RESEARCH ARTICLE

An Exploration of the Localization of the Sustainable Development Goals (SDGS) in Municipalities: A Case of South African Municipalities

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Abstract

The slow pace within which the Millennium Development Goals (MDGs) targets were achieved necessitated that 193 United Nations (UN) member states develop the Agenda 2030 popularly known as the Sustainable Development Goals (SDGs). Whilst many developed countries find it easy to implement the SDGs, underdeveloped and developing countries such as South Africa will inherently find it difficult to implement the SDGs. The ambitious United Nations Sustainable Development Goals (SDGs) have been criticized for being universal, broadly framed, inconsistent and difficult to quantify, implement and monitor. The burden of implementation will be worse when it comes to local governments or municipalities which are faced with service delivery challenges on daily basis. Many proponents of SDGs believe that the success of the implementation of the SDGs lies in successful localization at the municipal level. It is for this reason that this study explored the localization of the SDGs in South African Municipalities. It looked at the theoretical framework of the SDGs. It used qualitative research design and employed semi-structured interviews to gather information from senior managers in local government across South Africa. The study found that some municipalities do have Institutional Frameworks, processes and plans to localize the SDGs however the level of implementation is still very low and needs to be intensified hence an implementation model is recommended by this study.

Keywords: Sustainable Development Goals (SDGs), Localization of the SDGs, Implementation, Sustainability, Leaving no-one behind, Alignment, Leveraging, Fourth Industrial Revolution (4IR).

1. Introduction

The advent of the Sustainable Development Goals (SDGs) is attributable to the fact that the Millennium Development Goals (MDGs) had reached their projected delivery time (2015) yet there were objectives that were very far from being achieved. On the other hand, the gap between those who have and those who do not,has been unprecedently widening thus exacerbating inequalities leading to challenges of poverty, unemployment and inequality especially in developing countries such as South Africa. It is for these reasons, among many, that 193 United Nations (UN) member states adopted the outcome document "Transforming Our World: The 2030 Agenda for Sustainable Development" (United

Nations, 2015).This document then became a blueprint for the Agenda 2030 also known as Sustainable Development Goals. These SDGs collectively help to guide actions for global development and shape visions of the future (Estoque, 2020). Unlike the previous development agendas that put an emphasis on economic growth, the SDGs are a universal framework that contains many potentially diverging policy goals in the economic, social, and environmental sphere, while some goals are thought to be mutually supportive (Kroll, et.al., 2019). The

MDGs were criticized for focusing on social outcomes such as poverty, hunger, health, education, etc, and the SDGs that were adopted in 2015 set out a range of environmental, social and economic objectives and they apply to both the developing and developed countries (Morita, et al., 2019). Termed a global to-do list for sustainable development by critics, the SDGs have been criticized for being too ambitious, universal, expansive and with potential inconsistencies, particularly between the socio-economic development and the environmental sustainability goals (Stern, et.al., 1996; Redclift, 2005; UN SDSN, 2015; ICSU and ISSC, 2015; Easterly, 2015; Spasier, et.al., 2016). Swain and Yang-Wallentin (2019) further label these challenges as akin to a quagmire of conceptual and quantification problems, and extrication of a measure of sustainable development and its impact complex. Many developed countries find it easy and possible to implement the SDGs, however it is inevitable that developing countries will struggle to implement the SDGs.

This burden of implementation will be even more difficult when it comes to local government (municipalities) simply because of service delivery challenges and social ills that confront communities on daily basis. It has been pointed out that not only are many of the key basic services essential to meeting the SDGs delivered at the local level, but that municipalities are in the best position to ensure that needs of the local population are understood and met and that they leave no one behind (Slack, 2014). Participation by local government in the SDGs process culminated into what local government lobbyists and local development proponents call Localisation of the SDGs. This does not however mean that countries do not have any responsibility for implementation of the SDGs at the national level. Morita, et.al., (2019) emphasize that each country needs to recognize their level of achievement in terms of the SDGs, identify the goals that require more effort, and build more effective and well-performed governance systems to accelerate their efforts.

The 2030 Agenda for Sustainable Development encourages member states to conduct regular and

2. Sustainable Development Goals (SDGs)

The following are the SGDs and their descriptions:

GOAL	OBJECTIVES	DESCRIPTION
Goal 1	No Poverty	End poverty in all its forms everywhere by 2030
Goal 2	Zero Hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Good Health and Well Being	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Quality Education	Ensureinclusive and equitable qualityeducation and promote life-long opportunities for all
Goal 5	Gender Equality	Achieve gender equality and empower all women and girls
Goal 6	Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Industry, Innovationand Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	Reduced Inequality	Reduce inequality within and among countries
Goal 11	Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	Responsible Consumption and Production	Ensure sustainable consumption and production patterns
Goal 13	Climate Action	Take urgent action to combat climate change and its impacts
Goal 14	Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Peace, Justiceand Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnerships for sustainable development

Figure 1. *Sustainable Development Goals*

Source: *United   Nations, 2015*

inclusive reviews of progress at the national and local levels which are country-driven.

3. Aim and Objectives of the Study

The main aim of the study was to explore the localization of the SDGs in South African municipalities.

3.1 The Objectives Of The Study Were:

- To examine literature behind the SDGs.
- To establish if municipalities have Institutional Frameworks for the localization of the SDGs.
- To find out if municipalities have started any activities to support the localization of the SDGs.
- To find out if municipalities have aligned the SDGs with internal plans and processes.
- To establish the contribution of the 4IR in the localization of the SDGs.
- To recommend a localization model for the SDGs.

4. Literature Review

4.1 Localization Of The SDGs

Localization relates both on how the SDGs can provide a framework for local development policy and to how local and regional governments can support the achievement of the SDGs through action from the bottom up and to how the SDGs can provide a framework for local development policy (UNHABITAT, 2014) for municipalities (metropolitan, districts and local) to implement the SDGs. In simple terms localization refers to how municipalities can implement the SDGs by integrating them into their planning, budgeting, governance and service delivery processes.

4.2 Why Localizing SDGs

Municipalities in general and local municipalities (including metropolitan municipalities) are inherently expected to implement the SDGs because they are in the coalface of service delivery relevant to the functions of municipalities. Although Goal 11 specifically deals with cities, the global view is that cities (and local municipalities) are ideally positioned to implement Agenda 2030. It should be easier for municipalities to align the implementation of the SGDs with their internal processes such as Integrated Development Plans (IDPs), Budget Processes and Service Delivery, Budget Implementation Plans (SDBIPs).

It should however be pointed out that the implementation of the SDGs at local government level comes with own challenges. There is however an argument coming from the SDGs proponents that the implementation of the SDGs does not need "new" money but existing budget and programmes have to be realigned to serve the purpose of implementation. It is very difficult to believe that there will be no "new" money needed for the implementation of the SDGs since municipalities, especially in South Africa, are struggling even to deliver on their mandate.

4.3 Challenges Of Localizing The SDGs In Africa

The SDGs provide opportunities and challenges for different developing countries in the world, for purposes of this study only a few but major and broad challenges will be discussed. Jaiyesimi (2016) identifies four major challenges that need to be addressed for achieving the SDGs in Africa and these are Policy, Financial Capacity, Institutional Capacity and Technological Development:

- **Policy:** Lack of clear policy on guidance towards the implementation of the SDGs poses a great threat. Many developing countries, especially in Africa, have good policies on paper however lack of proper implementation of these policies has been a stumbling block. Although a significant policy innovation within the SDGs has been created through the establishment of the United Nations High Level Political Forum (HLPF) which meets annually and enables ministers to account on the implementation of the SDGs, there is currently no penalty for failure to implement the SDGs.

- **Financial Capacity:** The success of the implementation of the SDGs lies on the massive investment by countries. Developing countries, especially those that depend on financial aid to implement some of its programmes, will struggle financially and that will pose a challenge in implementing the SDGs.

- **Institutional Capacity:** Institutions (including government institutions) need to develop capacity to implement SDGs so that the institutional and personnel capacity are available. It will require all sectors including the private sector to invest into new skills sets and sustainability tool kits. It requires a new generation of sustainability professionals who are able to broker between global and local issues; research and its use; biological and social aspects of sustainability.

- **Technological Development**: Non-availability and non-reliability of data are crucial in the implementation of the SDGs for the Implementation Reports are highly data-driven. Progress made can only be measured through performance indicators. One of the problems with the SDGs is that a number of targets proposed are not quantifiable which means that countries and local authorities need to quantify these targets themselves. The whole data value-chain may prove to be a challenge especially in developing countries and similarly these countries may not have enough personnel to aggregate and manipulate data accordingly.

4.4 Challenges Of Localization Of The SDGs At Municipal Level

There are general challenges that will be experienced by municipalities when they localize the SDGs. Firstly, the level of development especially for those municipalities in developing countries is not the same therefore localization will not be at the same level. It will be important for authorities to note that the SDGs should not be imposed on municipalities, but they should be allowed to stagger their localization to suit their needs, priorities and level of development. On the same breath, communities that will be directly affected by the localization of the SDGs are also not at the same level of development therefore the good intentions of "leaving no-one behind" should be coupled with corresponding development of communities to also have access to participate effectively in the localization of the SDGs. A lot of municipalities, especially in developing countries like South Africa, experience ever changing political leadership which leads to political instability which does not augur well in terms of championing the localization of the SDGs for effective localization means a good tone and championing of the localization should be set from the top. Availability of properly disaggregated data is a problem in many municipalities. Some activities relating to SDGs do happen but not properly recorded or not recorded at all. Many municipalities also have a lot of backlogs which then results into SDGs competing with a lot of priorities and sometimes being viewed as a nice to have.

4.5 Aligning The SDGs With The Objects Of Local Government In South African Municipalities

The objects of local government in the context of South African municipalities are:

- To provide democratic and accountable government for local communities;

- To ensure the provision of services to communities in a sustainable manner;

- To promote social and economic development;

- To promote healthy and safe environment; and

- To encourage the involvement of communities and community organisations in the matters of local government.

In alignment with these objects of local government, SDGs therefore can be categorised according to those that relate to Ecosystems (Environment), Socio-Political Interventions, Economic Development and Governance.

- **Ecosystems or Environment:** Goals 6 (Clean Water and Sanitation); 7 (Affordable and Clean Energy); 11 (Sustainable Cities and Communities); 12 (Responsible Consumption and Production); 13 (Climate Action); 14 (Life Below Water) and 15 (Life on Land) all have to do with environmental ecosystems.

- **Socio-Political Interventions:** Goals 1 (No Poverty); 2 (Zero Hunger); 3 (Good Health and Well Being); 4 (Quality Education) and 5 (Gender Equality) are all addressing socio-political issues in communities.

- **Economic Development:** Goals 10 (Reduced Inequalities); 9 (Industry Innovation and Infrastructure) and 8 (Decent Work and Economic Growth) have to do with economic development and corresponding development of communities.

- **Governance:** Goals 16 (Peace, Justice and Strong Institutions) and 17 (Partnerships for the Goals) have to do with governance arrangements.
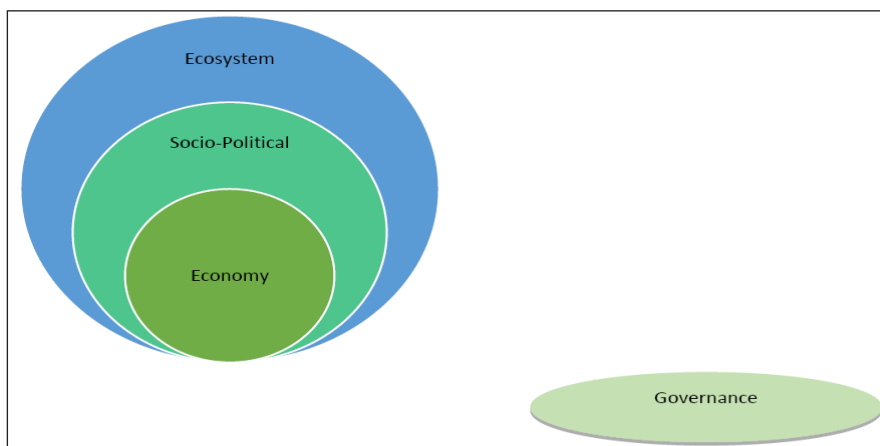
Figure 2. *Objects of local government and SDGs*
Source: *Akkiah (2019)*

4.6 Leveraging The Fourth Industrial Revolution (4IR) To Achieve The SDGs.

Digital technologies and the use of data in the decision-making processes can help a great deal in driving inclusive and sustainable growth in developed and developing countries. The Fourth Industrial Revolution (4IR) is gaining momentum in every sector and there are new and emerging technologies that are used to drive development, and these include the use of data, artificial intelligence, cloud computing, e-learning and use of smart grids and green energy. The advent of 4IR has proven that it does contribute towardscosts savings and the savings can then be ploughed back to theimplementation of the SDGs which in their own right can be implemented at a lesser cost if aligned with the 4IR.

Pantulian(2020) outlines 4 ways in which governments can leverage 4IR to achieve the SDGs and these are:

- **Expand access for the bottom billion:**The main barrier impeding access to technologies is lack of access to both the hard infrastructure and software infrastructure.Governments therefore need to strengthen basic digital infrastructure by governing the cost of capital and internet in developing countries. It is also important to ensure that government breaches that digital divide between urban and rural communities.

- **Innovate for sustainability and job creation:**There is a general perception that the advent of 4IR will result into job losses in some sectors. Whilst that perception may be true to some extent, the 4IR will also create new jobs more especially in the Information, Communication and Technology (ICT) sector. For governments to create these new jobs they should invest in digital

and soft skills. Research and development are the prime drivers of the institutionalization of both 4IR and SDGs.

- **Finance and scale tech for good:**Lack of government support for investment and infrastructure are key challenges in leveraging the full potential of technologies for the SDGs. There is a need for government to scale up technologies from both the public and private sector.

- **Update regulatory frameworks for the platform age:**The 4IR is definitely changing the nature of work and ultimately the way that municipalities deliver services especially delivering on Agenda 2030. This therefore needs that municipalities update their policies, frameworks, etc to align with the new normal. There is also a need for governments to weigh up the opportunities and challenges presented by the digital economy and develop appropriate policies to materialize the benefits from digitalization, complementing both national and regional priorities for achieving the SDGs.

4.7 Preparation For The Implementation Of The SDGs

UNHABITAT (2014) outlines the following steps to be taken by municipalities to ensure that they prepare for the successful implementation of the SDGs:

- **Conduct a needs assessment to define priorities and localize the SDGs:**It is important to conduct the needs analysis because the implementation of the SDGs should ordinarily be responding to the local needs and priorities of communities. For municipalities to successfully prioritize local needs, existing local programmes and processes should be reviewed and this should include

internal plans.

- **Cooperative governance to establish shared priorities:** There is a need for a multi-level governance stakeholder engagement forum so as to encourage seamless planning and coherent sectorial priorities across all levels of government.

- **Aligning local and regional plans with the SDGs:** The effective implementation of the SDGs also depends on aligning local regional and national plans. These plans should include baseline diagnosis of the socio-economic and environmental context; local or regional priorities, shared targets; coherence with SDGs based plans; strategic projects; budget and financial strategies; implementation timelines; cooperative mechanisms and monitoring and assessment tools.

- **Mobilizing local resources:** There should be alignment of local budgets with the priorities of the SDGs. It is also important that resources management capacity is built at local level so that there is effective and efficient management of resources.

- **Build capacities for effective and responsive leadership:** The success of the implementation of the SDGs relies on the empowerment of communities, leaders and community organisations. Capacity building also requires transformation of human, technological, organizational and institutional capabilities.

- **Promote ownership and co-responding for the implementation of strategic projects:** It is important to ensure that all stakeholders from the civil society, non-governmental organisations, non-profit organisations, academia, etc are involved so that ownership of the implementation of the SDGs is shared.

- **Participating in development cooperation and peer-to-peer learning**: Local governments should build direct partnerships with international and national agencies.

4.8 Institutional Framework To Localize The SDGs

The broad institutional framework for the involvement of the local and regional governments (LRGs) in SDG Localization is according to UNHABITAT (2014) firstly in the preparation of the Voluntary National Reporting; secondly in national coordination mechanisms and strategies designed to align national and local plans and thirdly in actions prompted by the LRGs of reporting countries to make programmes effective in the pursuit of SDGs at local level and lastly updating the mapping exercise.

5. Research Methodology

The study used qualitative research design and, also used semi-structured interviews to collect data. Qualitative research methods are valuable in providing rich descriptions of complex phenomena; tracking unique or unexpected events; illuminating the experience and interpretation of events by actors with widely differing stakes and roles; giving voice to those whose views are rarely heard; conducting initial explorations to develop theories and moving towards explanations (Sofaer,1999). The interviewees were local government specialists who are employed by municipalities and are, in particular, the ones who have to lead the localization of the SDGs in their respective municipalities. A sample of 50 municipalities was selected across South Africa and 50 senior managers who are responsible for Integrated Development Plans (IDPs) were interviewed. The IDP senior managers were chosen because they are the ones who are expected to coordinate the localization of the SDGs in municipalities.

6. Research Findings

Senior managers were interviewed because of their experiences in the implementation of the IDPs which more or less follow the same implementation approach as the SDGs. Interviews were transcribed into 5 themes which are:

- Existence of the Institutional Framework for the localization of the SDGs.

- Existence of activities that support SDGs.

- Alignment of the SDGs with internal plans and processes.

- Contribution of the 4IR in the localization of the SDGs

- Recommendations on effective localization of the SDGs.

Theme 1: Existence of the Institutional Framework for the localization of the SDGs

It is not all municipalities that have developed institutional frameworks for the localization of the SDGs and the study found that 60% of municipalities have developed the framework and 40% have not yet developed the framework for the localization of the SDGs. This is actually not a bad number since

South Africa, as a country, is only expected to report formally on the implementation of the SDGs by 2021. When asked what the institutional framework covers, R1 said, *"It covers all aspects of SDGs Campaign in the form of knowledge sharing with other stakeholders in making sure that the SDGs Awareness Campaigns and workshops are held whether face to face or virtually."* R2 responded by stating, *"The institutional framework covers programs that aim to implement all SDGs within the municipality at ward level. Just to mention a few is the IDP 2017/2018-2021/2022 which integrates the objectives of the National Development Plan Vision 2030 that puts emphasis on the importance of strengthening the local government sphere in order to ensure that municipalities are able to achieve their developmental mandate which includes infrastructure and basic services roll out and developmental planning. It also addresses elimination of poverty and reduces levels of inequalities."* R3 said, *"Our institutional framework covers all the Environmental aspects, ensuring that our Natural environment is safe from the impact of development. Our Environmental Management Framework covers water quality, air quality, biodiversity, wetlands, agricultural potential land, heritage development, etc."* R4 stated, *"The Institutional Framework covers mitigation, implementation, reporting and alignment of the SDGs."* Although these responses do not necessarily suggest that such municipalities have very good institutional frameworks for the localization of the SDGs, there is at least an understanding of the elements of the framework such as alignment with processes and plans, sustainable development (IDPs), etc. It is also important to note that some of these municipalities have aligned the SDGs with their Environmental Management Frameworks which is largely relates to the same preservation of the environment.

Theme 2: Existence of activities that support SDGs

Respondents were also asked if their municipalities had started any activities in support of the SDGs, 80% of municipalities had started SDGs activities and only 20% had not started. When asked which activities had been started by municipalities, R7 stated *"Human settlements in respect of renewable energy, disaster management (risk financing/resilience)"* as the activities that have been started. R8 cited *"The SDGs have been aligned with the IDP and the capital budget of the municipality; Knowledge sharing in terms of Masterclasses and Management Seminars have been held; An SDG Symposium has been held*

to identify progress made and the gaps that currently exist that need to be addressed; the City is in the process of compiling a publication that highlights some of the best practices that have been achieved in the City to date." R4 stated, *"Our municipality has engaged in various activities in support of the SDGs, this includes, forming partnerships to achieve goals, currently the municipality is part of ICLEI network for local government towards achieving sustainable development. Implementation of Climate Change Policy and impact mitigation and adaptation strategies are in place to combat climate change. Implementation of the Public Open Space By-Law to ensure life on land. The implementation of the Water Use License Application (WULA) to ensure life below water. The Environmental Management Framework (EMF) isin place to protect environmentally sensitive areas. The National Environmental Management Act (NEMA) is being implemented to ensure the protection of the environment and human life from environmental hazards."* What is important about the R4's response is that it aligns the localization of the SDGs with relevant legislation and framework which are meant to protect the environment. Some municipalities were also able to align their provision of social services and infrastructure and the SDGs. For example, R20 said, *"SDG 1- The majority of people in the various wards have access to primary health care, but this needs to be improved, especially in the municipality's rural areas. Since 2001, the municipality has made strides in coordinating the provision of housing and the waiting time for basic facilities has reduced dramatically.*

SDG 3-Through the special programmes, the municipality continuously engages in programmes that seek to promote gender equality within the municipal space. SDG 6- An HIV and AIDS Strategy has been developed to direct all stakeholders and role players in their efforts to introduce a systematic response to the problem within the municipal jurisdiction in order to combat this epidemic within the municipality. A local Aids Council is now in place to ensure that the HIV/AIDS continues to be combated. Other diseases such as tuberculosis are being treated. SDG 7- Within the municipality access to basic services has greatly increased, within 95% of households having access to water, 89% having access to electricity and 84% having access to proper sanitation."

Theme 3: Alignment of the SDGs with plans and processes

Respondents were also asked if their municipalities

had aligned the SDGs with their plans and processes. 80% of respondents indicated that their municipalities have aligned the SDGs with the internal plans and processes. They were also asked to indicate which plans and processes are aligned with the SDGs. All of the respondents indicated that the SDGs are aligned with their IDPs and budget. R4 further stated, *"Our municipality has in place the Unit called Environmental Management. We provide a rapid and high quality response to development applications which will inform internal and external parties of environmental and social constraints and opportunities on a site by site basis and to accurately evaluate all natural systems and habitats within the municipal area in order to introduce measures and systems to ensure their protection as well as ensuring sustainable development. We also help to implement the City's Environmental Strategy working with other numerous departments and external partners to ensure City's long-term environmental sustainability. Currently we have in place Climate Change Policy, Impact Mitigation and Adaptation Strategy, Integrated Environmental Management Plan, Internal Environmental Management Programmes, Environmental Management Framework and Strategic Environmental Assessments."*

Theme 4: Contribution of the 4th Industrial Revolution towards the localization of the SDGs

All respondents indicated that there is the role that can be played by the 4th Industrial Revolution (4IR) towards the localization of the SDGs. R8 said, *"4IR will create new jobs with new skills sets. Technology can improve service delivery in many ways (sustainable cities and communities) for example bringing in systems to monitor faults, service delivery delays, electricity and water consumption in real time, systems to monitor traffic for urban planning and development and systems to monitor change in population statistics. Block chain and Internet of Things (IoT) can transform systems so that municipalities are interconnected which can assist in identifying gaps in service delivery (industry, innovation and infrastructure). 4IR is important in monitoring climate change (early warning systems) to prepare for natural disasters and plan proactively (climate action). Improving Small Micro and Medium Enterprises (SMMEs) by creating digital market-places for products (reducing poverty). Technology to improve demand and supply of energy, alternative energy solutions (wind and water) and affordable clean energy. Improved systems and technology for*

Supply Chain Management (SCM) contributing to decent work and economic growth. Improved systems for monitoring pollution in rivers and the sea (life below water). The use of drone technology to monitor agriculture, wildlife and diseases in real time and artificial intelligence to support social services for the distribution of grants (reduced inequalities). This well-articulated response shows good understanding of how the 4IR can support localization of the SDGs in municipalities.

Theme 5: Recommendations on the effective localization of the SDGs

Respondents were also asked what they would recommend to help in the effective localization of the SDGs by municipalities. R18 recommended as follows, *"Align the SDGs with the existing municipality's strategy and budget; identify gaps and current opportunities that could be leveraged; develop an institutional framework; have an implementation plan; and ensure there is monitoring and evaluation."* R14 aligned his response with environmental sustainability as follows, *"I would like to see most of the municipalities implement in their structure a Unit or Section called Environmental Management Unit in order to achieve the much-needed balance between the three pillars of Sustainable Development (Society, Economy and the Environment). These can help to see some SDGs such as sustainable cities and communities, climate action and decent work and economic growth being achieved."* R11 recommended, *"There should be datasets supporting SDGs reporting; network with municipalities with alignment of the SDGs to the IDP; awareness across the municipality; need for political champions for SDGs; and alignment of the indicators with the municipal functions."*

7. Discussion

Many respondents indicated that their municipalities have Institutional Frameworks for the localization of the SDGs by municipalities. This is a good indication that municipalities are willing to localise the SDGs. There were however divergent responses regarding the content of these Institutional Frameworks, and this is an indication that there is a need for the development of a generic and uniform Institutionalization Framework and maybe the United Nations should draft this generic Framework. There was also noticeable progress by municipalities in terms of the activities that they have started which are supporting the SDGs. Almost all municipalities do have activities that align with the SDGs bearing in mind that the SDGs activities are

not entirely new and municipalities have always been involved in similar activities even before the name SDGs was coined. Some municipalities have also started to align their plans and processes with the SDGs and two most popular are the IDP and the Budget. Respondents also showed good understanding of how the 4IR can support the localization of the SDGs. Very good recommendations were provided with regard to effective localization of the SDGs. This is an indication that there is average understanding of the SDGs and how they can be localized. For purposes of promoting uniform localization of the SDGs a Localization Model is recommended by this study.

8. Findings

The following are the findings of the study:

- Some municipalities do have Institutional Frameworks for the Localization of the SDGs.
- The majority of municipalities have started activities supporting the localization of the SDGs.
- Some municipalities have aligned their processes and plans with the SDGs.
- All municipalities have an idea of how the 4IR can help in the localization of the SDGs.

8.1 Recommended Model

The Localization Model that is recommended here is adapted from a model used by eThekwini Municipality which has successfully aligned the Integrated Development Plan (IDP) of eThekwini Municipality and the Capital Budget. eThekwini Municipality's IDP has 8 broad plans or focal areas that are aligned with group functions (clusters) and these are:

- Plan 1: Develop and sustain spatial, natural and built environment.
- Plan 2: Developing a prosperous, diverse economy and employment creation.
- Plan 3: Creating a quality living environment.
- Plan 4: Fostering a socially equitable environment.
- Plan 5: Supporting organisational design, human capital development and management.
- Plan 6: A vibrant and creative city – the foundation for sustainability.
- Plan 7: Good governance and responsive local government.
- Plan 8: Financially accountable and sustainable city.

The Plans are then aligned with the 17 Goals e.g. Plan 1 which is: Develop and sustain spatial, natural and built environment is aligned with Goals 15 (Life on Land) and 16 (Peace, Justice and Strong institutions).

The Localization Model is illustrated below and specifies the IDP Plans, related goals and the capital budget.

Plan Description	SDG Goal	Sum of Capital Spend
1.Develop and Sustain our Spatial, Natural and Built Environment	15	R6,817,000
	16	R697,000
2.Developing a Prosperous, Diverse Economy and Employment Creation	2	R13,500,000
	7	R2,500,000
	8	R362,001,000
	11	R30,000,000
	16	R72,849,000
3.Creating a Quality Living Environment	6	R1,420,318,000
	7	R740,599,000
	9	R32,792,000
	11	R2,869,122,000
	16	R286,008,000
4.Fostering a Socially Equitable Environment	3	R24,000,000
	11	R29,790,000
	13	R11,800,000
	16	R58,867,000
5.Supporting OrganizationalDesign, Human Capital Development and Management	3	R700,000
	4	R1,370,000
	16	R9,290,000
6.A Vibrant and Creative City - The Foundation for Sustainability and Social Cohesion	11	R411,515,000
	16	R56,668,000
7.Good Governance and Responsive Local Government	2	R1,184,000
	16	R380,849,000
8.Financially Accountable and Sustainable City	7	R14,000,000
	16	R192,094,000

Figure 3. *Alignment of SDGs and the IDP and the Budget*
Source: *Akkiah (2019)*

9. Conclusion

The aim of the study was to explore the localization of the SDGs in South African municipalities. Literature review focused on localization of the SDGs; why it is necessary to localize the SDGs; challenges of localizing the SDGs in Africa; challenges of localizing the SDGs at the municipal level; aligning the SDGs

with the objects of local government in South Africa; leveraging the 4IR to achieve the SDGs; preparation for the implementation of the SDGs and institutional framework to localize the SDGs. The study used qualitative research design and 50 municipal senior managers responsible for IDPs across South African municipalities were interviewed. Interview questions focused on 5 themes which were: existence of the Institutional Framework for the localization of the SDGs; existence of activities that support the SDGs; alignment of the SDGs with internal plans and processes; contribution of the 4IR in the localization of the SDGs and recommendations on effective localization of the SDGs. The study revealed that some municipalities do have Institutional Frameworks for the Localization of the SDGs;the majority of municipalities have started activities supporting the localization of the SDGs; some municipalities have aligned their processes and plans with the SDGs and all municipalities have an idea of how the 4IR can help in the localization of the SDGs.

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