Editon Consortium Publishing
Transforming Scholarly Publishing

Editon Consortium Journal of Economics and Development Studies (ECJEDS)

ISSN: 2664-9462

DOI: https://doi.org/10.51317/ecjeds.v4i1.376
Volume: 04 Issue: 01 | June-2022
Received: 10.04.2022; Accepted 10.05.2022; Published: 15.06.2022 at www.editoncpublishing.org
Tsiwezi, S. T., & Mutundu, K. K. Editon Cons. J. Econ. Dev. Stud., *Double-Blind Peer Reviewed Journal.*

Effects of Infrastructural Development on Marketing of Agricultural Products in Kwale County, Kenya

Authors:
Mandara S. Tsiwezi(1); Kennedy K. Mutundu(2)
[1,2]Mount Kenya University, Kenya.
Main author email: manswa41@gmail.com

Abstract

This study sought to investigate the effects of infrastructural development on marketing agricultural products in Matuga Sub County in Kwale, Kenya. The study employed a descriptive design to find out what, where, who and how it can occur without changing the subject. The study used quantitative and qualitative methods to obtain hybrid data. The research targeted a population of 770 farmers in agricultural Saccos within the Sub County with a sample size of 154 farmers and 15 key informative interviews totaling 169 respondents who were issued with questionnaires. The key informative interview persons were as follows: 3 CECMs Trade, Infrastructure and Agriculture, 2 Sacco's chairpersons, 5 Retailer traders, one in every ward, 2 Area chiefs, 2 Youth and 1 Religious leader in Matuga. Data was collected using a questionnaire and key-informant interview then results were analysed through SPSS version 16.0. This study's significance is that it was a source of primary data to inform policy and stakeholder engagement in the role of infrastructural development in the promotion of the marketing of agricultural products. The researcher established that most roads are not all-weather, and farmers take long hours to deliver their farm produce to the Market. In addition, the farmers transport most of their products to the Kongowea market in Mombasa County. Hence, the national and county governments need to come up with policies to set funds for infrastructure development within the sub-county.

Key terms: Infrastructural development, rural-urban roads, urban roads, agricultural products, remote and urban areas.

---***---

How to cite this article in APA

Tsiwezi, S. T., & Mutundu, K. K. (2022). Effects of Infrastructural Development on Marketing of Agricultural Products in Kwale County, Kenya. *Editon Cons. J. Econ. Dev. Stud.*, 4(1), 353-358. https://doi.org/10.51317/ecjeds.v4i1.376

---***---

Editon Consortium Publishing
Transforming Scholarly Publishing

Editon Consortium Journal of Economics and Development Studies (ECJEDS)

DOI: https://doi.org/10.51317/ecjeds.v4i1.376
ISSN: 2664-9462
Volume: 04 Issue: 01 | June-2022
Received: 10.04.2022; Accepted 10.05.2022; Published: 15.06.2022 at www.editoncpublishing.org
Tsiwezi, S. T., & Mutundu, K. K. Editon Cons. J. Econ. Dev. Stud., *Double-Blind Peer Reviewed Journal.*

INTRODUCTION

Infrastructure development is a key element in the marketing of agricultural farm produce. African Development Bank (AfDB) recognises infrastructural development as an important element for backup of economic growth, alleviation of poverty and realisation of the Sustainable Development Goals (SDGs) (Kandiero, 2015). Establishing a road network improves the farm produce charges and reduces production through lowered transport charges for goods and services (Kiprono & Matsumoto, 2014). However, the bad state of the road network and inadequate market structures in Matuga Sub County have led to increased transportation charges, posing a business constraint. Kandiero (2009) argued that vehicle charges in Africa are projected to be twice greater than charges in South and East Asia, making it difficult for farmers to take their produce to the market. Regardless of the essential of roads in the economic development in Africa, less developing countries (LDC), investment in road infrastructure stands at just 2 per cent – 3 per cent of Gross Domestic Product (GDP) (Kandiero, 2009). The phenomenal was supported by the infrastructural development policy of china during the periods 1996 – 2005, which stood at 7.78 per cent of its GDP, and it was geared to spur a huge division of its growth (Davis et al., 2008). According to Crossley et al. (2009), infrastructure plays a major element in the agricultural division by providing a guaranteed supply of farming inputs to the farmers and farm produce to market. Investment in infrastructure in a country's remote parts is crucial in cost deduction for farm inputs and upgrading marketplaces for farm products.

Infrastructure development has played a crucial part in agricultural markets to the growth of an economy for a long time. Poor and inadequate infrastructure investment in Matuga Sub County has been ailing for decades, so farmers take longer to transport their farm produce to the market. This has contributed to a lot of wasted fresh farm produce from the farm gate. Despite the bumper harvest by the farmers in the region, these farmers do not get value for money from the products they produce. In addition to the poor and inadequate market infrastructure investment, the Matuga farmers are not linked to international markets where they can export the commodities they produce. The majority of the farmers in the sub-county are found in remote areas, and they find it very difficult to travel to the marketplaces to sell their produce. Forced middlemen to take advantage of the situation and buy the produce at the farm gate at a lower price than the amount the farmer would receive if he had taken his products to the market. In Matuga, farming is considered a women activity, so these women are forced to sell the products at a lower price to brokers because they are afraid of travelling long distances with children at the back. Matuga farmers experience stiff competition from Mombasa and Tanzania traders with a good infrastructure network for farm produce. Also, the available physical market facilities are very far from the farm gate, forcing the farmers to incur extra costs transporting the produce to the market. This has led to increased prices of the commodities from Matuga compared to those from other parts. As a result, Matuga farmers have been disadvantaged due to poor transportation networks resulting in heavy product losses. According to Faajir (2015), the bad situations of roads and poor accessibility to markets have caused hardships and loss of hope to the farmers since they do not get the aspired value of the farm produce.

Further, due to poor and inadequate infrastructures within the sub-county, farmers have abandoned cash crop farming and instead migrated to the urban centre looking for alternative jobs. In addition, the road network is not accessible during the rainy season, forcing farmers' products to lose significantly. Hence, there is a need to establish an all-weather road network and a marketplace that is easily accessible and close to the farm gates for easy transportation and selling of the products. The unavailability of ready markets for the farms' produce is another factor that has greatly affected the agricultural

DOI: https://doi.org/10.51317/ecjeds.v4i1.376
ISSN: 2664-9462
Volume: 04 Issue: 01 | June-2022
Received: 10.04.2022; Accepted 10.05.2022; Published: 15.06.2022 at www.editoncpublishing.org
Tsiwezi, S. T., & Mutundu, K. K. Editon Cons. J. Econ. Dev. Stud., *Double-Blind Peer Reviewed Journal.*

sector. Instead of producing a lot of crops from the farm, the locals-only produce for consumption purposes, which have led to a reduction of the acreage of the farming. Therefore, this persistent limbo engulfing the Matuga farmers with heavy products and financial decadents due to a deplorable road network and lack of major infrastructural amenities contributed to great retrogressive problems. Further, the situation has cost the area mass migration, lack of food security and poor living standards despite productive landmasses and sustainable developmental factors. Consequently, it is critical for such problems to be researched through empirical findings and develop suitable recommendations that may address the prevailing conditions facing Matuga farmers and locals at large. Unfortunately, this is a knowledge gap since no similar study was conducted in the region.

LITERATURE REVIEW

According to the Ministry of Communication and Transport in Tanzania (2003) and African Development Bank Group (2013), remote road network and public sector vehicle costs are normally characterised by a bad road situation and increased travelling charges. Furthermore, Olorunfemi and Adenigbo (2017) postulates that most of the communities living in the remote parts of Africa are faced with poverty and are characterised by low education. The Matuga sub-county people are also part and parcel of this category. Nevertheless, they can be equipped with skills capable of transforming the world through adequate agricultural production reinforced by reliable and adequate transportation of farm produce to the market.

In Ghana, investment in remote road networking will mean increased accessibility of farm produce to the market points and accelerate local and foreign trade. Narteh (2012) noted that remote farmers benefit from farm inputs required to harvest good yields and increase market linkages due to infrastructure improvement. Hettige (2006) advances that improving rural roads is generally recognised as an essential investment in remote parts of the country. Its absence intensifies its weakness and continuation to insufficiency standards. According to Shimokawa (2007) and World Bank (2006), their Studies noted that improved infrastructure in the remote parts of a country made it faster and more convenient to take farm produce to the market centres. Remote infrastructure contributes greatly to a county's growth, an instrument for all community inclusive and economic investment in farm products marketing. Hine et al. (2001) suggest that inefficient infrastructure, people movement and farm products are hindered due to closing down farming and financial increment. Access to remote roads is key for farming practices, agri-business, selling farm produce and market linkages (Ostromet al., 1993).

Kwale County's economy depends mainly on agriculture. Despite the rapid increase in other areas, farming remains a key area that generates 16 per cent of the GDP (2014-15). In Kenya, two-thirds of the total population live in the remote areas of the country that are in one way or the other are, attached to farming activities. As per projections, farming in the country has provided around 70 per cent of the entire labour force. Agricultural products in Kwale are featured by insufficient market centres for selling farm produce. Therefore, a good Road network and market infrastructure plays a vital part in LDCs whereby many poor people rely on agriculture for survival. Improving the road network and markets contributes greatly to farmers' farming. Remote access infrastructure is a crucial element in remote areas to engineer developmental agenda and encourages financial and communal amenities, facilitating higher yield returns and job creation. Thus, infrastructure investment heavily contributes to the increase of income and surplus yield and provides amenities that boost the living standards of farmers (Akinyosoye, 2010).

Globally most underprivileged individuals are found in the remote parts of the nation where the road network is in a bad state, hence difficult to travel and transport farm products to reach their destined market for sale. Consequently, the development of remote roads will mean that many farmers will participate in the market economy

Editon Consortium Publishing
Transforming Scholarly Publishing

Editon Consortium Journal of Economics and Development Studies (ECJEDS)

DOI: https://doi.org/10.51317/ecjeds.v4i1.376
ISSN: 2664-9462
Volume: 04 Issue: 01 | June-2022
Received: 10.04.2022; Accepted 10.05.2022; Published: 15.06.2022 at www.editoncpublishing.org
Tsiwezi, S. T., & Mutundu, K. K. Editon Cons. J. Econ. Dev. Stud., *Double-Blind Peer Reviewed Journal.*

and mitigate the state of farmers' poverty (Oraboune, 2008). As a result, the need for researchers to investigate the effects of infrastructural development on the agricultural produce and marketing in Matuga Sub County, Kwale County, Kenya and come up with findings in the knowledge gap on the subject matter that may address the current conditions. The study is expected to come up with recommendations to adopt the best ways of establishing and rehabilitating road networks and markets in a close approximation to the farmers.

RESULTS AND FINDINGS

Out of 154 respondents who were issued the questionnaire, only 98 farmers returned the questionnaire. This represented 63.6 per cent of the sampled targeted people issued with a questionnaire making it a good for the research. Best and Khan (2006) stated that 60 per cent of respondents as good, while beyond 70 per cent were very good. Following Best and Khan (2006), the researcher proceeded with amazing the data collected. From the findings, it was noted that 50 farmers were involved in chicken rearing representing 59.2 per cent, while 38 farmers, representing 40.8 per cent, were growing citrus products. It was further established that 72 farmers representing 73.5 per cent, expressed difficulties in marketing their products while 26 farmers representing 26.5 per cent, had no challenges.

It was established that all 98 farmers representing 100 per cent noted that it leads to delays in product delivery to the market. Regarding Rural-Urban roads, the study noted that 81 farmers said Murram roads are the most available within the sub-county and represent 82.7 per cent, followed by 10 farmers who said All-weather roads represent 10.2 per cent. On the other hand, 7 farmers said Tarmac roads are available, representing 7.1 per cent. Therefore, there is a need for the all-weather roads if Tarmac cannot easily ease the marketing of farm produce to the markets. While Rural-Urban Roads rating from the finding 52 respondents, which are representing 53.1 per cent, rated rural-urban roads to be poor and leading, 30 respondents representing 30.6 per cent rated very poor, 10 respondents representing 10.2 per cent. The roads were natural, 4 respondents representing 4.1 per cent, good and last 2 respondents representing 2 per cent the roads are very good. Bearing in mind that most of the Matuga sub-county roads network is poor; there is an urgency to develop policies on the road to upgrade them.

According to the respondent's, majority of the farmers takes 3- 6 hours to reach the market, which represents 57 of the framers, which is equivalent to 58.3 per cent, followed by 1-3 hours are 17, representing 17.3 per cent, then 6-9 hours which are 15 representing 15.3 per cent then I hour 7 farmers representing 7.3 per cent, then 9-12 hours and above 12 hours each 1 farmer and representing 1 per cent each category. As per the study, there is a need to put more effort into improving the road network to reduce farmers' 3-6 hours to get to the market. The study delved into the inquiry on the best areas that the leaders in the county had delivered most. The inquiry involved interviews where a question on the area they had performed well was asked. The respondents showed different areas, including the construction of markets, mobilising farming, encouraging farmers to join SACCOs, and creating awareness.

From the findings, 40 respondents representing 40.8 per cent of the farmers sell their products to Kongowea market in Mombasa County, which is the majority of farmers. 30 respondents representing 30.6 per cent of sales in Ukunda market in Msambweni sub-county, followed by 18 respondents representing 18.4 per cent of the farmers take their produce to Kwale market in Matuga sub-county and last 10 respondents representing 10.2 per cent of the sale at Kombani market also in Matuga. Going by the results, the sub-county lacks enough markets where farmers can sell their products directly.

The research established that 60 respondents representing 61.2 per cent of the farmers, do not access permanent

Editon Consortium Publishing
Transforming Scholarly Publishing

Editon Consortium Journal of Economics and Development Studies (ECJEDS)

DOI: https://doi.org/10.51317/ecjeds.v4i1.376
ISSN: 2664-9462
Volume: 04 Issue: 01 | June-2022
Received: 10.04.2022; Accepted 10.05.2022; Published: 15.06.2022 at www.editoncpublishing.org
Tsiwezi, S. T., & Mutundu, K. K. Editon Cons. J. Econ. Dev. Stud., *Double-Blind Peer Reviewed Journal.*

market facilities, while 38 respondents representing 38.8 per cent, only have access to permanent market facilities within the sub-county. As a result, the county government has to give a prior to market facilities to areas where farming is practised. In this research, a lot of challenges have been exposed, which are fronting the sub-county. Infrastructure in the remote parts of the sub-county remains a big issue that needs urgent attention. For example, 82.7 per cent of the respondents said the sub-county uses marram roads, 53.1 per cent rated the roads to be poor, 58.3 per cent of those interviewed take 3-6 hours to get into the market, and last 81.6 per cent of respondents said when goods arrive at the market have defects. All these are contributed by the poor rural-urban roads.

The Matuga Sub County has just two reliable Markets where farmers can take their products in the following ratio in percentages as per the respondents Kwale and Kombani 18.4 per cent: 10.2 per cent with 40.8 per cent produce taken to Mombasa county - Kongowea market, 61.2 per cent of the respondents do not access permanent physical facilities in the sub-county. 81.6 per cent of the respondents could not access the information on social media due to several challenges. In terms of rating, the communication 61.2 per cent of the respondents rated it poor, hence the need to discuss the issues.

CONCLUSION AND RECOMMENDATION

Conclusion: The study established that the infrastructure network needs to be upgraded on rural-urban roads to effectively market agricultural produce. While on Urban roads, it was found that maintenance was poor, making it impossible for farmers to access the urban markets easily. Therefore, the County government of Kwale has to prioritise infrastructure improvement and maintenance for easy access throughout the season. On Market physical facilities, the research found that the sub-county lacks permanent structures and reliable markets are in Mombasa County. So, the county government of Kwale needs to construct markets where farmers can take their produce. Finally, on the Communication, it was realised through the study that farmers within the Sub County have challenges with social media to access information. Therefore, the county needs to set capacity-building programs for farmers.

Recommendation: This study recommends that all rural-urban and urban access roads be improved and maintained periodically, respectively, to ensure accessibility of the roads to the markets at any time. Bearing in mind that infrastructure is a key element of any development of a country. The research further recommends that the county government give a priority establishment of markets within the sub-county to enable farmers to have a place to sell their farm produce nearer to the farm gate. Moreover, the county should establish capacity-building programs for farmers to minimise communication challenges through social media such as Facebook and WhatsApp, among others, to access farming information.

REFERENCES

Africa Development Bank. (2013). *At the Center of Africa's Transformation: Strategy for 2013-2022.* African Development Bank Group.

Akinyosoye, M. (2010). *Infrastructure Development in Nigeria Road Map to Sustainable Development.* Green Hill Technical Services Ltd., Lagos.

Best, J. W., & Kahn, J. V. (2006). *Research in Education.* (10th Ed), Pearson Education Inc.

Crossley, P., Chamen, T., & Kienzle, J. (2009). Rural transport and traction enterprises for improved livelihoods. *Food and Agriculture Organization of the United Nations (FAO).* ftp://ftp.fao.org/docrep/fao/011/i0525e/i0525e.

Editon Consortium Publishing
Transforming Scholarly Publishing
Editon Consortium Journal of Economics and Development Studies (ECJEDS)
DOI: https://doi.org/10.51317/ecjeds.v4i1.376
ISSN: 2664-9462
Volume: 04 Issue: 01 | June-2022
Received: 10.04.2022; Accepted 10.05.2022; Published: 15.06.2022 at www.editoncpublishing.org
Tsiwezi, S. T., & Mutundu, K. K. Editon Cons. J. Econ. Dev. Stud., *Double-Blind Peer Reviewed Journal.*
Davies, M., Edinger, H., Tay, N., & Naidu, S. (2008). *How China Delivers Development Assistance to Africa*. Stellenbosch: Centre for Chinese Studies.

Faajir, A. (2015). Effects of market infrastructure and poor access to markets on marketing of grains in selected states of Northen Nigeria,West Africa. *Journal of Bussiness and Retail Management Research (JBRMR)* 9(2), 110-118.

Hettige, H. (2006). When do rural roads benefit the poor and how? An in-depth analysis based on case studies. *Asian Development Bank*.

Hine, J. L., & Ellis, S. D. (2001). *Agricultural Marketing and Access to Transport Services. Rural Transport Knowledge Base.*

Kandiero, T. (2009). *Infrastructure Investment in Africa: Development Research Brief Number 10.* African Development Bank (AFDB).

Kiprono, P., & Matsumoto, T. (2014). Roads and farming: The effect of infrastructure improvement on agricultural input use, farm productivity and market participation in Kenya. *In CSAE Conference 2014: Economic Development in Africa.* The University of Oxford.

Narteh, A. E. (2012). *The role of Road Transportation Service in the Development of Traditional Market"s: A Case of Asesewa and Agormanya Traditional Markets in the Eastern Region, Ghana* (School of Graduate Studies, Kwame Nkrumah University of Science and Technology).

Olorunfemi, S. O., & Adenigbo, J. O. (2017). Rural Road Infrastractural Challenges: An Impediment to Agricultural Development in Idanre Local Government Areas of Ondo State, Nigeria. *Ghana Journal of Geography* 12(2), 108-124.

Oraboune, S. (2008). *Infrastructure (Rural Road) Development and Poverty Reduction in Africa*.

Ostrom, E., Schroeder, L., & Wynne, S. (1993). *Institutional incentives and Sustainable Development: Infrastructure Policies in Perspective*. Westview Press.

Shimokawa, S. (2007). *Rural Road Investments, Agricultural Development, and Poverty Alleviation in China. Pinstrup-Andersen and Fuzhi Cheng (Ed), 'Food Policy for Developing Countries: Case Studies (10).*

World Bank. (2000). Energy services for the World's poor. *Energy and Development Report*. The World Bank.