

Role of Inter-Regional Linkages in Promoting Functional Development Between Harare Metropolitan Region and Murewa-Mutoko Districts:

Lessons From Covid-19 Pandemic

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Abstract

Interregional planning linkages distribute goods, food and services in space towards promoting growth and addressing disparities. In functional regions, interregional linkages present flows of labour, capital, commodities, and information between the node and periphery. However, the advent of Covid-19 pandemic affected these interregional linkages. This study interrogates the food, labour and information linkages between nodal regions and the periphery through the lenses of trade factor migration and cumulative causation in the face of Covid-19. Open-ended interviews, questionnaires, Focus Group Discussions and observations were utilised to collect data from key informants, farmers and traders selected through snowballing. Findings show the dominance of the nodal Harare Metropolitan Region on the food, labour and information flows from the peripheral Murewa-Mutoko Districts. Food produced in these two districts is largely sold in Harare, bypassing the Murewa and Mutoko Growth Points. As a node, the Harare Metropolitan Region presents a large market and buying power than the two district centres combined. In addition, labour movement from Murewa-Mutoko Districts prioritised working in Harare Metropolitan Region. Many farmers from these districts worked in Harare Region before resorting to farming after job lay-offs. Information flows between the node and periphery relays messages on the agricultural products required, the quantity and quality as well as the farm input requirements. As a result of these linkages, the Murewa-Mutoko Districts specialise in cash crop production for sale to Mbare Musika. In return, the Harare Metropolitan Region, through industrialisation and agglomeration, specialises in finished products and agriculture inputs that are sold to these districts. However, these synergies were impeded by travel restrictions and the resultant high transactional costs as farmers negotiated the Covid-19 restriction through bribes. The study recommends territorial development that reduces the dependence on Harare. and development of decentralised markets to decongest the Mbare Musika.

Keywords: Interregional linkages, food flows, node, periphery, Harare metropolitan region

INTRODUCTION

Regional or sub-national planning bridges the gap between broad 'national development' imbedded in 'policy' and the action-oriented development projects by local communities. In practice, subnational planning is, however, side-lined in favour of implementation of specific projects or national and broad policy frameworks (Hall et al., 2010). This created a gap between national development policies and local development initiatives, and resultantly poor functional linkages and widening gap between nodal and peripheral regions (Hall et al., 2010; Jaraíz et al., 2013; Rambanapasi, 1989). The Covid-19 pandemic devastated the globe

since March 2020 with far reaching implications on regional linkages. The flows of goods and services between cities and rural areas and the movement of people and was severely hampered by the Covid-19 travel restrictions. In the process, peripheral districts were most affected as traders could not reach the hinterlands and farmers could not market their harvest to the city. Suffice to note that while Covid-19 restrictive measures limited the spread of pandemic, city residents still needed agricultural products from rural areas. Thus Covid-19 negatively affected rural-urban linkages and the growth of central and peripheral regions.

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Sub-national planning, when analysed through the lens of linkages, offers a melting pot that translates policy into projects and coordinate as well as integrate stakeholders, sectors and interests. This balances regional growth, capitalising on its comparative and competitive advantages and functional linkages between the node and periphery. Despite the acknowledgement of its importance in both scholarly and policy debates (Mutizwa-Mangiza, 1990; Rambanapasi, 1989; Wekwete, 1988), regional planning remains a peripheral subject in Zimbabwe. The dearth in current literature in regional planning in Zimbabwe manifested itself in the fragmented policy framework and programmes on urban and regional planning in the country (PlanAfric Zimbabwe, 2000). The Covid-19 pandemic gave added nuances on rural-urban linkages, regional trade and competitiveness. Furthermore, a reflection on the pandemic also shows the importance of central regions on the development of the rural regions.

This paper adopted the functional regional planning approach towards analysing the interrelationship and flows between Harare Metropolitan Region and the Murewa-Mutoko Districts. Note that Murewa and Mutoko are two separate Districts in Mashonaland East Province of Zimbabwe. However, this study treats them as one Murewa-Mutoko District to assess their combined interregional flows towards the Harare Metropolitan Region. The functional regional planning approach, according to Ferrão et al. (2013), is an essential analytical and developmental diagnostic tool than politicaladministrative framework for analysing regions. Moreover, the functional analysis of regional flows is critical as socio-economic and cultural realities of regions intersect and overlap the administrative and territorial boundaries (Allmendinger and Haughton, 2009; Heley, 2013). Moreover, the Covid-19 restrictions added another layer towards analysing regional linkages. While the centre enjoyed net-benefits from urban-rural linkages, and travel restrictions made remote areas more difficult and expensive to visit.

Regional planning is a critical level of analysis for policy-makers and academics because of the widening economic relations between territories, which generates demand for planning on wider scales (Glasson and Marshall, 2007). Again, the changes in "governability" and democracy have put local and national levels under significant democratic pressures through a circle of elections, which leaves the region as an important platform to promote development and integration in space. It is within this understanding that regional planning remains a useful planning framework in future despite its obvious institutional and policy weaknesses in Zimbabwe. The paper has five sections that include the introduction and theoretical foundations for regional linkages, the research methods, the results, discussions of the findings and the conclusions.

THEORY

Classical regional planning readings by Hoover and Giarratani (1984) define nodes as regions that are functionally integrated so that labour, capital and commodity flows are more common within the region than outside. Functional regions are understood from the integration and interdependencies of people, resources, information or physical relationships, flows and systems that form a hierarchical structure (Ferrão et al., 2013; Klapka et al., 2013; Ullman and Boyce, 1980; Vresk, 1990). Functional regions cut across municipal boundaries and require coordination of stakeholders and policy at different levels. A common thread from these readings is that functional regions maximise interregional flows of goods, services, information and people within than interactions outside of the regions. The flow of people, information and agriculture harvests and farm inputs makes the Harare Metropolitan Region and its relationship with the Murewa-Mutoko Districts, a unique functional region for interrogating the interregional linkages between the node and the periphery. Functional regions are critical towards analysing sub-national planning as it pertains to "deciding the general distribution of [new] activities and developments" in space (Glasson and Marshall, 2007:12).

Characterising Functional Regions

Functional regions are characteristically hierarchical and activities within the region gravitate towards the nodes that in turn present dominance over the spatial-functional structure of the surrounding space (Hoover and Giarratani, 1984; Živanović, 2017). The concept of the "node" is mostly defined through functional regions. Functional regions are territorial units whose



boundaries do not reflect geographical or historical events but the organisation of social and economic relations such as labour and markets (OECD, 2002). In addition, functional regions can be polycentric with several hierarchical nodes as expounded by Walter Christaller's Theory of Hierarchy of Settlements (Živanović, 2017). Nodal regions are punctuated by flows of goods and services, labour and capital flows between the centre and the periphery (OECD, 2002; Živanović, 2017). The interregional linkages are the basis of development of the region and its periphery. Regional development planners track these flows to assess the extent to which they determine the hinterland and the stakeholders who benefits from the flows. Thus, functional regions are useful for territorial diagnosis. However, these functional regions are not always positive. Often, they exude polarisation effects on the surrounding regions.

In other words, the relationship between the node and periphery tend to favour the dominant centre. The interregional flows also determine the winners and losers among the regional stakeholders. Thus, studies in functional regions are also interested in who gets the lions' share from the interregional flows and the underlying dynamics towards such relationships.

Theoretical Framework for Interregional Linkages

Regional development planning theories are analysed on the basis of how they direct the future space territory as well as their influence on the distribution of activities in space (Glasson and Marshall, 2007). In other words, these theories explain the growth, decline or distribution of activities and services in space. The article will explore the neoclassical theory of trade factor migration and the cumulative causation and how they explain interregional linkages between Harare Metropolitan Region and the Murewa-Mutoko Districts. The theory of trade factor migration, as propounded by Dawkins (2003), argue that income differences between regions are removed by production factor migration and trade. This theory implies that a region imports goods from another region if they are cheaper than the ones produced in the region itself (Dawkins 2003). This can be classified as a modernisation regional planning theory that argues that flows in factors of production will reduce inequalities between regions and thus lead to growth of the periphery.

The theory of trade factor migration is further elaborated by the idea of absolute advantage where a region concentrates on producing goods and services that it has an uncontested superiority and in return trade those goods and services it cannot (Smith, 1776; Dawkins, 2003). This forms the basis of specialisation that sets the regions above other regions on producing the product in question. Within these interregional flows, the concept of absolute advantage promotes trade between the core and periphery.

The idea of inter and intraregional trade was further expanded by the concept of comparative advantage (Ricardo, 1821). Ricardo introduced the notion of opportunity cost to determine different options and locations for producing goods and services within a specific region. To explore the idea of interregional linkages, one can further tease out the idea of factor proportions by Ohlin (1935) who argues that labour migrates to regions with the highest wages. He further argues that capital is invested where it yields the highest profit. The concept of factor proportions leads to regional division of labour and specialisations in the node than the surrounding areas (Ohlin, 1935; Živanović, 2017).

The trade factor migration theory can be criticised on the basis of how it explains the flows of goods, services, labour and capital within the region on the bases of transport costs and spatial impediments. Further, the uncertainties and risks associated with the flows between the periphery and the centre are explained through the lack of information on the opportunities within the regional and legal barriers associated with selling goods, services, labour and capital flows.

In addition, some of the weaknesses of trade factor migration are explained through the economies of scale and agglomeration effects. Large urban centres have huge labour and market opportunities (Thompson, 1972). These factors put together, translate into attractions towards the flows of goods and services and would favour the core against the peripheral regions. Another important argument is that regional institutions often have limited power towards promoting economic development since the national governments have resources and political power to provide better incentives and thus influence the business environment.



Within the broad framework of regional trade theories, the trade factor migration subscribes to the thinking of the convergence of per capita income across regions over time. The convergence development theories promote the modernisation ideology, which argues that lagging regimes would eventually grow (Dawkins, 2003; Matunhu, 2011). This thinking propagates that flows in goods and service would promote growth of peripheral regions through diffusion of innovation and technology from the centre (Dawkins, 2003). However, the divergence regional development theories that emerged after the World War Two present a counterargument. Studies in the global South show that some regions will not develop and catch up with the nodal regions (Dawkins, 2003; Matunhu, 2011). One of such theories is the cumulative causation theory. This theory is adopted in this paper to address the gaps in the theory of trade factor migration.

Myrdal (1957)'s seminal work on cumulative causation challenges the above neoclassical economic proposition that trade between regions ultimately lead to a reduction in inequalities between regions. On the contrary, Myrdal (1957) argues that increasing returns to scale results in the clustering of economic activities or agglomeration of economies within regions that are first to industrialise (Dawkins, 2003). In other words, increased returns to scale produces agglomeration and clustering of economic activities in space, which favours nodal regions.

This concept explains that on one hand, the periphery benefits from the core through the "spread effect" (Myrdal, 1957). This is elaborated through the diffusion of innovation and technology from the developed to the peripheral regions (Dawkins, 2003). On the other hand, the backwash effect explains the flow of capital and labour from the peripheral to the developed regions (Myrdal, 1957). However, in reality, the neoclassical free trade development paradigm reinforces the concept of cumulative causation by catalysing the growth of developed regions at the expense of lagging regions. In this study, we analyse the relationship between Harare Metropolitan Region and Murewa-Mutoko Districts through both the trade factor migration and the cumulative causation theories.

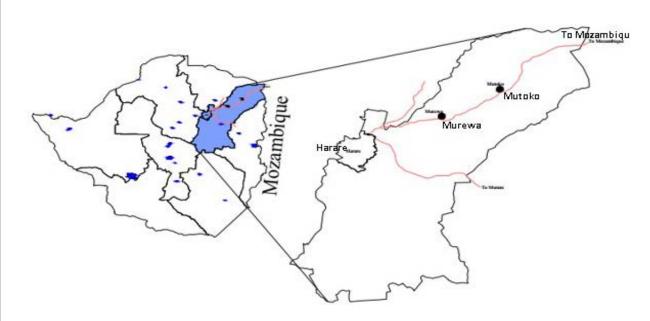
Implications of Covid-19 on Regional Linkages Pandemics increase morbidity and mortality over a wide geographic area and cause significant economic, social, and political disruption. The COVID-19 had far-reaching consequences globally and was declared a global disaster (Cheval, et al, 2020). The COVID-19 pandemic, lockdown and social distancing disrupted consumer habits of shopping, as they could not visit the store or market (Sheth, 2020). In addition, the COVID-19 pandemic transformed communities and their business lives as restaurants and industry suffered from restricted movement of people (Stumpner et al, 2021). In general, the pandemic affected most professions. However, the health and food production and transportation were the most critical sectors. The resultant lockdowns affected food transportation and reduced consumption along the food supply chain, impacting on transporters and farmers.

RESEARCH METHODS

The study adopted a pragmatic research philosophy, which is flexible to allow researchers to choose the methods and procedures that meet the research needs and aim (Kaushik and Walsh, 2019). Within this research paradigm, the mixed methods research approach was adopted to collect qualitative and quantitative data (Kothari, 2004). Interviews were conducted with purposely selected key informants from the City of Harare, Murewa and Mutoko Rural District Councils, food transporters, and market officers for Mbare Musika in Harare, Murewa and Mutoko Districts **Figure 1**.

Questionnaires were used to collect data from 30 farmers, 30 urban and 30 ru-ral traders selected through snowballing. Focus Group Discussions (FDGs) were conducted with 30 farmers in Murewa and Mutoko Districts. The data was analysed through thematic narratives using Microsoft Excel. The study sought permission from the City of Harare, and Murewa and Mutoko Rural District Councils to interview traders, farmers and transporters, including consent of respondents themselves. The interviews protected the identify of respondents to ensure confidentiality.





Map of Zimbabwe showing the location of Harare metropolitan region and the Murewa and Mutoko Districts **Source:** Authors, 2022

RESULTS

The findings reveal that the relationship between Harare Metropolitan Region and the Murewa-Mutoko Districts is characterised by the flow of goods, people, labour, information, and traffic. The prominent drivers of these flows are the trade in agricultural goods from Murewa and Mutoko Districts to Harare Metropolitan Region. These flows are elaborated in the subsequent sections.

Agricultural Flows

Farmers in Murewa and Takashinga Farming Community in Mutoko produced more than one crop that they sell to Mbare Musika in Harare. They cultivate beans, green pepper, cucumbers, tomatoes, groundnuts, maize, sweet potatoes, tobacco, maize, sunflowers, rape, butternuts, peas, carrots, millet, cotton, onions as well as watermelons. Except for maize, which is staple, most of the crops grown by the farmers are cash crops. Evidence from the study indicated that all the farmers sell their cash crops plus surplus maize to Mbare Musika or food traders from Murewa and Mutoko Growth Points.

The trade and movement of these agricultural produce forms the backbone of the linkages between the Murewa-Mutoko Districts and the Harare Metropolitan Province. The farmers sell their products to Mbare Musika, the Grain Marketing Board (GMB) in Mutoko and Murewa as well as to the Cotton Company of Zimbabwe (COTCO) in Mutoko. The majority (80.8%) of the smallholder farmers (n=30) sell their products to Mbare Musika in Harare only **Figure 2**. A significant number of farmers (15.5%) sell their products to Mbare Musika in Harare and GMB in Mutoko and Murewa. Lastly, 3.8% revealed that they sell their agricultural products to Mbare Musika, GMB and COTCO. These findings show that the majority of smallholder farmers ex-port their agricultural products outside their Murewa-Mutoko District.

The farmers even export their agriculture products outside their Mashonaland East Province (Region) to the Harare Met-ropolitan Region. Although some farmers sell some of the agricultural products locally to the GMB and COTCO, the dominant flows are between the districts and Harare Metropolitan Re-gion. The major determinant of flows is the agglomeration of economies in the Harare Metro-politan Region. These city agglomerations, according to the World Bank Report (2009) creates a huge market for goods and services. Findings show that farmers from Murewa-Mutoko Dis-trict that specialise in cash crop farming for sale to Mbare Musika haveimproved their quality of life through



building durable houses. Some farmers bought trucks for delivering agriculture products to the market. improved their quality of life through building durable houses. Some farmers bought trucks for delivering agriculture products to the market.

Interviews of rural food retail traders in Murewa and Mutoko Growth Points revealed that 80% get their supplies of agricultural products locally from farmers in Murewa and Mutoko Districts. A large number of the participants (25%) get their products from farmers outside these two dis-tricts. This is an indication of additional flows in the movement of agriculture products. Some of the agriculture products sold by food trader at Murewa and Mutoko Districts originate outside the two districts **Figure 3**. Some of these agriculture products include pineapples and sugar cane that are imported from Chimanimani District in Manicaland Province and Mudzi District respectively.

The data collected from FDGs show that whilst most of the produce from the smallholder farmers is sold in Harare. This present the dormant flows of agriculture products to the Metropolitan Region, there are also flows of goods and services in the opposite direction (**Figure 3**). **Figure 4** shows that the bulk of the agriculture products flows gravitate towards the Harare Metropolitan Region, giving dominance over the peripheral Murewa -Mutoko Districts.

This a typical rela-tionship between nodal and peripheral regions. After selling their produce at Mbare Musika, farmers in turn buy agriculture inputs such as seeds, chemicals, pesticides and fertilisers from Harare. Farmers also buy groceries and furniture that are relatively cheaper in the capital than at Murewa and Mutoko Growth Points.

Flow of People and Labour

The predominant interrelations between Murewa-Mutoko Districts and Mbare Musika in Harare include the flows of agriculture products. However, these flows also comprise of the movements of people themselves. FDGs with farmers in Tabudirira Farming Community in Mutoko indi-cated that many farmers or family members sought job opportunities in Harare Metropolitan Province (Figure 5). One Mutoko Farmer explained, "I worked several years in Harare before settling in Mutoko to start this farming business after job layoffs." Though the farmer is now resident in Mutoko, he has strong ties with Harare, where his adult children live. The farmer frequently visits the city and often combines this with the delivery of his agriculture products.

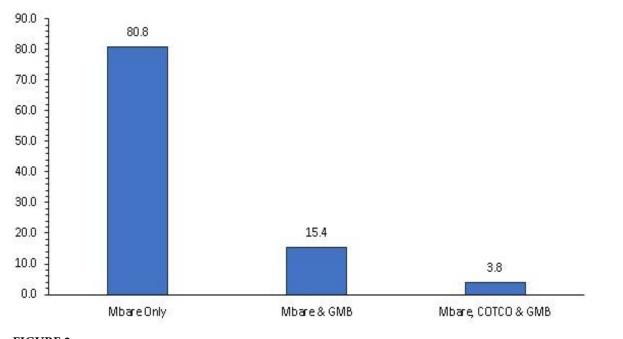
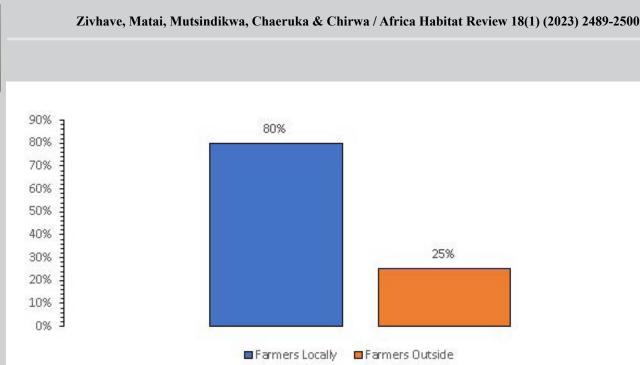


FIGURE 2 Points of sale of agricultural outputs Source: Authors, 2022



AFRIC

Source of agriculture products for rural food retail traders **Source:** Authors, 2022

During the fieldwork, one of the interviewed farmers from Murewa had a planned trip Harare. His son had successfully completed his advanced level studies and wanted to go to university. Harare Metropolitan Province as a dominant node offered better colleges and universities than the Murewa-Mutoko District and the provincial capital Marondera.

The farmer preferred Harare that has tertiary institutions such as the University of Zimbabwe, Harare Institute of Technolo-gy, Catholic University and Women's University in Africa. Farmers in Murewa and Mutoko Districts preferred Harare Metropolitan Region when looking for jobs and educational facilities for their children as it offered a variety of opportunities.

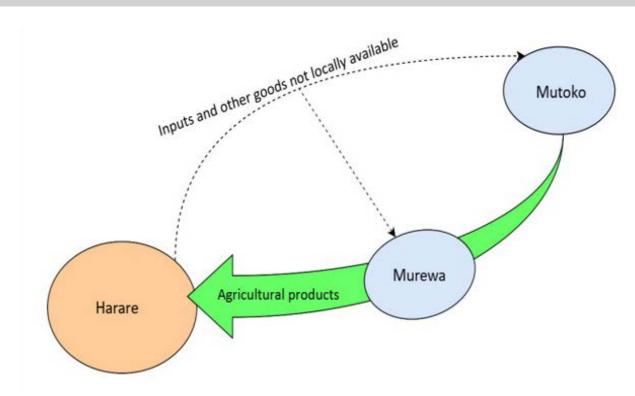
Information and transportation flows

The movement of agriculture products, people and labour between Murewa-Mutoko Districts and the Harare Metropolitan Region influenced the flow of information and transportation sys-tems. Farmers received information on the demand of farm produce from Mbare Musika, sent through phone calls, mobile text messages and WhatsApp. This information comes from the food traders or middlemen(knownasmakoronyerainShona,which translates into cheats), con-veying the message on the farm products required by the market, the quantities and the price. The makoronyera are notorious for ripping off farmers, transporters, and the local authority at Mbare Musika. Upon receiving the information from Mbare Musika, the Murewa-Mutoko Farmers arrange transportation of farm produce. About 70% of the interviewed farmers hired trucks for the transportation of agriculture products to Mbare Musika in Harare **Figure 6**. Often food re-tail traders hired trucks to collect agriculture produce from the farmers themselves.

Besides food deliveries through hired trucks, the farmers from Tabudirira Farming Community in Mutoko often use public transport to deliver their farm produce to Mbare Musika. Unlike the Murewa Farmers, these farmers are close to the Harare-Nyamapanda Highway and therefore use scotch carts and wheelbarrows to transport agriculture products from the farm to the highway to board buses or hike for private transporters.

There are challenges encountered in the information and transport flows. The FDGs with farm-ers revealed that the cost of transporting produce to the market in Mbare Musika is high. These costs increased during the Covid-19 lockdowns as movement was restricted. Transporters and farmers resorted to bribing police and the army at roadblocks to deliver their farm produce to the market. Again, the poor governance associated with the Mbare Musika affected the transport flows from Murewa-Mutoko Districts to Harare. When transporters delivered farm produce to Mbare Musika, they negotiated with middlemen for access to parking space.





The flows of agriculture and inputs between Harare metropolitan region and the Murewa-Mutoko Districts **Source:** Authors, 2022

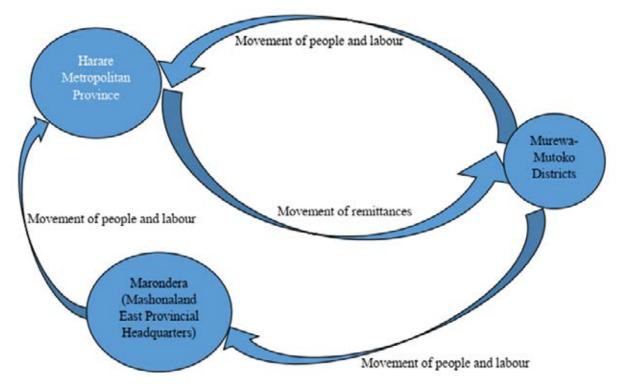


FIGURE 5

Flows of labour and people from Murewa-Mutoko Districts **Source:** Authors, 2022





Transporter carrying farm produce preparing to leave Mutoko for Mbare Musika **Source:** Authors, 2022

The parking bays around the Mbare Musika are 'managed' by youths supported by politicians who charge parking fees. The sum of all the associated 'transportation costs' is altogether too high, affecting the vi-ability of the farming business. Field observations in Murewa and Mutoko show farms that have become fallow after the Covid-19 lockdowns as cost of production have made some farmers bankrupt.

Though the costs of producing, transporting, and handling agricultural goods have increased over the years. Farmers continue supplying at Mbare Musika because of advantages such as sell-ing in bulk, which are not available elsewhere. Moreover, farmers buy inputs in bulk from Hara-re. This completes the loop of flows and interlinkages that bring farm products to the city and takes back inputs to the rural areas. Based on the findings from FGDs, the production costs are generally high and discourage farming although the farmers have remained steadfast in the business with the hope of better opportunities in future. On the other hand, agricultural food traders make reasonable profits by selling the agricultural bought from farmers.

The middleman makes more profit the agricultural products at Mbare Musika without making any investment in the business. In summary, the interregional linkages that brings farm produce to Mbare Musika are increasingly benefiting the retail food traders and the middleman than the farmers and transporters, though the later bear the bulk of the responsibilities. This misnomer calls for policy interventions towards improving the linkages between the regional nodes and the hinterland. The syphoning of profits from the farmers and transporters by the middlemen and retail food traders confirms that Myrdal's backwash effect that mop the little resources available in the pe-riphery.

Covid-19 Implications on Interregional Linkages

Prior to the Covid-19 pandemic, the Harare Metropolitan Region and Murewa-Mutoko District interregional linkages favoured the node. Harare benefited from food and labour flows. The Murewa-Mutoko hinterlands benefited from the cash, seed pack and grocery transfers from Harare. The Covid-19 travel restrictions worsened the already skewed relationships. It became more difficult for farmers to both bring fresh farm produce from the Murewa-Mutoko Districts to Harare resulting in many farmers losing their perishable such as tomatoes. Of-course Harare residents lost the variety of farm product and prices of farm produce rose. However, Harare has alternative of food produce from market gardeners around the city.



In addition, many urban residents started urban agriculture to fill the gap created by limited farm produce sold at Mbare Musika. Thus, the farmers in Murewa-Mutoko Districts and rural transporters suffered more from the Covid-19 travel restrictions. These experiences again supported the node where the shocks within the supply chain will be felt more by the hinterland.

DISCUSSION

The interrelationships between the nodal region, the Harare Metropolitan Region and its periphery, the Murewa-Mutoko Districts are defined through the intensity of the flows between these centres. In this study the flows are depicted through the movement of agriculture produce, in-formation, farmers and transporters to deliver the farm produce, buy inputs and groceries. The flows between these peripheral districts to the metropolitan province has created employment opportunities for food transporters. The same flows brought young people to the city in search of better-paying jobs and high-quality education.

These findings support arguments by Ferrao et al. (2012) that functional regions between metropolitan and rural territories defined the intensity of relationships between cities and their surroundings. The study shows a strong business inter-connection between the Murewa-Mutoko Districts and the Harare Metropolitan Region that transfer information, agriculture produce, inputs and labour. The flows between the Murewa-Mutoko Districts and Harare Metropolitan Region are stronger than flows between the district themselves and their nearby provincial and administrative capital Marondera.

This confirms the dominant argument that nodal regions present supremacy over the surrounding peripheral re-gions (Hoover and Giarratani, 1984; Živanović, 2017). The food, inputs, groceries and labour flows between Harare Metropolitan Province and the Murewa-Mutoko Districts, however, were severely hampered by the Covid-19 travel restrictions that made travel expensive and time con-suming because of numerous traffic roadblocks and police bribes. Cities are centres of growth and regional competitiveness. Many countries promote city regions as a way of improving trade internationally. Harare Metropolitan Region is the centre of busi-ness promotion in Zimbabwe. The Metropolitan Region established industrial agglomeration in Southerton, Workington and Graniteside and export processing zones in Sunway City in Ruwa.

All these investments have created a big economy that in turn demands more raw materials, food and labour from the peripheral regions. However, the strategies towards making Harare Metropolitan Region competitive nationally and internationally; have tended to neglect other peripheral regions. The Harare Metropolitan Regional population estimated at 2.5 million people has created a huge demand for raw materials as well as a huge market for food. As a result, the Murewa-Mutoko Districts sell most of their products in the Metropolitan Region. The experiences of the Harare Metropolitan Region and the Murewa-Mutoko District are not without parallels. Zivanovic (2017) argues from a study of Serbia that the planned industrialisation of the country's cities emphasised city comparative advantages neglecting the surrounding agrari-an areas.

These strategies promoted nodal development tendencies with the result that goods, services, labour cascaded towards these city nodes. Though successful in promoting the coun-try's competitiveness in Europe, the strategy created unintended impacts for both the nodes and the periphery. Narrowing to specific regions, Zivanovic's (2017) study in the Banat Region of Serbia found that functional development produced polarisation effects that intensified popula-tion concentration in the nodal city and subsequent depopulation of the surrounding rural areas. Similarly, the industrialisation and development of Harare has neglected peripheral areas such as Murewa-Mutoko Districts. As a result of the City's success, officials believe that the city re-ceives daily populations of about 1.5 million people comprising of mainly traders who buy goods for resale in other cities or rural areas or sale agriculture products in the street. Conse-quently, Harare Metropolitan Province has become a victim of its 'success' as the large flows of people and traffics create congestion and pressure on infrastructure and service delivery. Farm-ers from Murewa-Mutoko Districts barely developed their business beyond subsistence.

With the resultant Covid-19 travel restrictions, the visits between rural and urban areas were reduced and the transfer between rural and urban areas further suffered.

The poor governance of the Mbare Musika has seen the retail food traders and middlemen get a lions' share of the business at the market. The main players in the rural-urban food flows are the farmers and transporters from the Murewa-Mutoko District, however, their revenue base has been consistently eroded since 2000 when the association of farmers that sold farm produce to Mbare Musika was disbanded by the city. The Harare Metropolitan Region and Murewa-Mutoko Districts relationship mirror Davoud's (2009) argument that city regions are production sites and advanced economies that create knowledge for exploiting natural resources in the pe-riphery. Within these regional flows, the knowledge and technology transfer from Harare does not seem to have benefited the farmers in the district of origin. Farmers have increased knowledge on improving productivity and meeting customer quality demands. However, their income has remained suppressed because of lack of adequate policies to protect them.

The trade between Murewa-Mutoko Districts and Harare Metropolitan Region resulted in these districts specialising in cash crop to provide food for the city region. The Murewa-Mutoko Districts are located in Zimbabwe's Natural Region 1 characterised by high rainfall patterns that support agriculture. In turn the Harare Metropolitan Region has supplied finished products such as farming inputs and groceries to these districts. These flows created a symbiotic relationship between the node and the periphery. Unfortunately, this relationship favoured the node.

The cumulative causation theory explains this phenomenon. The polarisation effect of the Harare Metropolitan Region provides the market for agriculture products without necessarily enriching the periphery. Young people from these districts prefer to study in the metropolitan region and subsequently work in the city. As a result, the Harare Metropolitan Region benefits at the expense of the periphery. The imbalances in regional flows have created pressure for Harare as people flock to the province for better opportunities.

CONCLUSION

As a nodal region, Harare Metropolitan Region asserts its dominance over the peripheral Murewa-Mutoko Districts. The interregional linkages between these centres created demand for agriculture products from these peripheral districts, catalysing specialisation in agriculture products. In a way, this creates the potential to develop both the nodes through backwash and the periphery through spread effects. However, in reality the polarisation effect outweighs the spread effects. The challenges experienced by the farmers and transporters on marketing agriculture products to Harare Metropolitan Region affect the viability of the farming business. Therefore, public policy should consciously manage this skewed relationship through integrated and multistakeholder promotion of territorial development of the hinterland. International experiences show that functional development will negatively impact on the node, and Harare Metropolitan Region already suffers from a large influx of people with the subsequent traffic congestion and poor service delivery. Countries such as Serbia promoted nodal and city regions towards supporting regional and national growth. However, this strategy had negative consequences on the peripheral regions. Zimbabwe should revive territorial development of peripheral regions as this study shows that functional development negatively affects the nodal regions through a large influx of people from the periphery. Covid-19 restrictions negatively affected food flows between the node and the periphery with resultant food losses for farmers.

RECOMMENDATIONS

The interregional linkages between Harare Metropolitan Region and the Murewa-Mutoko Districts experiences a myriad of challenges that mirror the dominance of the nodal regions. This study recommends that spatial planners should develop plans, policies and strategies towards promoting territorial planning and development of peripheral districts such as the Murewa-Mutoko Districts. This is critical since territorial planning is integrative, strategic and involves multi-stakeholders (OECD, 2002) which stirs development of the periphery.



The study also recommends comprehensive regional development. This can be achieved through development plan and policies that prioritises spatial and economic integration, supported by infrastructure which is spatially connective and interventions that are spatially targeted (lijazs-Vasquez, 2017). Comprehensive regional planning and development would redress regional flows that are skewed in favour of Harare Metropolitan Region. The Covid-19 pandemic demonstrated the need for localised markets. However, interregional linkages promote flows between the node and periphery. This study recommends the promotion of decentralised regional and district markets that reduce the movement of people, goods and services from one centre.

CITED REFERENCES

Allmendinger, P. and Haughton, G. (2009). Soft spaces, fuzzy boundaries, and meta-governance: The new spatial planning in the thames gateway. *Environment and Planning* A. 41(3), 617–633.

Cheval, S., Mihai Adamescu, C., Georgiadis, T., Herrnegger, M., Piticar, A., & Legates, D. R. (2020). Observed and potential impacts of the COVID-19 pandemic on the environment. *International Journal of Environmental Research and Public Health*. 17(4140), 1-25, 4140.

Dawkins, C. J. (2003). Regional development theory: Conceptual foundations, classic works, and recent developments. *Journal of Planning Literature*. 18(2), 131–172. Retrieved from https://doi.org/10.1177/0885412203254706

Ferrão, J., Mourato, J. M., Balula, L. and Bina, O. (2013). *Functional regions, urban-rural relations and post 2013 cohesion policy.* Observatario de ambiente e sociadade, studio/29. Lisbon: Instituto de Ciencias da Universidade de Lisboa, Universidade de Lisboa.

Glasson, J. and Marshall, T. (2007). *Regional planning*. New York: Routledge.

Hall, P. and Tewdwr-Jones, M. (2010). Urban and regional planning. New York: Routledge. https://doi.org/10.4324/9780203861424

Heley, J. (2013). Soft spaces, fuzzy boundaries and spatial governance in post-devolution wales. *International Journal of Urban and Regional Research.* 37(4), 1325–1348. Hoover, E.M. and Giarratani, F. (1984). An introduction to regional economics. New York, Knopf

Jaraíz Cabanillas, F. J., Mora Aliseda, J., Gutiérrez Gallego, J. A. and Jeong, J. S. (2013). Comparison of regional planning strategies: countywide general plans in USA and territorial plans in Spain. *Land Use Policy*. 30(1), 758– 773. Retrieved from https://doi.org/10.1016/j. landusepol.2012.06.001

Kaushik, V. and Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. *Social Sciences*. 8(9). Retrieved from https://doi.org/10.3390/ socsci8090255

Klapka, P., Halás, M., Tonev, P., & Bednar, M. (2013). Functional Regions of the Czech Republic: Comparison of Simpler and more Advanced Methods of Regional Taxonomy. *Acta Universitatis Palackianae Olomucensis–Geographica*. 44(1), 45– 57.

Kothari, C. R. (2004). Research methodology: Methods and techniques. New Delhi. New Age International Publishers. Retrieved from https://doi.org/10.16309/j.cnki.issn.1007 1776.2003.03.004

Matunhu, J (2011). A critique of modernization and dependency theories in Africa: Critical assessment. *African Journal of History and Culture*. 3(5), 65-72.

Mutizwa-Mangiza, N. D. (1990). Decentralization and district development planning in Zimbabwe. *Public Administration and Development.* 10(4), 423–435. Retrieved from https://doi.org/10.1002/ pad. 4230100406

Myrdal, G. (1957). *Rich lands and poor*: The road to world prosperity. New York: Harper & Brothers Publishing.

OECD. (2002). *Globalisation, migration and development.* Paris: OECD Publishing.

Ohlin, B. (1935). *Interregional and international trade.* Cambridge: Harvard University Press.