other crops include tobacco, cotton, and maize. The most dominating business is selling rice to truck drivers who help in shipping to other clients in the city and neighboring countries. Agriculture in Igunga is facilitated by the availability of irrigation scheme in Mwanzugi. When there is trade for rice, youths (mostly unemployed) get temporal jobs of loading and unloading rice bags from trucks, in which they get paid 500 Tshs per bag. On average, it is reported that one may earn up to 8,000 Tshs a day from loading and unloading cargo activity. It is reported that approximately 60 youths are self-employed in loading and unloading activities. There is an estimate of 40 spare parts dealers in Igunga, who mostly purchase their raw materials from Dar es Salaam and Mwanza. It is reported that businessmen who make enough profit from Igunga shift their profit and business interests to other areas (mostly to bigger towns and cities). It is further reported that business in Igunga is constrained by the availability of financial institutions (especially banks), as there is only one established commercial bank; NMB since 2007. Women are benefiting from financial groups which are lending to them, such as SIDA. Transit trade has created direct employment to watchmen, who self-employ to watch over trucks' security at night. There are about 60 watchmen in the area, earning an average of 3000 Tshs per night per person. Their presence has increased security in the town, not only to truck drivers and their trucks, but also to businesses in the area. It is generally argued that living costs have increased, but mostly due to general changes in economic structure and prices in the country. Respondents noted that, crimes are not directly caused by the operations of transit trade, but indirectly as a result of growth in the town. It is even reported that most criminals do not come from the locale, but from Kahama district in Shinyanga region. Crimes have affected business activities, for instance, motorcycles and three-wheelers are not allowed to operate past 7 pm

2. Tunduma (Border town in Tunduma district, Songwe region): *Total respondents=22*

It is reported that Tunduma has witnessed a 20 times growth in 20 years, in all areas; business, social services, crimes, and urbanization (see picture below). Maize and beans are the major crops being produced and traded in Tunduma. Truck drivers buy these crops for various purposes, with most of them buying for re-selling in other towns. It is reported that demand for maize has increased, which has raised the prices from 12,000 a bucket to 22,000 a bucket. This has benefited farmers and traders. In Tunduma, truck drivers are said to spend an average of 20,000 Tshs per day on food, accommodation, and other services. 200 trucks are estimated to pass at the border each day (during the peak years), with an approximate number of 300 drivers. A quick analysis shows that on average, per day, expenditure directly made as a result of transit operations is 6,000,000 Tshs (300*20,000). However, with a recent decline in transit trade, it is estimated that about 100 trucks cross the border each day, with an estimated number of 150 truck drivers and other operators. This translates into expenditures of 3,000,000 Tshs (150*20,000) a day. Drivers spend about 2 to 3 days at the border before crossing, which doubles the amount spent at the border. The economy of the border is said to depend on visitors.

A view of settlements in Tunduma Township

Source: Field Survey team

Most of the cargo through Tunduma is destined to Congo and Zambia. As well, from these countries comes copper and other products, which are shipped to other countries. It is reported that the SCT with DRC is a major reason for the decline of Congo cargo, as traders are concerned with pre-payment of cargo charges, fearing losses in case an accident occurs. It is reported further that business at Tunduma border has gone down by 80 percent in a period of 2 years, from 2015. Hotels have been hit hard, with the average number of residents per night falling from 15 people/night in 2010 to 2 people/night in 2017. Prices of goods in Lusaka are said to be cheaper, making traders opt for some of the Zambian products such as sugar. Most customers of Tanzania products are from neighboring countries, especially buying food products such as rice, maize, and beans. From Zambia, it is said that most products are sugar, juice, liquor, and other retail products.

Financial services are extremely developed, with almost all the major banks in the country operating at this border. The banks currently operating in Tunduma include; NMB, CBA, Tanzania Postal Bank, Azania Bank, Bank of Africa, CRBD, and NBC. These banks have emerged in a period of 5 years, as prior to 2010 there were only 2 banks; NMB and NBC. The growth of these banks signifies the rapid expansion of this town as a result of transit and business opportunities. Opportunities to women directly as a result of transit trade operations are multiple, with some involved in washing drivers' clothes (which earns them a significant amount of daily income, averaging 3000 a day).

Crime rates are high, with most businessmen reported to move to other towns and cities once they breakthrough in their businesses, not because of availability of more business opportunities in those areas, but because of alarming crime rates in Tunduma (mostly armed robbery). There are no cases of fuel tourism at Tunduma border. It is actually the opposite, retail fuel traders in Zambia (as well as buses and trucks) buy fuel from Tanzania (in Tunduma) since it is cheaper than in Zambia. For instance, a liter of fuel in Tunduma sells at an average of 2150 Tshs, while in Zambia a liter is worth 2700 Tshs. However, depending on the fluctuation of Kwacha, it is said that there are times when fuel traders in Tanzania buy fuel from Zambia (although not in many cases).

3. Rusumo (Border town, Ngara district, Kagera region): *Total respondents=23*

Major crops produced and traded in Rusumo include bananas, maize, and beans. These agricultural products are traded in both the local and neighboring country market. However, business activities are not so well established in Rusumo, partly because the geographic landscape of the area is not favorable (mountainous), and secondly, the cargo volume to Rwanda is small, compared to the cargo that goes to other countries. The major activity that is said to be profitable to youths is informal cash exchange services, where Rwandan franc is exchanged with Tanzania Shiling. Most of the products traded in Rusumo are sourced from Kahama.

The border is currently developed into an OSBP, and hence, trucks are not allowed to park and rest. This has affected even the little business that used to take place in the area. Park and Rest has been shifted to Benako area (Ngara district in Kagera region), which is about 20 km from Rusumo border. Trucks coming from Rwanda park at Benako, while those coming from Tanzania park at Rusumo on the Rwnadan side. Benako has now emerged as a potential town, with many business activities mushrooming in the area, at a pace that has exceeded its predecessor park and rest area (Rusumo). There is a notable migration of traders from Rusumo to Benako. Most products coming from Rwanda include; potatoes, clothing, beverages (beers mostly), and electronic equipment (most of which are said to be cheaper). Prices in the area affected by the amount of traded goods in general. For instance, for the case of cement, traders who buy in bulk are said to sell at a lower price than those who buy a small cargo, due to advantages in bulk transportation which reduces unit costs. Those who buy in bulk sell at 16,500 a bag, while those who buy small amounts sell at 18,000.

The social services in Rusumo are not well developed, as people are forced to move long distances in search for basic services such as health (hospitals are averagely located 20 km from the border), while there is only one dispensary at Mshikamano village, education, water, etc. Financial services are very poor as well, as there is only one bank in the area, NMB, which is tailored to cater for business clients' needs. With the absence of banks, even the common mobile money services are poor in both quality and quantity. For instance, there is only one mobile money provider (M-Pesa). Apart from these services being located far from the community, transport to Ngara (where they are available) is expensive, averaging 8000 Tshs (an increase from 3000Tshs 10 years ago). Some of these services are currently available at Benako. Crimes in Rusumo are not alarming, as the area is not urbanized. Accidents poses one of the major challenges that the area faces as a result of transit trade activities.

4. Igurusi (Transit point, Mbarali district, Mbeya region): *Total respondents=23*

Major crops produced and traded at Igurusi are maize, rice, and sugar canes (see picture below). Rice dominates other crops in terms of sales, as women are actively engaged in this business. They sell directly to truck drivers. Many youths are engaged in transport services (in form of Boda Boda) and others are engaged in selling sugar canes on the transit point. It is reported that they earn an average of 20,000 a day (directly from transit trade, by selling to truck drivers).

Youth and Women dominate Household Enterprises at Igurusi

Source: *Field Survey team*

There have been reported cases of localization of petroleum products, where some tanks of petrol in transit have been reported to have been offloaded for domestic retail at Igurusi. Truck drivers are said to collude with some petrol stations and local traders to buy the bulk in transit fuel for the purpose of re-selling.