

Urban Nexus strategy: an approach to attain water, hunger and energy in the Sustainable Development Goals at the eThekweni Metro Municipality

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Introduction

Globally, there are many challenges of safeguarding water, energy, and food for everyone. Due to the fast growing of the population and economic growth as well as the rapid of urbanisation there is an increasing demand for these three. However, the most challenging part is that the natural resources from which these services are coming from are inadequate. In addition, drivers like climate change and the degradation of natural resources decrease the capability to offer more such services. In South Africa, metro cities consume more than half of the country's energy, this also includes the eThekweni Metro Municipality where the study is based. Currently, Durban city faces challenges of climate change, this manifest through the increasing of the tropical cyclone reports. The eThekweni municipality has taken a good initiative to take the concept 'urban nexus' into practice. Hence, it is in this vein that the present study argues that the application of urban nexus strategy may somewhere somehow help in the attainment of the water, energy and hunger goal in the SDGs by 2030. In addition, the paper concludes by questioning the model to implement, monitor, and evaluate the urban nexus approach Firstly the study, conceptualize urban nexus. Secondly, the paper discuss the SDGs and Urban nexus in the eThekweni Municipality.

Conceptualizing Urban Nexus Approach

The concept of urban nexus is new, it is a new and buzzing concept that has been widely discussed and debated by researchers and policy-makers. The researchers and policy-makers put emphasis on the importance of water, energy, and food. The concept of WEF is made up of three important terms. Firstly the term is water, the UN Water (2013) reveals that "the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against

water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability”. The second concept is energy security, with the aim of ensuring “the uninterrupted availability of energy sources at an affordable price”. Lastly, is the concept of Food security, FAO (2006) reveals that “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”. The mixture of this concept is also known as WEF nexus. The WEF nexus defines the interrelationship and interdependency in WEF. In 2011, the World Economic Forum and the Bonn conference recognized the lack of understanding of the Nexus as a major global economic challenge. Now, what does the concept mean to the eThekweni municipality? In reference to eThekweni municipality, it is known that the municipality is growing daily in industries, firms, and companies. With that reason, the concept means that the daily operation of these industries, firms, and companies should be friendly to the environment. Moreover, it is well known that the citizens rely on the environment (land) for the generation of livelihood through agricultural activities. If the operation of the industries is friendly to the environment, clean water may one way or other lead to safe water.

Link between SDGs and Urban Nexus in the eThekweni Municipality

The argument of the study is that the implementation of the WEF concept may lead to the attainment of some of the SDGs by 2030. There are three goals in the SDGs that can properly explain the relationship between the urban nexus and SDGs. The Zero Hunger (goal 2) intends to “end hunger, achieve food security and improved nutrition and promote sustainable agriculture”. Another goal that relates to the urban nexus is the Clean Water and Sanitation (goal 6) which aim to “ensure availability and sustainable management of water and sanitation for all”. Lastly is the Affordable and Clean Energy, which is goal 7. This goal aims to “ensure access to affordable, reliable, sustainable and modern energy for all”. Durban city is developing through industries companies and firms as stated. As a result, the eThekweni Metro Municipality has started a Durban Climate Change Strategy (DCCS) for the protection of the resources of the city from the industries. One of the DCCS goals is “to Supply of 40% of electricity from appropriate renewable energy technologies by 2030”. However, the eThekweni Metro Municipality is currently facing dangerous floods, which has taken many lives.

Safe water, as well as the issues of food security (this is seen by the perpetuation of poverty within the municipality), has been a challenge within the municipality. Not having access to safe water, energy and food may somewhere somehow contribute to the failure to attain the SDGs by 2030, more especially the energy, hunger and water goal. The failure to practice may affect SDG 11, which aim to “make cities and human settlements inclusive, safe, resilient and sustainable” On a same view (Bizikova, Roy, Swanson, Venema, and McCandless, 2013.) “Emphasize that the world’s food, water, and energy resources are already experiencing significant stress and shortfalls”. For that reason, there is a relationship between the SDGs and Urban Nexus. In general, there is limited literature on how the water, energy and food can be united in order to successfully implement urban nexus, which will also lead to the attainment of SDG goals, more especially water, energy and hunger.

Conclusion

In conclusion, there is a close interaction between the urban nexus approach and the global goals, more especially the SDGs within the eThekweni Metro Municipality. The implementation of this strategy (urban nexus) may promote a friendly environment within the municipality that will ensure safe water, energy and food availability for the future generation. Lastly, scholars or researchers should partake to assist the eThekweni Metro Municipality to develop a model on how the concept (urban nexus) can successfully be implemented, monitored and evaluated.

References

- Bizikova, L., Roy, D., Swanson, D., Venema, H.D. and McCandless, M., 2013. The water-energy-food security nexus: Towards a practical planning and decision-support framework for landscape investment and risk management. Winnipeg, Manitoba: International Institute for Sustainable Development.
- FAO, 2006. Food Security. Policy Brief, June 2006, Issue 2, Available at:
<http://www.fao.org/forestry/13128-0e6f36f27e0091055bec28ebe830f46b3.pdf>
- UN Water, 2013. ‘What is Water Security’, Available from:
<http://www.unwater.org/publications/water-securityinfographic/>