

# Infrastructure Provision as a Catalyst for Local Economic Development in South Africa

#### Mandisa SM Makhathini

Department of Geography and Environmental Studies, University of Zululand, South Africa

#### Victor H Mlambo and Siphesihle Mpanza

Department of Public Administration, University of Zululand, South Africa

#### **Abstract**

Throughout the era of the apartheid, the provision and accessibility of infrastructure in South Africa was skewed, and while the minority had access, the majority was overlooked. Local economic development (LED) has rested on the premise that the availability of infrastructure is likely to spur socio-economic development and to lift millions of South Africans out of poverty. However, with South Africa's economy struggling to register consistent growth, there are difficulties accessing the much-needed finances needed to invest in infrastructure to spur LED. The study that this paper reflects upon used a qualitative research method and a systematic review of the literature relating to infrastructure provision and local economic development. It utilised thematic content analysis to deduce its findings with the hope of bringing in meaning to the overall content of the paper. The study revealed that indeed infrastructure provision is key to local economic development, that South Africa's infrastructure provision is still skewed as urban areas continue receiving priority over rural areas; that local economic development is key in reducing inequality and spurring economic growth and sustaining the livelihoods of rural dwellers. However, limited investments in infrastructure in rural areas hinder the realization of such benefits. It recommends that the government prioritise LED in rural areas among other suggestions.

**Keywords:** development; inequality; socio-economic development; South Africa; Investment

#### 1.Introduction

LED is a potentially powerful development tool, but it remains constrained by a number of factors within an African context (Bond 2002). Firstly, although the strategy is now adopted in many African countries, there is no clear or common understanding of the concept. Secondly, there is disagreement concerning whether there should be a uniform or standard approach to LED. Thirdly, there are different approaches on how to achieve LED. Finally, there are questions on what should be the strategic focus of LED overall. These factors appear to be informed by different ideological foundations which underpin how LED as a developmental approach is understood and implemented.

South Africa is one of the few countries in Africa that has been officially implementing LED projects for over a decade (Rodríguez-Pose and Tijmstra 2005). A focus on so-called LED strategies was introduced shortly after the end of Apartheid in 1994. Ever since, the South African government has placed great emphasis on LED projects and poured significant investments into ensuring LED becomes realisable, with the hope that such investments would benefit locals on ground. Despite such emphasis, South Africa has been greatly affected by the shortage of modern infrastructure to support LED. To bridge this gap, the government together with the private sector have prioritised investments in local-level infrastructure. They have come to understand that for economic development to become realisable, there is great need to invest in modern infrastructure (Nahman, Wise and Lange 2009). Within a South African context, the relationship between infrastructure and economic growth has in recent years become one of the most important economic topics in both academic and policy circles. The Accelerated and Shared Growth Initiative (ASGI-SA) as a macroeconomic strategy, for example identified inadequate infrastructure as one of the six most important constraints to growth in South Africa

South Africa is economically not performing as well as it wishes, the tax base is shrinking, corruption is becoming entrenched and unemployment is rising, so is poverty and inequality (Wasserman 2019). With the above, the need to boost LED through infrastructure investment has become great. Griffiths and Lambert (2013) claim that investments in infrastructure need to collaborate with government's efforts to deal with these issues as they hinder economic development. Therefore, this paper explores whether increased investments in infrastructure contribute

towards enhanced local economic development and to understand the extent to which South Africa has prioritised local economic development as a means of allowing locals to have the skills and ability to generate income and become self-sustainable. The purpose was to contextualise the understanding or possible relationship between public investments in infrastructure and local economic development within a South African context, especially since much has been written on the LED and infrastructure provision. Subsequently, thematic content analysis was used to deduce the findings.

The paper acknowledges that LED initiatives have become a beacon of hope for developed countries (USA, UK & South Korea) supported by the availability of modern infrastructure networks. In South Africa, LED is seen as a tool to help government lift millions out of poverty. The question is how would this be achieved against the backdrop of a weak and fragile economy, the acute socioeconomic challenges in rural areas battling to access modern infrastructure?

## 2. Local Economic Development and Infrastructure

We begin by outlining the theoretical perspective on which assumptions in this study are based before discussing the concepts of local economic development and infrastructure investment. Within the context of socio-economic development, there has been great debates and discussions with regards to whether infrastructure provision can spur economic development. For example, Carlsson, Otto and Hall (2013) argue that investments in infrastructure promotes economic growth. The South African government also takes this view. It regards infrastructure development as integral efforts aimed at overcoming poverty and inequality, as well as building environmental sustainability and urban resilience, particularly in the light of rapidly risen urbanization rates. Fedderke and Garlick (2008) identify three channels through which infrastructure can positively influence economic growth. Firstly, they are that good infrastructure can enhance the productive potential of the economy, but in most cases, the political decision-making process often leads to bad decisions on spending, whether for electoral reasons or as a sign of inefficiencies driven by a lack of market discipline (Fedderke and Garlick 2008). Secondly, they argue that infrastructure may simply be regarded as a direct input into the production process; and so the increase in infrastructure as a factor of production would increase the output of the economy as a whole, directly inducing economic growth (Fedderke and Garlick 2008). Thirdly, it is argued that infrastructure can act as a stimulus for factor accumulation. This belief is centred on the argument that human capital formation, for example, is a function of factors such as school facilities and the qualifications of educators. In particular, infrastructure, in the form of schools, roads, and electricity provided to schools, is likely to be an important factor in the human capital production function.

The above arguments have been made also in relation to South Africa in particular (Carlsson, Otto and Hall 2013), where it is said that adequate infrastructure development enhances productivity and economic growth. This leads to an argument that there is a great need for government to invest in infrastructure, despite the sluggish economic growth. Moreover, while South Africa is regarded as Africa's most industrialised country, the country's infrastructure networks have suffered from a long period of poor maintenance, neglect and under investment, which cripple economic development. Therefore, the assumptions of the economic theory concerning infrastructure development underlines the need for South Africa to invest in infrastructure to towards to socio-economic development.

The concept of Local Economic Development (LED) has gained prominence within the economic development discussions after the cold war, but there are differences about the concept. The Makhado Municipality (2005) defines LED as an outcome based on local initiative and driven by local stakeholders; and that it involves identifying and using local resources, ideas and skills to stimulate economic growth and development. Ettlinger (2001) sees it as concerned with the well-being of a place, a locality. Distinct from 'economic development' more generally, local economic development focuses on particular contexts, which vary across space. Rodríguez-Pose and Tijmstra (2005) argue that LED strategies have their origins in the high-income countries of the North as strategies in response to the social and economic problems that resulted from the persistence of locality-specific development problems. For developing regions in the South, LED has been gradually emerging as a development strategy for similar reasons. The persistence of problems of slow economic growth and poverty, combined with the changes in the national and international economic environment, and the inability of many central governments to intervene at the local level have provided a strong impulse towards more locally-based initiatives (RodríguezPose and Tijmstra 2005).

The concept of infrastructure is also defined and understood differently by different schools of thought. One view is that a key distinct feature concerning economic development is that for economic growth to be realisable, there needs to be infrastructure provision that meets the needs of society. Eynon (2016) define infrastructure as basic physical and organisational structures needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. Nijkamp (2000) spoke about infrastructure as material public capital (roads, railways, (air) ports, pipelines etc.) and superstructure meaning immaterial public capital (knowledge networks, communication, education, culture etc.). Infrastructure is a basic requirement for local economic development and the latter cannot succeed if there is inadequate infrastructure available to drive it. In this study, infrastructure is referred to as road, rail lines, maritime routes, buildings etc. In South Africa, local economic development (LED) is seen as one of the most important ways of decreasing poverty. Local economic development must aim to create jobs by making the local economy grow. However, for this to be realisable, it is generally accepted also that it is imperative to develop municipal infrastructure to make it easier for businesses to operate (i.e. houses, transport, roads, water and electricity etc.

#### 3. Historical and Current Overview of Infrastructure Investments in SA

The discovery of diamonds in 1867, which gave rise to urbanisation and industrialiation played an important role in the early development of South Africa's railway infrastructure. According to De Kock (1936), Kimberley's population and wealth grew rapidly in the 1870s and 1880s, and this exposed the constrains of poor transport, logistical and storage services (Bardill 2019). Similarly, the discovery of gold on the Witwatersrand in 1886 had a marked effect on the railways development, as it generated both demand for transport services and the revenues with which to finance them (Perkins, Fedderke and Luiz 2005). Pieterse (2009) highlights that in apartheid SA, the government made significant investments in infrastructure, particularly to serve the white minority. In making these choices, consumption expenditure on education, healthcare, housing, municipal services and welfare for the majority of the population was sacrificed to facilitate the development of infrastructure for a privileged minority,

an extractive economy and a security state (Department of Planning, Monitoring and Evaluation 2014). Fourie (2006) argues that despite its racist policies and unfair treatment of the majority, the government did ensure the development and consolidation of infrastructure (which was mainly located in urban areas) that was central for ensuring the growth of the country, although it was meant to serve the minority. Infrastructure expenditure during the apartheid years was relatively high as a percentage of GDP (Department of Planning, Monitoring and Evaluation 2014). One may expound that the apartheid government envisioned a developed South Africa, hence, they saw investments in infrastructure as key to enabling the country to exploit the vast regional possibilities that were available. The Department of Planning, Monitoring and Evaluation (2014) nevertheless, remarked that from 1948 to 1976, the apartheid government had been able to ensure the steady inflow of investments, which were then channelled to ensure infrastructure development.

But the uprising of black youth in 1976 resulted in a considerable decline in investments and this meant that the state of infrastructure could not support faster economic growth or growth that was more diversified. Anríquez and Stloukal (2008) in their study "Rural Population Change in Developing Countries: Lessons for Policymaking" argue that within a global context, many people are located or reside in rural areas and are deprived of service delivery, and in most cases excluded in the planning and implementation of policies aimed at spurring development, as evident with the infrastructure policies of the apartheid government.

The relationship between an economy and its economic infrastructure is analogous to that between a building and its foundation (Perkins, Fedderke and Luiz 2005). Economic infrastructure typically exists not for its own sake, rather to support various kinds of economic activity. South Africa's fiscal choices since 1994 have contributed positively to gross domestic product's (GDP) growth rates, improved welfare and standards of living, and access to bulk economic infrastructure by a majority of the population (Perkins, Fedderke and Luiz 2005). The country has made remarkable progress in reducing poverty and inequality, though it still faces tremendous shortfalls in economic and social infrastructure. Cross (2001) highlights a great need for the South African government to address the limited availability of infrastructure in rural areas. The government acknowledges that in metropolitan cities, despite the huge inflow of people from

rural areas, infrastructure availability was observable, whereas rural people are greatly disadvantaged as they do not have access to infrastructure.

To address this shortfall, the new democratic government set about reversing the declining post-1976 investment trend, correcting the imbalances in the infrastructure sector, and embarking on reconstruction and development (Department of Planning, Monitoring & Evaluation 2014). In the period from 1994 to the early 2000s, the government focused on increasing access to social and household infrastructure through the provision of housing, schooling and healthcare, and connecting households to electricity grids and water networks. Other expenditure was aimed at improving the welfare of households who were located in rural areas and were seen as being disadvantaged (Department of Planning, Monitoring & Evaluation 2014). To ensure the development of such, the African National Congress government came with the RDP (Reconstruction and Development Programme) programme meant to guide economic and social development including the provision of services and the development of infrastructure in places that were previously neglected.

The RDP's approach, in short, was to ensure that essential service needs were met through vast increases in government subsidies when the market failed, and by mobilising additional resources through partnerships, more forcefully tapping capital markets, and via off-budget methods (Bond 2002). This was the government's overarching mandate in the area of infrastructure and services. The Department of Planning, Monitoring & Evaluation (2014) noted that the government knew the important role that could be played by infrastructure in contributing towards local economic development, especially for those who are located in rural areas. By 2004, an estimated 1.6 million subsidized houses, about 56 000 new classrooms and 38 000 school toilets had been built, with 2 700 more schools receiving potable water, and about 4 000 more schools got connected to the electricity grid (The Department of Planning, Monitoring & Evaluation 2014).

Furthermore, health services reached new areas with the construction of over 700 new clinics, the upgrading of an additional 212 clinics, the purchase of 215 mobile clinics, and the re-equipping of 2 298 clinics. Three new modern tertiary hospitals with over 2 000 beds were also constructed under the Hospital Rehabilitation and Reconstruction Programme, and R1.6 billion was spent on 492 projects to improve 141 hospitals. The government provided basic water

supply to over 9 million more people, gave access to basic sanitation to 6.4 million more people, and about 4 million more electricity connections were made to poor households (The Department of Planning, Monitoring & Evaluation 2014). Despite government's pledge to ensure the rollout of infrastructure needed to support local economic development, there is a notion within the political arena that infrastructure must align with investments flowing into the country, and central to this is that one cannot just pour resources into infrastructure development without the necessary investments to ensure their effective utilisation (Mabugu 2016/2017).

In addition, Hemson, Meyer and Maphunye (2004) assert that while there is a great need for infrastructure development, there is a great need to also clearly delineate the types of infrastructure needed and how it could spur local economic development, especially in rural areas. Rodríguez-Pose and Tijmstra (2005) note that LED is more about ensuring that people have the means to ensure self-development and self-sustainability, and from a rurality perspective, the type of infrastructure needed varies, hence the government ought to research these trends rather than assuming a particular model of LED will fit all. This would also ensure that government does spend money on projects that do not have considerable return on investments. The government has prioritised spending on infrastructure as a means to boost growth according to the National Development Plan (NDP), which required a staggering R847-billion in public infrastructure investment, in particular, the transport and electricity sectors (Tancott 2014).

Noticeably, this allocation was revised downwards by R34.2-billion, to R813.1-billion in the 2015 budget because of lower-than-anticipated economic growth and the need to contain expenditure. Infrastructure development is central to the NDP, and so high levels of investment in infrastructure will continue into the foreseeable future (Pule 2014). The government has identified 7 key interventions relating to the provision of infrastructure; these include geographic, spatial, energy, social infrastructure, knowledge, regional integration, and water and sanitation. The government argued that between 1990 and 1992, South Africa's economy experienced negative growth because of a combination of domestic protests and industrial action, as well as international sanctions and slow export demand from major trading partners (Levy 1999).

It becomes highly evident that the government has committed itself to

ensuring the provision of new and modern infrastructure, the maintenance and upgrading of decaying infrastructure. Prinsloo (2019) argue that the quest to ensure infrastructure provision in a developing economy like South Africa should not be left in the shoulders of the government alone, rather a conducive environment must be created to allow private stakeholders to also partake in such. Rodríguez-Pose and Tijmstra (2005)contends that within a global context, there have been emerging debates and arguments regarding the relationship between the availability of infrastructure and local economic development, central to this being that governments must not just invest in infrastructure development without seeing the benefits that might arise from such. Others have argued that without infrastructure the realisation local economic become a pipe dream. This suggests that there is a great need to ensure a balance between the two, giving rise to the question: to what extent has South Africa ensured this balance in its quest to ensure local economic development, especially since the country is still confronted by issues of poverty, rising inequality and unemployment.

## Infrastructure investments and the local economic development: the role of government

There has been increased academic debate regarding the connection between local economic development and the steady inflow of investment into infrastructure development, especially in developing regions. Central to debate is the notion that LED has the ability to ensure locals have the power to become job creators, stimulate the local economy and alleviate the burden from the government in terms of job creation and poverty eradication (Dyosi 2016). While there has been different opinions and thoughts regarding the possibility of such, scholars have agreed that that for developing regions, local economic development can be a catalyst for local development, but this would need a sustained inflow of investments (Trotter 2003). There are studies that have reported a positive relationship between infrastructure development and LED growth. For example, Calderón and Servén (2008) in their study titled "Infrastructure and Economic Development in Sub-Saharan Africa" established linkages between infrastructure and economic development, and concluded that infrastructure development is associated with both higher growth and lower inequality. They also found that while infrastructure made a large contribution to reducing inequality in East and South Asia, the impact was relatively modest in SSA due to poor quality of infrastructure.

A study by Osakwe et al (2018) concluded that Africa has infrastructure programmes that have the potential to lead to trade diversification and stimulate economic development. Seetanah et al (2009) found that there is a positive relationship between infrastructure development and poverty reduction, owing to the fact that when people have access to infrastructure platforms such as rail, roads and communication platforms, it creates an avenue for entrepreneurship and local business development. Ma (2005) highlighted that a classical example that highlights an investment-led economy is China, whose fast economic growth was supported by increase in local economic development through the establishment of small entrepreneurship ventures and the provision of training and capacitation workshops. Meyer (2014) notes that despite such, the case might be extremely different for developing regions where there is no steady economy or a conducive business environment that is free from conflict, rampant corruption and political instability. Shiferaw (2017) using an example of Ethiopia found that infrastructure development and economic growth in Ethiopia has led to improved aggregate productivity, induced economic growth, and contributed considerably to local economic development.

In Nigeria after 2015, the administration of President Muhammadu Buhari made infrastructure key to its growth strategy. The administration promised to create a \$25 billion infrastructure fund to help revitalize local industries if local goods become cheaper than imports. Thurston (2015) opines that central to this argument is that investment in local infrastructure in Nigeria would not only create jobs, but it would also result in a situation where locals to play a bigger role in the economy. However, the quest to ensure infrastructure development in Africa has seen many governments become indebted to foreign financiers without improving the developmental prospects for a country. For example, Athumani (2019) argues that Uganda's auditor-general warned in a report that public debt from June 2017 to 2018 had increased from US\$9.1 billion to US\$11.1 billion as a result of huge amounts of loans to finance infrastructure development. In Kenya, China is the largest lender, accounting for 72% of all its foreign debts. Kenya was to spend a staggering KSh 800 billion (US\$ 8billion) in 2019 to service its debts, becoming the third indebted country behind Angola and Ethiopia. Like Uganda, there are several African states which have seen an

increase in debt because of the huge need to ensure infrastructure development, for example, South African infrastructure projects have received \$2,2 billion from Chinese lenders since 2014 (McKenzie 2018).

In 2018, South Africa's Deputy Minister of Cooperative Governance and Traditional Affairs Andries Nel explained that the infrastructure investments needed in South Africa far exceeded the available fiscal resources (Frankson 2018). The South African Financial and Fiscal Commission (FFC) noted that in order for South Africa to get its infrastructure to suitable standards, an additional R4 billion per sector would be required yearly for five years in the case of water and sanitation, and for just less than seven years in the case of electricity (Frankson 2018). The deputy minister suggested that there is a positive connotation between infrastructure spending and economic development. Physical infrastructure is a critical enabler of faster, inclusive and sustainable economic growth. Addressing the BRICS Friendship Cities, Local Government Cooperation and Urbanization in June 2018, President Cyril Ramaphosa embarked on a drive targeting US\$100 billion in investment over five years. Despite the drive to ensure the inflow of investments towards the country infrastructure development, the rate of skills development undermines utilisation of investment (Mbatha 2018). Kamara (2017) explicates that the success of LED initiatives depends on the role that can be played by government, so the consolidation of democratic values and good governance is central to ensuring that foreign direct investments needed for infrastructure development is realisable.

The South African government believes that Local Economic Development (LED) as an approach to economic development allows and encourages local people to work together to achieve sustainable economic growth and development thereby bringing economic benefits and improved quality of life for all residents in a residing in local municipalities. Businesstech (2018) concludes that despite national government emphasis on LED in South Africa, the major custodians and implementing agents are local municipalities, and in South Africa, local governance is currently at crossroads. For example, Tshwane Metro Municipality (2019) reported that it already owed R23.4-billion to service providers. Defaulting on these obligations would weaken the public-sector balance sheet. This then impacts negatively on the ability of municipalities to effectively ensure local economic development. This brings to the fore the issues of financial management and procurement control in local municipalities as a

skilled capacity needed to develop, implement and sustain LED projects in their areas of jurisdictions.

## 5. Infrastructure development, the private sector and LED in South Africa

Infrastructure development as a driver of economic growth remains central to the development agenda of every African country. Yet a significant infrastructure financing deficit – estimated at between US\$68 billion and US\$108 billion annually is holding back infrastructure development on the continent (Prinsloo 2019). To bridge this deficit, copious dialogues and policymaking efforts are made to attract private financiers – corporates, infrastructure funds, pension funds and sovereign wealth funds, among others – to infrastructure investment opportunities. From an international perspective, the activity of LED has been viewed as a combined endeavour of all key stakeholders in a locality, namely the local government, the public sector, the community and the private sector. Therefore, the quest to ensure infrastructure development to promote LED is not a prerogative of the government alone (Rogerson, & Rogerson, 2010). The economy must enable this cooperation. However, Wasserman (2019) notes that SA's economy shrank by an appalling 3.2% in the first quarter of this year compared to the last quarter - the worst performance in a decade. In another view, weak levels of investment and load-shedding wreaked havoc across the economy (the cumulative cost of load shedding to South Africa's economy in 2019 was between R59bn and R118bn, according to the Council for Scientific and Industrial Research. Within the global business sector, there is a shared consensus that public-private sector partnerships are important for local economic growth. Mbele (2018) posits that some economists and analysts in South Africa have argued that the government has not done enough to warrant the establishment of a welcoming environment for businesses, rather has allowed political and economic uncertainty to cloud the need for private sector investment and their involvement in the consolidation of LED. Mbele (2018) laments the fact that South Africa's uncertain political climate has hindered its ability to attract steady investments in Infrastructure. du Plooy (2018) establishes that the private sector has realised that it cannot depend on the government for infrastructure development; hence it has to ensure there is collaboration in this regard.

During the years of early years of democratic South Africa, infrastructure funding was largely provided by the national government. Parastatal companies also undertook infrastructure development in some sectors. Nevertheless, since the 2000s, there has been a greater role been played by the private sector in supporting the government and the government has seen reciprocal to such support. This is evident through the National Infrastructure Plan in 2012, which was adopted by the South Africa government to enable the role of the private sector (du Plooy 2018). For example, Borha (2018) shows that Ethiopia is attracting foreign investment in infrastructure and manufacturing and pursuing further diversification of its economy through tourism. Senegal's government is driving growth by building infrastructure vitally needed to improve living standards, support the growth of the private sector and attract foreign investors, while simultaneously strengthening its public finances. Publicprivate partnerships (PPPs) have proven successful vehicles in driving sustainable infrastructural develop on the continent. They harness governments' ability to break down bureaucracy and to design supportive policy and regulations, while leveraging private-sector funding, skills and technology to deliver the large-scale infrastructure projects needed to the South African economy (Borha 2018).

South African president Cyril Ramaphosa has highlighted that central to his developmental goals is to ensure the availability of infrastructure with the assistance of the private sector. The president's call was indeed answered by the private sector in Johannesburg in 2018, when it pledged to invest nearly R290 billion into the South African economy, to spur economic development, create jobs and stimulate economic growth (Craker 2018). Statistics South Africa (2018) reported that the total turnover for private sector enterprises operating in the South African economy increased by 6,0% to R9 369 199 million (R9,4 trillion) for 2017 from R8 836 493 million (R8,8 trillion) in 2016, which then created an avenue for government to join forces with the private sector. Conversely, there are challenges which may hinder the country's quest for LED through infrastructure development, nevertheless, a collective approach maybe the answer to answering these challenges.

## 6. Barriers Impeding Effective Infrastructure and LED Provision in South Africa

Delivering his 2019 budget South African Finance Minister, Tito Mboweni, explained that state-owned enterprises (SOEs) posed a "very serious risk" to the fiscus, arguing that they had become a huge liability that was impeding infrastructure development. Omarjee (2019) highlights that infrastructure development in South Africa is undertaken by the government through state-owned enterprises. However, in 2018 alone, government guarantees to SOE's increased by R51.5bn. For example, the government allocated R50bn to power utility Eskom, R1bn to arms manufacturer Denel, and R6.2bn to its national carrier, South African Airways (SAA). Local economic development has become difficult to entrench as funds meant for such have ended up being used to bailout under-performing SOE's. Furthermore, this means SOE's cannot facilitate infrastructure development because corruption and financial mismanagement have eroded their ability to undertake such.

In his budget speech in parliament in May 2018, former Cooperative Governance and Traditional Affairs Minister, Zweli Mkhize, said that 87 municipalities – about a third of South Africa's total of 257 – were 'dysfunctional or distressed' due to two set of problems. One set is systemic and relates to the size and structure of municipalities; the other is mismanagement due to 'political instability or interference, corruption and incompetence' (Brand 2018). Brand (2018) therefore argues that if local municipalities are failing to deliver basic services, it becomes impossible for them to effectively implement LED projects as such projects need funding and human capacity. LED initiatives are in the custody of municipalities as they act an implementing agent on behalf of national government. While the national government may act as a support structure, it is local municipalities that are tasked with ensuring the provision of a conducive environment essential for LED to thrive. But corruption and mal-administration are some of the inhibitors to local government's capacity, seriously hampering the consolidation of LED at a local level.

Sadly, South Africa's economy is in tatters as government debt keeps increasing and the tax base is shrinking. This means the government will battle to have enough money to finance the construction of infrastructure (Fin24 2016), and in turn little money will be distributed to local municipalities, which may ultimately

lead to difficulty in ensuring growth and consolidation of LED projects. Therefore, despite the need for modern infrastructure and the entrenchment of LED, to a great extent, these are tied to the growth of the country. Under current economic conditions, it will be difficult, if not impossible for the government to invest the necessary amount of money in order to boost infrastructure development, which is needed to ensure local economic development.

### 7. LED as a Catalyst for Local Economic dCvelopment Globally

Across Africa, LED strategies may offer a more people-centred and locality specific alternative to the structural adjustment programs that have dominated the development policy panorama for Africa in the past decades. Rodríguez-Pose and Tijmstra (2005) notes that LED strategies have their origins in the highincome countries of the North, where countries realised the need to ensure that people at the lower part of the socioeconomic ladder were capacitated in terms of knowledge and sufficient training in order to spur socio-economic development. For example, Rodrik (2014) asserts that through the implementation of robust programs and oversight mechanisms, India sustained rapid growth of GDP for most of the last two decades leading to rising per capita incomes and a reduction in absolute poverty. This saw LED become central to India's development. In the United States, emphasis on local economic development is seen as key in propelling youth entrepreneurship and creativity to such as extent that the US government started issuing out grants and other kinds of support for LED projects that seek to create job opportunities (Diseko 2014). Weisbrot, Johnston and Lefebvre (2014) highlights that Brazil experienced a period of economic and social progress between 2003 and 2014, when more than 29 million people were lifted from poverty and inequality declined significantly and the income level of the poorest 40% of the population increased by an average of 7.1% (in real terms) between 2003 and 2014.

The author attributed this to the policies of former president Lula da Silva who was keen on the bottom-up approach to local development. The government would provide resources, but the people would be in charge and would be the drivers of LED projects. The World Bank also established that Malaysia successfully diversified its economy from one that was initially agriculture and commodity-based to one that now plays host to robust manufacturing and

services sectors that have propelled it to become a leading exporter of electrical appliances, electronic parts and components (The World Bank 2019). Malaysia's growth was aided by the government's emphasis on local economic development and ensuring that locals have the resources to start-up small businesses. The government, in turn, steps in and helps locals to acquire the skills and business acumen they require to ensure success. The Gulf Times (2017) found that the state of Qatar continues to support and empower small- and medium-sized projects in response to its current and future needs with the best international quality standards to support the national economy. The country aims to speed up the growth rate of small- and medium-sized industries, which have a greater ability to increase the contribution of the industrial sector to GDP.

Nghonyama (2011) suggests that there is a great difference in terms of how LED is viewed in Africa in comparison with the rest of the world. In Africa, LED has been identified with self-reliance, survival, and poverty alleviation, rather than participation in the global economy, competitiveness, and finding market niches and this hinders its growth and consolidation. Similarly, LED strategies present a number of potential social and economic benefits. Such strategies combine an economic and social dimension that is frequently hard to identify in traditional development strategies. LED seeks to join the objectives of generating sustainable growth and addressing the needs of the poor in the territories in which it operates (Rodríguez-Pose and Tijmstra 2005). The fact that the local government mainly develops LED strategies and with the availability of broad range of local stakeholders means that LED strategies can help empower local societies and dynamise local resources. LED strategies allow local people to adopt a more proactive stance with regards to their own future, even if they are living in areas of the world that recently had little say or control over the economic activities that take place in their territory (Rodríguez-Pose & Tijmstra 2005). Therefore, looking at the benefits associated with LED shows that from a South African perspective, there is great need to overcome challenges that are impeding the consolidation of LED.

## 8. Infrastructure and LED Provision in South Africa: Future Prospects

There is no doubt that South Africa is challenged in terms of having the required infrastructure. While the government is swimming in huge pools of debt and

it cannot be able to increase its spending on infrastructure; the private sector can only play a role to a certain extent as it is also very much dependent on economic growth and a conducive business environment, requirements which have been weak in South Africa. The negative rates of growth have reduced government's income, and this has coincided with a poor business environment, which is failing to attract the necessary investments. Moreover, the financial mismanagement prevalent at local municipalities has not helped consolidate LED projects, rather locals have failed to benefit from government's assurance that LED will contribute toward a better standard of living for the people.

Going forward, South Africa's economic direction looks very much uncertain, and with weak growth, corruption and the disintegration of state-owned enterprises, these have further pressured government resources, which are already strained. Nonetheless, despite the existence of such challenges the private sector and government have emphasised the need to work together to promote the idea of local economic development through capacitating the locals and providing avenues, which they use to upgrade their skills. Importantly, no matter the extent of cooperation between government and the private sector, if local municipalities are ridden with corruption and ill-equipped to handle the consolidation of LED, with whatever amount of infrastructure and finance allocated, South Africa will battle to entrench LED as an income-generating activity and poverty alleviation tool.

## 9. Concluding remarks

The study argues that inadequate infrastructure hinders economic development. The government has also conceded that lack of proper infrastructure is hindering development because infrastructure development is integral to overcoming poverty and inequality. The development of infrastructure can have a positive contribution to economic growth. The first production-based theory proposed suggests that the provision of more infrastructure would bring a high throughput of the economy and directly lead to economic growth. The second posits that infrastructure can play a good or bad role in terms of development. On the one hand, it may result in massive costs while on the other it may raise productivity. Thirdly, good infrastructure can lead to enhanced human capital formation. Crucially, appropriate infrastructure such as schools, road networks

and electricity all contribute to a conducive learning environment which in turn makes learners' performance to be excellent. Meanwhile, LED can be realised mainly by developing the infrastructure within local communities so that businesses and organisations are able to operate and offer services to the people. Historically, infrastructural development was prioritised unequally in South Africa, and therefore had consequences such as the inability to access infrastructure by the majority. However, this has taken a positive turn since the dawn of democracy in 1994 when the South African government's main priority was to increase access to social and household infrastructure, including clinics, schools, roads, and housing.

Through various initiatives, democratic South Africa showed commitment to provide infrastructure to the previously disadvantaged, pursue local development. South Africa accepted that there is a positive relationship between infrastructure development and the reduction of poverty, but inverse there is a negative relationship between inadequate infrastructure and LED. This is generally accepted view in developed countries, developing countries and in Africa. However, one factor hindering the consolidation of LED in African states is the huge debts that African countries have incurred while trying to develop their infrastructure. This has in turn undermined the sovereignty of several African states.

In South Africa, economic development is overshadowed by factors such as sluggish economic growth, high levels of unemployment, issues of corruption especially in local government and lack of accountability. In order for economic development to thrive, investors need to be certain that the issues such as those raised above can be managed. In that way, local economic development can reach the local people and create opportunities for them. As much as South Africa aimed to provide infrastructure services to the people, there is still a demand that exceeds the available resources. There is a great need for local government to ensure the effectiveness of the LED projects and ensure that infrastructure provision is guaranteed for all.

#### References

- Anríquez, G and L Stloukal (2008), "Rural Population Change in Developing Countries: Lessons for Policymaking", European View, Vol 7, No 2, pp 309-317.
- Athumani, H (2019), "Uganda Not Worried China Will Seize Assets Over Rising Debt". (Available at. https://www.voanews.com/africa/uganda-not-worried-china-will-seize-assets-over-rising-debt, accessed 20 May 2019).
- Bardill, J (2019), Lesotho: Dilemmas of Dependence in Southern Africa. Abingdon: Routledge.
- Beyer, A, Peterson, Cand Sharma A (2003), "The role of participation and partnerships in local economic development in Africa". (Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.199.2850&rep=rep1&type=pdf, accessed 20 May 2019).
- Bond, P (2002), Local Economic Development Debates in South Africa. Kingston: CA: Queen's University.
- Borha, S (2018), "Africa's Infrastructure Gaps are an Investment Opportunity Waiting to Happen". (Available at https://www.businesslive.co.za/bd/opinion/2018-11-09-africas-infrastructure-gaps-are-an-investment-opportunity-waiting-to-happen/, accessed 27 June 2019.)
- Brand, D (2018), "South Africa is Paying A Heavy Price for Dysfunctional Local Government". (Available at https://theconversation.com/south-africa-is-paying-a-heavy-price-for-dysfunctional-local-government-102295, accessed 29 June 2019).
- Businesstech (2018), "The Provinces and Municipalities in South Africa where Corruption is most Reported: study". (Available at https://businesstech.co.za/news/government/263657/the-provinces-and-municipalities-in-south-africa-where-corruption-is-most-reported-study/, accessed 06 June 2019).
- Calderón, C and L Servén (2010), "Infrastructure and economic development in Sub-Saharan Africa", Journal of African Economies, Vol 19, No 2, pp 113-187.
- Carlsson, R., Otto, A. and J Hall (2013), The role of Infrastructure in Macroeconomic Growth Theories. Civil Engineering and Environmental Systems, 30(3-4), pp 263-273.
- Clark, J (2008), "Developing Collaborative Leadership: A Study of Organisational Change toward Greater Collaboration and Shared Leadership", Doctoral dissertation, Antioch University, Ohio.

- Craker, A (2018), "Opinion: Private sector's R290bn kick-start spurs investment". (Available at: https://www.iol.co.za/business-report/opinion/opinion-private-sectors-r290bn-kick-start-spurs-investment-17820964, accessed 19 May 2019).
- Cross, C (2001), "Why does South Africa need a Spatial Policy? Population Migration, Infrastructure and Development", Journal of Contemporary African Studies, Vol 19, No 1, p 111-127.
- Department of Planning, Monitoring and Evaluation (2014), "Infrastructure". (Available at: dpme.gov.za/publications/Policy%20Framework/Discussion%20 document%20PME%2027%20October%202014%20final.pdf, accessed 20 June 2019).
- Diseko, M (2014), "Local Economic Development and Local Government: Strategic Considerations", Doctoral dissertation, University of KwaZulu-Natal, Durban.
- du Plooy, M (2018), "Rethinking the Value of Infrastructure in South Africa". (Available at https://m.engineeringnews.co.za/article/rethinking-the-value-of-infrastructure-in-south-africa-2018-06-21, accessed 19 May 2019).
- Dyosi, F (2016), "A Study of Local Economic Development in the Town of Stutterheim", Doctoral dissertation, University of Cape Town, South Africa.
- Ekpung, E (2014), "Trends Analysis of Public Expenditure on Infrastructure and Economic Growth in Nigeria", International Journal of Asian Social Science, Vol 4, No 4, pp 480-491.
- Ettlinger, N (2001), "Local Economic Development". (Available at https://www.sciencedirect.com/topics/social-sciences/local-economic-development, accessed 18 November 2019).
- Eynon, J (2016). Construction manager's BIM Handbook. John Wiley & Sons: Hoboken.
- Fedderke, J and R Garlick (2008), "Infrastructure development and economic growth in South Africa: A review of the accumulated evidence", Policy paper: No 12.
- Fin24, (2016), "SA's Low Economic Growth Shrinking Tax Base". (Available at https://www.fin24.com/Economy/sas-low-economic-growth-shrinking-tax-base-20160209, accessed 12 May 2019).
- Fourie, J (2006), "Some Policy Proposals for Future Infrastructure Investment in South Africa". (Available at: https://www.ekon.sun.ac.za/wpapers/2006/wp052006/wp-05-2006.pdf, accessed 20 July 2019).

- Frankson, L (2018), "SA's Infrastructure Needs Exceed Available Fiscal Resources

  Nel". (Available at: https://infrastructurenews.co.za/2018/07/03/sas-infrastructureneeds exceed available fiscal resources pel/\_accessed\_14\_ July
  - infrastructure-needs-exceed-available-fiscal-resources-nel/, accessed 14 July 2019).
- Gratton, C and I Jones (2010), Research Methods for Sports Studies. Abingdon: Routledge.
- Griffiths, J and Lambert R (2013), Free Flow: Reaching Water Security through Cooperation. Paris: UNESCO.
- Gugerty, M and J Stern (1996), "Structural Barriers to Trade in Africa". East Asia Vol 8, pp 14-1.
- Gulf times (2017), "Qatar strategy to speed up growth of local industries". (Available at https://m.gulf-times.com/story/561345/Qatar-strategy-to-speed-up-growth-of-local-industries, accessed 17 July 2019).
- Hemson, D, Meyer, M and K Maphunye (2004). Rural Development: The Provision of Basic Infrastructure Services. Pretoria: HSRC Press.
- Jouanjean, M, Gachassin, M and D te Velde (2016). Regional Infrastructure for Trade Facilitation–Impact on Growth and Poverty Reduction. London: UK: ODI.
- Kahika, G and G Karyeija (2017), "Institutional roles and the implementation of Local Economic Development, Kasese District, Uganda", Africa's Public Service Delivery and Performance Review, Vol 5, No 1, pp 1-9.
- Kamara, R (2017), "Creating enhanced capacity for Local Economic Development (LED) through collaborative governance in South Africa". (Available at https://scholar.sun.ac.za/handle/10019.1/102461, accessed 13 May 2019).
- Kodongo, O and K Ojah (2016), "Does Infrastructure really explain Economic Growth in Sub-Saharan Africa?", Review of Development Finance, Vol 6, No 2, pp 105-125.
- Koma, S (2014), "Developmental Local Government with reference to the implementation of Local Economic Development Policy", Doctoral dissertation, University of Pretoria, South Africa.
- Levy, P (1999), "Sanctions on South Africa: what did they do", American Economic Review, Vol 89, No 2, pp 415-420.
- Ma, L (2005), "Urban Administrative Restructuring, Changing Scale Relations and Local Economic Development in China", Political Geography, Vol 24, No 4, pp 477-497.

- Mabugu, R (2016/2017), "Responding to South Africa's Infrastructural Challenges," (Available at https://www.gov.za/, accessed 24 June 2019.)
- Makhado Municipality (2005), "Introduction to local economic development," (Available at www.makhado.gov.za, accessed 13 December 2019.)
- Markle-Reid, M, Dykeman, C, Ploeg, J, Stradiotto, C, Andrews, A, Bonomo, S, Orr-Shaw, S. and Salker N (2017), "Collaborative leadership and the implementation of community-based fall prevention initiatives: a multiple case study of public health practice within community groups", BMC health services research, Vol 17, No 1, pp 141.
- Mbatha, A (2018), "South African President Evokes Mandela in Call for Graft Fight". (Available at https://www.bloomberg.com/news/articles/2018-10-23/south-african-president-evokes-mandela-in-call-for-graft-fight, accessed 18 June 2019).
- Mbele, S (2018), "Beware the Foreign Direct Investment trap". (Available at https://www.dailymaverick.co.za/opinionista/2018-09-14-beware-the-foreign-direct-investment-trap/, accessed 18 June 2019).
- McKenzie, B (2018), "Chinese lending for African infrastructure trebles, led by policy banks". (Available at: https://www.polity.org.za/article/chinese-lending-for-african-infrastructure-trebles-led-by-policy-banks-2018-07-27, accessed 27 June 2019).
- Meyer, D (2014), "Local economic development (LED), challenges and solutions: The case of the northern Free State region, South Africa", Mediterranean Journal of Social Sciences, Vol 5 No 16, p 624.
- Mitullah, W.V, Samson, R, Wambua, P and S Balongo (2016), "Building on progress: Infrastructure development still a major challenge in Africa". (Available at: https://afrobarometer.org/publications/ad69-building-progress-infrastructure-development-still-major-challenge-africa, accessed 06 June 2019).
- Moyo, T (2016), "Promoting Industrialisation in Mauritius, South Africa and Botswana: Lessons for the Future," Africa Development, Vol 41, No 3, pp 139-163.
- Nahman, A, Wise, R and W Lange (2009), "Environmental and Resource Economics in South Africa: Status quo and lessons for Developing Countries", South African Journal of Science, Vol 105, No 9-10 pp 350-355.
- Nghonyama, M (2011), "The Sustainability of Local Economic Development Projects in Thulamela Municipality in the Vhembe District of the Limpopo

- Province:", Doctoral dissertation, University of Limpopo, Turfloop Campus, South Africa.
- Nijkamp, P (2000), Infrastructure and Suprastructure in Regional Competition: A deus ex machina? in Regional Competition. Berlin: Springer.
- Omarjee, L (2019), "Mboweni: Does SA really needs state-owned enterprises". (Available at: https://www.fin24.com/Budget/mboweni-does-sa-really-need-state-owned-enterprises-20190220, accessed 17 June 2019).
- Osakwe, P, Santos-Paulino, A, and Dogan B (2018), "Trade Dependence, Liberalization, and Exports Diversification in Developing Countries," Journal of African Trade, Vol 5, No 1-2, pp 19-34.
- Perkins, P, Fedderke, J, and Luiz, J (2005), "An Analysis of Economic Infrastructure Investment in South Africa", South African Journal of Economics, Vol 73, No 2, pp 211-228.
- Pieterse, E (2009), "Post-apartheid Geographies in South Africa: Why are urban divides so persistent. Interdisciplinary Debates on Development and Cultures: Cities in Development—Spaces, Conflicts and Agency". (Available at https://www.africancentreforcities.net/wp-content/uploads/2013/10/post-apartheid\_geographies\_pieterse\_15dec09.pdf, accessed 12 June 2019).
- Prinsloo, C (2019), "The Pitfalls of Private Sector Investment in Infrastructure Financing. SAIIA". (Available at https://saiia.org.za/research/the-pitfalls-of-private-sector-investment-in-infrastructure-financing, accessed 07 June 2019).
- Pule, A (2014), "Unpacking the National Development Plan". (Available at: https://www.vukuzenzele.gov.za/unpacking-national-development-plan", accessed 03 May 2019.)
- Rodríguez-Pose, A and Tijmstra S (2005). Local Economic Development as an alternative approach to economic development in Sub-Saharan Africa. A report for the World Bank, World Bank. Washington DC.
- Rodrik, D (2014), "The Past, Present, and Future Of Economic Growth", Challenge, Vol 57, No 3, pp 5-39.
- Rogerson, C and J Rogerson (2010), "Local Economic Development in Africa: Global Context and Research Directions", Development Southern Africa, Vol 27, No 4, pp 465-480.
- Seetanah, B, Ramessur, S. and S Rojid (2009), "Does Infrastructure Alleviate Poverty in Developing Countries", International Journal of Applied Econometrics and Quantitative Studies, Vol 6, No 2, pp 31-36.

- Shiferaw, A (2017), "Productive Capacity and Economic Growth in Ethiopia", New York City: United Nations Department of Economics and Social Affairs.
- Statistics South Africa (2018), "Private sector companies record turnover increases". (Available at: http://www.statssa.gov.za/?p=11779, accessed 14 July 2019).
- Tancott, G (2014), "National budget: R847 billion for infrastructure". (Available at https://infrastructurenews.co.za/2014/02/27/national-budget-r847-billion-for-infrastructure/, accessed 13 July 2019).
- The South African Government agency (2018), "SA needs billions for infrastructure investments", (Available at https://www.sanews.gov.za/south-africa/sa-needs-billions-infrastructure-investments, accessed 12 January 2020).
- The World Bank (2019), "Malaysia". (Available at https://www.worldbank.org/en/country/malaysia/overview, accessed 18 June 2019).
- Thurston, A (2015), "Nigeria and Ethiopia Bet Big on Infrastructure, but Will It Work". (Available at https://www.worldpoliticsreview.com/articles/17353/nigeria-and-ethiopia-bet-big-on-infrastructure-but-will-it-work, accessed 31 July 2019).
- Trotter, D (2003), "Achieving Local Economic Development Through Natural Resource-based Tourism in KwaZulu-Natal", Doctoral dissertation, University of Natal, South Africa.
- Tshwane, T (2019), "Fraud, Poor Governance' Cause Municipal Crisis". (Available at https://mg.co.za/article/2018-10-26-00-fraud-poor-governance-cause-municipal-crisis/, accessed 01 August 2019).
- Wasserman, H (2019), "SA's economy is shrinking at an alarming rate and only oranges and interest rates are offering hope". (Available at https://www.businessinsider.co.za/economic-growth-first-quarter-of-2019-2019-6, accessed 12 May 2019).
- Weisbrot, M, Johnston, J, and S Lefebvre (2014), "The Brazilian Economy in Transition: Macroeconomic Policy, Labor and Inequality", London: UK:Center for Economic and Policy Research