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ISTANBUL AYDIN UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

BUILDING OF SMART CITY INNOVATION IN THE BUEA MUNICIPALITY OF CAMEROON AND THE VILNIUS MUNICIPALITY OF LITHUANIA (2013-2017)

THESIS

Mercy TEME ETOKE

Department Of Political Sciences And International Relations Political Science And International Relations Program

Thesis Advisor: Assist. Prof. Dr. Gülay Uğur GÖKSEL

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DECLARATION

I hereby declare that all information in this thesis document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results, which are not original of this thesis. (05/09/2018)

Mercy Teme ETOKE

FOREWORD

My gratitude goes to God Almighty for wisdom and strength to complete this great academic task of my career. I am also very grateful and appreciate all my lectures in the department of Political Science and International Relations in Istanbul Aydin University, Turkey and also the department of Social pedagogy in the Lithuanian university of Educational Sciences.

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June, 2018 Mercy Teme ETOKE

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ABBREVIATIONS

BMC	**:** Buea Municipal Council
E U	**:** European Union
GESP	**:** Growth and Employment Strategy Paper
IGI	**:** International Governance Institute
M L	**:** Ministry of Interior
OECD	**:** Organization for Economic Cooperation and Development
R&D	**:** Regional Innovation System
R DD	**:** Regional Development Department
RDP	**:** Regional Development Plan
SME	**:** Small and Medium sized Enterprises
SMART	**:** Strategic Municipal Advisory, Research and Training Solutions
S D O	**:** Senior Divisional Officer
UNESCO	**:** United Nation Educational Scientific and Cultural Organization
VCM	**:** Vilnius City Municipality
ICT	**:** Information and Communication Technology
CDP	**:** Communal Development Plan

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BUILDING OF SMART CITY INNOVATION IN THE BUEA MUNICIPAL COUNCIL OF CAMEROON AND THE VILNIUS MUNICIPALITY OF LITHUANIA

ABSTRACT

This research studies the building of Smart City Innovation in the BMC of Cameroon and the VMC in Lithuania over the last five years (2013-2017). The core purpose of this research is to show the innovation process of the Buea Municipal Council in Cameroon (BMC), Vilnius Municipal Council (VMC) in Lithuania and to understand how the inhabitants of the cities have been benefiting from their environment whether positively or negatively. The sources of my findings will be obtained from journal, articles, newspapers and a questionnaire that will be completed by experts (politicians, entrepreneurs, university lecturers and doctoral students). Hence, the creation of new policy for regional development, Social capital, partnership, entrepreneurship, non-governmental organizations in Cameroon as well as Lithuania has brought tremendous assistants to the economy. It is assisting the countries to realize their 2020 and 2035 vision of economic innovations, while Research and networking aid development by linking people together through communication such as the social media and cell phones which therefore creates strong social capital. Nevertheless, some hard barriers separate the BMC and the VMC from their smart city innovational development such barriers include poor leadership, little finances obtained from the central government, bribery and corruption.

Keywords: *Social Capital, Smart City, Municipal Council, Innovations, Economic development*

KAMERUN BUEA BELEDİYE KONSEYİNDE VE LİTVANYA'NIN VİLNİUS BELEDİYESİNDE AKILLI ŞEHİR İNOVASYON İNŞASI

ÖZET

Bu araştırma geride kalan beş senelik (2013-2017) zaman süresi içerisinde Kamerun'un BMC'de ve Litvanya'daki VMC'de Akıllı şehir İnovasyon inşasını araştırmaktadır. Bu araştırmanın temel amacı Kamerun'daki Buea Belediye Konseyinin (BMC) ve Litvanya'daki Vilnus Belediye Konseyinin (VMC) inovasyon sürecini göstermek ve bu şehirlerde yaşayanların olumlu veya olumsuz olarak kendi çevrelerinden nasıl fayda sağlamış olduklarını anlamaktır. Benim sahip olduğum bulguların kaynakları gazeteler, dergiler, makaleler ve ayrıca uzmanlar (siyasetçiler, girişimciler, üniversite araştırma görevlileri ve doktora öğrencileri) tarafından yapılarak tamamlanacak olan bir anketten elde edilecektir. Bu yüzden, gerek Kamerun'da ve gerekse Litvanya'da bölgesel kalkınma, Sosyal sermaye, ortaklık, girişimcilik, devlet dışı kâr amacı gütmeyen kurum ve kuruluşlar için yeni politikanın oluşturulması ekonomiye çok büyük yardım ve desteklerde bulunmuştur. Sosyal medya ve cep telefonları gibi iletişim araçları yoluyla insanları birbirine bağlayarak araştırma ve yardım geliştirme ağı oluşturup aynı zamanda güçlü sosyal sermaye meydana getirirken, ülkelerin 2020 ve 2035 ekonomik inovasyon vizyonlarını gerçekleştirmelerine yardımcı ve destek olmaktadır. Yine de, zayıf ve kötü liderlik, merkezi idareden elde edilen yetersiz finans kaynakları, rüşvet ve ayrıca yolsuzluk gibi bazı zorlu engeller BMC ve VMC'yi kendi akıllı şehir inovasyon kalkınma ve gelişimlerinden de uzak tutmaktadırlar.

Anahtar kelimeler: *Sosyal Sermaye, Akıllı Şehir, Belediye Konseyi, İnovasyonlar, Ekonomik kalkınma.*

1. INTRODUCTION

Social capital is a present-day view in economic development. But however, the concept has been in use for almost a century. The first time Social capital appeared was in a book that was published in 1916 in the United States that discussed how neighbors could work together to oversee schools, and other social needs. Social capital contributes to economic growth by bringing out the significance of collaboration and trust within the firm, the market and the state. The supremacy of social cooperation has long been documented in economic and social thought. Social capital act as social norms, networks, sustains cooperation by emphasizing fundamental value and pursuit as an end in itself. It is a mixed-motive cooperation, in which individual behavior takes account of its effects on the welfare of others. In this manner, it operates as an internal commitment mechanism to resolve social dilemma or collective action problems from free-riding and narrow-interested calculation (Christoforou, 2017:3).

Socioeconomic development in Cameroon has passed through 3 main phases. From 1960-1985, the economy growth was increased all thanks the agricultural production and the exploration of oil that was backed by the strong world market prices. However, as a result, the government provision of public good and services increased which later provision the living conditions of citizens.

Furthermore, there is a close relationship between social capital and economic development in the Buea Municipal Council (BMC) of Cameroon and the Vilnius Municipal (VMC) of Lithuania because social capital unites people and groups together for a common interest for instance its foster entrepreneurial activity, improve prospects and support the development of human capital.

Again, the most important research questions were as follows; “how has social capital influence economic development in the BMC and the VMC? how is the regional policy in Cameroon, their 2035 and the Europe 2020 vision is helping the municipalities to achieve their objectives? what are the benefits of socio economic

development in the municipalities? what are the challenges faced by the municipalities to achieve their objectives?". This thesis is divided into four chapters, which is the introduction which explain the, main research questions and explains how states and cities around the world for example Barcelona, Oslo, Singapore London, San Vilnius, Buea Municipality are improving on their Information and Communication Technology (ICT) approaches and smart city strategies in their urban areas to bring about a flexible and successful, economic, infrastructure, health, transportation system and social capital to make their cities smarter; analyzes the new regional policy in Cameroon; chapter two explains how the new regional policy in Cameroon has made it possible for economic and social resources to be equally distributed in order to close the gaps between the poor and the rich. And how the policy has help to enhance growth, fight unemployment, improved quality of life and it finance by the state, council and NGO; It stresses on the element of smart city models in Lithuanian social capital e.g. smart economic, people, governance, environment, living and the use of network infrastructure to improve on economic, political efficiencies, within the country; chapter three talk about the use of Information and Communication Technology (ICT) to increases prosperity and competitiveness for citizens and local business; collective public intelligent, based on effective planning for urban, regional development, and the 2020 agenda to bring development in Europe countries. The final chapter which is chapter four analyzes the case studies with the use of the Legatum prosperity index of 2017 which shows the level of prosperity between the two countries. The chapter also analyses the responses of the questionnaire. And bring out the shortcomings of the socioeconomic development in the two cities.

In order to know how the inhabitance of the municipalities are benefiting from their environment, the levels of development in the municipalities, and to understand the importance of social capital and economic development, both qualitative and quantitative data of analyses were used to give a clear picture about the objective of the research. A participant observation method was also use in other to get familiar with the two cities; hence it was easy to gather more information and to observe the levels of development in the cities. Secondary sources like books, articles, newspapers and published dissertations that were familiar with the topics were also use.

1.1 Background Knowledge About Smart City Development

A Smart City is a city where services, road, and rail network are supply through the use of communication technologies and information. According to Husam Al Waer and Mark Deakin (From Intelligent to smart cities) a smart city is a city that utilizes ICT to meet the demands of its citizens. They added that community involvement in the processes is a necessity for a smart city. Factors that contribute to smart city include the following;

- The application of a wide variety of digital and electronic technologies to the city and its communities
- The application of ICT to uplift life and the working environments in the region
- The embedding of such ICT within government systems
- The territorialization of practices that bring the people and ICT together in order to faster innovation and enhance the knowledge that they offer.

Due to Smart services, cities and their inhabitants are transforming scientifically, organizationally, efficiently and in a social context. In adding up, the raise in population and the rapid urbanization has required smarter approaches which are helping the world to create an economical, social and a sustainable environment. A smart city is not merely cities that exploit digital equipments or communication know-how, to develop the worth and performance of its city services, to decrease expenses and source utilization, and to connect successfully and vigorously with the general public. It is also a human city that is open and comprehensive.

The boosting of world population and scarcity of resources in the world are becoming critical in our international programs, most of the pastoral population agglomerates in the inner-city because of the political, social, economical and technological benefits that are found in the cities. In recent times 50% of the world population lives in cities, so as to enjoy social political, economic and scientific benefits available in cities. However, because of the increasingly integrated world, and the urbanization process, there have been a raised in variety of socioeconomic, technological and organizational problems, like putting a stop to brain movement, providing sufficient healthcare services, dropping bureaucratic expenses, working

out transport problems, investing in communication infrastructure, uphold efficient water and energy scheme, ensure environmental sustainability.[1]

In 2007, most of the world's city populations surpass the population living in rural settlements for the first time in history (United Nations, 2014). The United Nations Organization statistics (2014) shows that more than half of the world's population live in cities, and it is anticipated to grow as time goes by. It is predictable that by 2050, approximately 66 percents of global population is predictable to be in urban areas. This urban expansion might threaten sustainable development especially when governmental policies are not implemented. There have been many examples in the world where rapid cities grown without planning has lead to disorder and damaging such as the rising and the change in population growth and other different characteristic of city existence for example health, transport, education, pollution and many more (Kim; Han, 2012; Mckinsey and Company, 2013; Neirotti et al, 2014). Notwithstanding, the coming decades will bring additional changes that will ultimately linked to sustainable development. Again, good setting up and power, will increase the level of urbanization that will smooth the progress of socio – economic development.

Smart Growth approach, stated that decisions on development has some consequence on our wellbeing, education, duty, traffic, atmosphere, economic growth, equality, prospect, accommodation cost, security of quarters. Notwithstanding, developmental decisions create some negative experiences on our personal life, societies and countries. To triumph over the effects of growth, smart growth approaches are capable to help maintain and build up beautiful, suitable, safe and healthy city surroundings.

furthermore, the definition of smart city was re-coined in the early 2000s by various technological corporations they includes, Cisco Siemens and IBM the reason for this was to merge the information scheme into the city developmental projects. These projects include; housing, transport systems, electricity, water and manure infrastructures, safety measures, healthiness and unrestricted safety. However, the Smart Growth approach has prearranged the way for Smart City approach, which now relies on the advancements of ICT which is needed for the planning of

development, sustainability, processes and other urban services and amenities (Harrison 2011, 2-3). Likewise, the phrase “Smart City” can be used to discuss other dimensions related to cities, not only about cities entirely. Such dimensions include citizens, economy, environment, health, education, governance, communication and transport. Other, city activities which are related with the Smart City are education, industry, technical infrastructure, and so many more.

1.2 Smart City and Its Sphere of Influence

A Smart City is a city whereby innovative projects are provided by means of (ICT) information and communication technologies. As a result, smart city operations becomes more successful, responsive, flexible, sustainable (Gonzales and Rossi 2011:9). Smart city innovations change the city and its inhabitances industrially, managerially, economically and equally. During the process of smartness, cities take on innovative technologies in other to maintain efficient use of inadequate resources. Smartness is the capability to use information and revolve them into knowledge by the help of information and communications technologies.

Smart city renovation involves an incorporated structure that is based on accessible social, economic, governmental and competitive resources of a city. The increase in strategic structure helps for effective urban development and proficient distribution of inadequate sources. The approaches of smart city development can be alienated in to six areas that carry smart city services. They include smart economy, smart people, smart governance, smart mobility, smart environment, smart infrastructure, smart health and smart living.

1.3 World Examples of Smart Cities

Since the days of industrial revolution, the level of economic growth in cities has increase; the industrial revolution bought a lot of prosperity for many countries around the world and this prosperity has led to the development of technology, infrastructure, transportation, and health care facilities all around the world. Juniper Research (http://www.ioti.com/smart-cities/world-s-5-smartest-cities) gave examples of some smart cities around the world, they include; Singapore, Barcelona, Oslo, London and San Francisco.

Singapore has become the most important cities that apply ICT approaches and smart strategy in urban area expansively. An Intelligent Island vision was set up by the government in 1992. Singapore three IT support strategy are IT education, IT infrastructure and IT economy. With Singapore iterative master plans, the country has turned in a center for transportation technology and international trade.

In addition, the attractive capital of Catalonia a region in northeastern Spain, Barcelona has made wide use of sensors to help check and manage traffic. City planners recently, make known their plan to modify traffic flow, which according to them will be reduced by 21%. The city is also using smart-city technology to reduce the level of congestions within the city. A sensor for monitoring air quality and noise, Smart parking technology as well as smart streetlights has been installed in the city. It is also increasing a network of free Wi-Fi in public spaces. Also, there was shortage of water in the city a few years back, but the, smart city sensors system for irrigation was developed in order to avoid shortage of water within the city.

Again, London is also at the top of the list of smart cities in the world. In recent years there has been the use of technology to help embark upon city congestion and to make parking simpler. Lately, city developers make public a plan to execute information technology to control overcrowding. In 2014, the city began undulating out a smart parking scheme in the Westminster district that also did extremely well in many areas. Juniper Research affirmed that the city score was brought down because of its reliance on polluted energy and its relatively poor energy use reduction scheme. Still, according to analysts, London publicized an investment of £4-billion pound for the investment in roads over the next decade and £200-million in the bus network, before now, the city has made large investments in smart traffic technology, traffic lights respond in favor of buses to smooth the development of public transport, there is a congestion charge that was executed in 2003. This is an organized effort that is being performed by the city to reduce congestion.

Moreover, the city Oslo in Norway is the richest cities in the world; it is usually quoted as a competitor in the record of the smartest cities in the world. The city has made stride in using technology to control the consumption of energy and greenhouse gas emissions. The city is planning to cut down gas discharge by half before 2020 to restructure its transportation network by 2030, and it is aiming to be 95% climate neutral. Like many other smart cities, sensors are mounted to help

monitor wrong parking. A sensor is also installed to help look up on the sick and elderly patients. There is the establishment of a network of smart street illumination, which has help to reduce energy utilization. The city is also getting more notice for its insistent strategy to cut carbon emissions from cars. According to analysts the country is looking for a means to ban private motor by the end of the decade and the city while the city government is planning to cut greenhouse emissions extensively by 2019. Presently, the city has a high level of personal car owners.

Oslo is as well using network to keep an eye on traffic levels. They have certified plate detection machinery which ties into their congestions charging scheme. "They also have offers mobile payment apps which are available for smart parking.

Once more, San Francisco is now the finest spot for startups than other cities, such as Palo Alto, Mountain View, or San Jose. It connected City project has enables residents to set up parking spots. It also has one of the highest densities of LEED-certified buildings in the United States. As CNN declared last year. The tech explosion, on the other hand, has stifle traffic within the city. The Mayor Ed Lee is convinced that the city can triumph over the difficulty and renovate San Francisco into a national model for smart transport. The public transportation network in San Francisco, although aging it is fairly used. Still, the city is high in terms of bus accessibility; they also have a good payment system that enables payments to be made contactless times. There is much private vehicle ownership in the city and the city is leading in smart parking which was introduced in 2011.

1.4 Vilnius and The Buea Municipality Context of Smart City

Vilnius Lithuanian is at its best so far as development is concern. In Eastern Europe, it's the fastest growing city in terms of political, economic, social and environmental changes in the city: the standard of living for citizens is quite high and studies shows that 93 percent of people living in Vilnius are contented with their lives; the city is blessed with clean water, fresh air and fastest internet connection in the world; again, the citizens are fully involve in decision making of the state and the government also search for possible ways to bring resolution to problems that are related to smart city development The smartness of the city has been recognized by both analyze and the media because of the rise in foreign investment in the city. The New York Times admit that the city is among the world best 10 managed cities. The

Mayor of Vilnius city Remigijus Šimašius stated that the city of Vilnius has an obligation to open more business and to encourage more foreign investors into the city; he added that smarter city management is the key to make the city a convenient. For this reasons, the government have make available participatory platforms were citizens are able to participate in decision make processes of the city. Hence, an official website was developed to give better information about the city agendas, in this sites citizens make suggestions by interacting with city council members, participating in councils elections, and other important topics of the council agenda. Place to live and carry out business activities[2]. The city Vilnius is business friendly, the city has high caliber Companies like IBM, Western Union, Teva Group, Fiher Scientific and many more. Still, according to" *The Financial Times* Vilnius is among the best cities in the Eastern part of Europe because of their investment attribute. The city has competent inhabitants who can speak at least one foreign language.[3] Being a capital with over 543 thousand in population (Jan 2016), Vilnius is currently a leader in smart city developments. Number of people actually using city services could be illustrated by number of patients registered at Vilnius territorial health insurance fund, which was close to 650 thousand in 2015. Vilnius is clearly leading the pack by economic activity and investment, new developments of office space and residential property, growth in number of children in kindergartens and primary schools, etc. This is causing a need for citizen mobility and an increasing number of cars, and challenges in managing travel times, parking, pollution, CO2 emissions etc. City bypassing routes are almost completed, and traffic light management is operational since 2009, a new fast public transport3 is planned for some routes connecting suburbs with central locations. Traffic light management is a clear priority in public transportation. A bicycle rent network is available, and bicycle storage facilities are planned with all new residential housing developments, also for

the existing residential stock[4]. The municipality is focusing on transparency and actively embracing open data. Open data portal has been created; an increasing number of city and administration data sets is opened to the public in machine-readable form.

Such bold initiative is the first of its sort among Lithuanian city municipalities.

Also, the city of Buea is located at the foot of the mount Cameroon. The city is also known as the legendary hospitality, it is the capital of the South West Region of Cameroon, with a total population of two hundred thousand (200.000) inhabitance. The city has two major seasons the Dry season and the rainy season. The Climate of the city was first said to be very cold but because of an increase in population the climate has become warmer. The council has now been transform into a modern council with its very sophisticated office in the city of Buea. Moreover, the missions and visions of the Buea municipal council is to work hard in other to ensure and maintain the socio-economic wellbeing of it inhabitances, by ensuring economic growth, good roads and to manage solid waste disposals (Helders, p:3-37). The Cameroon government has a centralized system of government with most of its activities being handled by the council. However, many municipal Councils in Cameroon and the Buea Municipal Council in particular is characterized with poor urban facilities like pipe borne water, poor drainage systems, poor sewage control. This is because of poor management of the municipality. Sometimes the municipal sanitary workers are only concern with public roads and careless about the solid waste in some other parts of the city. Secondly, the government controls most of the finances of the states and allocates very little to the council for it socio-economic development in its municipality.[5] In addition, the Buea council have been working to improve despites of its drawbacks to improve its socio-economic development to it citizens, for example the city have a good transport network system that have encourage trade and movement, many primary, secondary schools and a university.

The Mayor of the Buea Municipality Ekema Patrick Esunge stated that "Buea will be a well-built city with an adequate social infrastructure, a vibrant economic that will allow citizens to live in comfortable and healthy environments by 2030". However, the government is striving to maintain and enhance socioeconomic, physical and cultural wellbeing for citizens by providing corporations, industries and civil society organizations. Nevertheless, the crucial goal is to make the city of Buea a contemporary and a hub city in complete harmony with the tradition of the legendary hospitality. In 2012, a Communal Developmental Plan (CDP) was developed to ensure a balanced in development in the Municipality for developmental projects regardless of the limited resources. The major aim of the CDP is to:

- Facilitate the achievement of local budgets.
- To make developmental campaigns plans easy for Municipal executives.
- To fight against conflicts.
- To promote pacifications, fairness in the developmental actions.
- To encourage the council to develop partnership in order to perform developmental roles of the Municipality.

As a result, there is an increase in job opportunities, hygiene and sanitation, security, trade & commerce, agriculture, waste management and disposal, within the municipality. Notwithstanding, other socio economic developmental activities are carry out by the council they include; good transport network, health, market, other projects such as the demolition of old council properties like schools and community development projects like the setting up of public taps and public toilet. This is to improve the living conditions and working conditions for citizens and entrepreneurs so as to achieve the smart city concept by 2035. The Buea council has gone into a partnership with a Canadian real estate organization and a Non- Governmental Organization to provide low cost housing in the Municipality that is worth over 4 million FCFA. The Organization admitted that they are financially fit to carry on the project and the reasons for the project is to provide low cost homes to citizens because to them owning a home leads to long life and also build an educative beautiful and attractive community. This agreement was signed by the Mayor and his team. The Mayor admitted that the council is going to put all efforts to realize the success of this project.

In summary, most countries around the world are working to improve on their city development in order to improve on citizens' wellbeing, infrastructural and technological development.

2. ANALYSES AND MODELING OF REGIONAL POLICY IN CAMEROON

2.1 Understanding the Role of New Policy in Regional Development

Regional policy is aimed at redistributing resources such as public investments to less developed regions in a country for example rural areas; it is also aim at distributing economic and social resources to close the gaps between the poor and the rich within a Country. In Cameroon, regional policies are implemented through developmental plans which are carried out by governmental institutions examples are the Ministry of Economy, Planning and Regional Development (MINEPAT), Municipal Councils and International Governance institutions such as the International Governance Institution (IGI) which is a global developmental Organization of professionals who are contributing to sustainable development. Hence regional policy has help to enhance economic growth, improving the quality of life through strategic investment, and it is also active to put more support on underdeveloped areas within the country with additional support gotten from the civil society. Regional developmental policies are financed by the states, Municipal Council, Non-Governmental Organizations, civil society and other sources.[6] The most important objectives for the regional development in Cameroon is to achieve economic growth and development, a minimal poverty, social inclusion and illiteracy rate, an access to the judiciary, controlled population growth, low unemployment rate and increase employment, equality in the distributions of resources both to the rural and urban areas, and also in different regions of the country, gender quality, constructing of new bridges, construction of new railways, the constructions of new seaports in other areas of the country, construction of new airports in Tiko, and Limbe, equality in elective positions, access and good infrastructure development and economic growth, a powerful democracy, improving social, united nation enjoying peace, security and stability, and to become a middle income country. Despites the above economic regional developmental plan, the government is also aim at carry out other political and social developmental strategies for example. The

government is set to improve the efficiency of the job market to reduce poverty to its nominal level; in 2013 the main target was to make the availability of 2000 jobs in the agricultural sector to make the country, an attractive nation and a new industrialized country.

Again, Cameroon´s vision to become an Emerging Democratic and a United Country in Diversity in 2035 the country is aspiring to take key developmental programs, to ensure sustainable development and better living conditions within all regions of the country. In 2009 the government adopted the Growth and Employment Strategy Paper (GESP) to increase economy growth and development and to make the 2035 vision a possibility. The aim of the vision is to increase the level of infrastructural development, maintenance of economic growth, establishment of information base system, get information from the population about their expectations, and the choices of the stakeholders, formalized future projects of stakeholders and exploring alternative situation, recognize important facts and give analyses to them, establish more visions. Visions were created from the experiences of the previous studies, in order to satisfy the needs of the population. Still, Cameroon becoming an emerging nation will reduce the level of unemployment and more preference will be given to small and medium size enterprises for job employment and the right to function effectively; there will also be an increase in competitions, and efficiency in the Cameroon cities and towns. fighting against corruption in government institutions and also private institutions will be effective, promotions into positions will be based on merit, sensitization campaign will be organize to sensitize citizens especially students about the evils of Corruption. Decentralization policy which was created in the 1996 constitution will become affective and there will be an expansion of the system with the intention of the citizens to achieve the benefits of its creation, Promoting good relationship with her neighboring country Nigeria, so as to export farm products and other industrial products, Infrastructural improve on the quality if housing; the percent of people living in insecure housing will be reduce to 20 percent, the access to good drinking water will increase from 50 percent to 70 percent by 2035.

Finally, the goal to obtain a good energy supply will move from 33.4 percent to 45 percent in 2035. Life expectancy will increase from 50 years to 70 years. Programs will be organized to fight against HIV/AIDS, and other diseases especially in the

rural areas. In order for the government to successfully achieve its objectives to become the Emerging Democratic and united Cameroon, the state has implemented some regulatory to support its developmental policy for 2035 and they includes, developmental plans, developmental observatory for regional development, and laws which are put in place to guard these policies organize and meet local needs and to make Cameroon a healthier place. To achieve the regional developmental plan, the state needs to improve on the housing and other living conditions of the people; reduce the number of people living in the rural areas; improving the transport system by constructing more roads especially tarred roads, railway, and other transports and drainage systems; there should be an equal distribution of resources in both rural and urban areas; increase in developmental strategies to combat the problems face by the different forms of pollution such as air, water and environmental pollutions; look for possible solutions for climate change and increase electricity supply so as to improved economic development; protecting the ecosystem for example limiting the cutting down of trees and also improve the level of communication in the country. Notwithstanding, the developmental policy is facing some obstruction, which includes the following. There is a constant increase in population growth rate that is leading to a high demand of some basis social and infrastructural facilities. Most Cities are faced with problems of congestion, poor drainage systems, and poor sanitation. There are also high cream waves, insecurity, unemployment and prostitution in every part of the country. Lot of threat face by climate change for example floods, high sea level and diseases, which are difficult to battle with.[7]

Figure 2.1: Map of Cameroon

In summary, the new regional policy of Cameroon has helped the country's main cities to be transformed from rural to urbanize cities with moderate levels of employment, equal distributions of resources to most areas of the country. In addition, the intervention of International Organizations and Non-Governmental Organizations is assisting to shape the country in a better way.

2.2 Knowledge Base of the New Role of Regional Development in Cameroon.

In 2014 the government of Cameroon endorses the decentralization law to be applicable to local Councils. The decentralization law gave local councils the ability to carry out some essential developmental activities within their constituencies in several fields. The states also introduced the Growth and Employment Strategic Paper (GESP) to advance. In essence, the regional developmental process in Cameroon includes; Municipal Councils, companies, international Organizations (Moss Kanter, 2012) all these institutions create an active regional economy, where

socio economic developments are carried out, and these institutions are aimed at maintaining a stable state. Socio economic development has become a very important and popular concept in our communities today. Mihatic (2002:83), define socio economic development as the change and progress, embracing indicators which include increase in per capita income, a reduction in the poverty level among the masses, more social justice, modernizations in the term of social changes, higher levels of employment and literacy, wider access to medical treatment for a better life with more opportunities for self-improvement. Again, according to Cypher and Diethz, (1997) development is the improvement of the socio economic and political dimensions of the society that leads to the increased in income and the standard of living conditions. Still, the concept of development in general compasses values such as sustainability, empowerment, capacity building, participation, transparency, accounting and the expanded roles of women (Coetzee et al, 2001). When all the above definitions are put in practice citizens are convinced to live better lives and enjoy higher standards of living, while economic and political stability will be certain.

A report on development situation in the World Bank by the United Nation Conference on Environmental development (UNCED) stated that "socio economic development will never and can never be defined to a general satisfaction because not everybody will be satisfied with the developmental activities that are carried out by the local or urban councils". In 2017 Cameroon was recommended for the Innovation Idea Award for its solar energy project in the World Smart City awards held at the Smart City Expo World Congress (SCEWC) in Spain. During this section, Cameroon accepted to take the Huawei Microgrid Solar Plant solution to substitute the long-established power supply keys that entail the development of mid and high voltage power grid. The new solar plant solution sustains speedy consumption, it assists the local government to achieve rural electrification it has also, amplify the development of local industries such as medical healing, communication and schools. According to Huawei, the scheme has enhanced the development of the local inhabitants, by transmitting electricity to lots of rural community and more than 120,000 residents, increasing school enrollment rate and generate more than 1,000 employment openings, improve city management, build sustainable economies and facilitate well-organized public services.

Furthermore, the creation of local governments (Councils) in most developing countries nowadays, has boost developmental activities in local areas. although some African countries especially Cameroon and the Buea Municipal Council (BMC) in particular is still characterized with suburbs, little or no facilities to enjoy good standards of living, even though the Cameroon government is practicing a decentralized system of government with most of its activities being handled by local councils. The Buea municipality is faced with problems such as poor market systems, poor drinking water, no town planning and poor drainage systems, the municipal sanitary workers are only concern with public roads and careless about the solid waste in some other parts of the city, the government controls most of the finances of the states and allocates very little to the council for socio-economic development, causing the municipal councils to seek for assistance from International Organizations and institutions for it socio economic development. Also, at the level of the Municipality, the level of democracy is deprived because the local people are not given the right to participate in decision making and other issues that concerns them. Development can only have positive effect if all members of the civil societies are participating in developmental activities and decision making, it will thus bring positive effects in the municipality and the society at large.

Moreover, the Buea Municipal Council was created by the presidential decree No.77/203 to become Buea Rural Council (BRC).[8] The city of Buea has a population of 200.000 inhabitances with sixty seven (67) villages which are inhabited by the Bakweri natives. The official languages are English and French but the most common Language among the inhabitance is pidgin which is known as the lingua franca. The city is often refers to as an emerging city in an emerging nation, because it is one of the fastest growing towns in Cameroon today, This expression is accurate because the council works hand in glove with International Organizations for example International Governance Institute (IGI) that is contributing to ensure good education in the municipality, Lipset, (1959) stated´´ that if education does not make men to be good citizens at least it makes it easier for them to become so´´, therefore higher education is important for socio economic development; the IGI also guarantee sustainable development, and economic growth. Still, regional socio economic development is often experience when there is a production of knowledge

(Neba Samuel F., 2010). Entrepreneurs, and Customers; it as well ensure a sustainable socio economic development within the municipality, which therefore creates a dynamic regional economy (Moss Kanter, 2012).

Presently, the Buea Municipal Council (BMC) has metamorphosed into a modern institution for the reduction of poverty, and for ensuring sustainable development within the municipality. The Municipal Council also carry out other functions; it aids to close the gap between the citizens and the state, it creates long term and short term job opportunities for graduates and students (Eyong Evelyn M., 2007). The Municipal Council carries out its smooth functioning to foster her developmental drives through the following administrative departments: Elected Municipal who is also known as Policy Makers who work with other council staff and the mayor to ensure effective functioning of the council and the municipality. the Mayor Cabinet; the Mayor has three assistances the second deputy and the third deputy Mayor, they have different duties but they carry out the duties of the Mayor when he is out for other Municipal duties; The Secretary General ensures the smooth function of the council and he or she is answerable to the Mayor for any work done; Municipal Treasury assures that all the council´s debts are recovered and he or she is also pay all the expenditures of the council. Finance and he is also incharge of all the monetary affairs of the council; Social is concern with the social responsibilities of the council and also for the collection of civil status information; Store Accouter guarantees the safety of all council´s equipment; Recovery services is responsible for the collections of park fees and it's also tax the properties of the council; Technical services is concern with building permit of the Municipality.

The chart below shows the working organigram of the Buea Municipal Council.

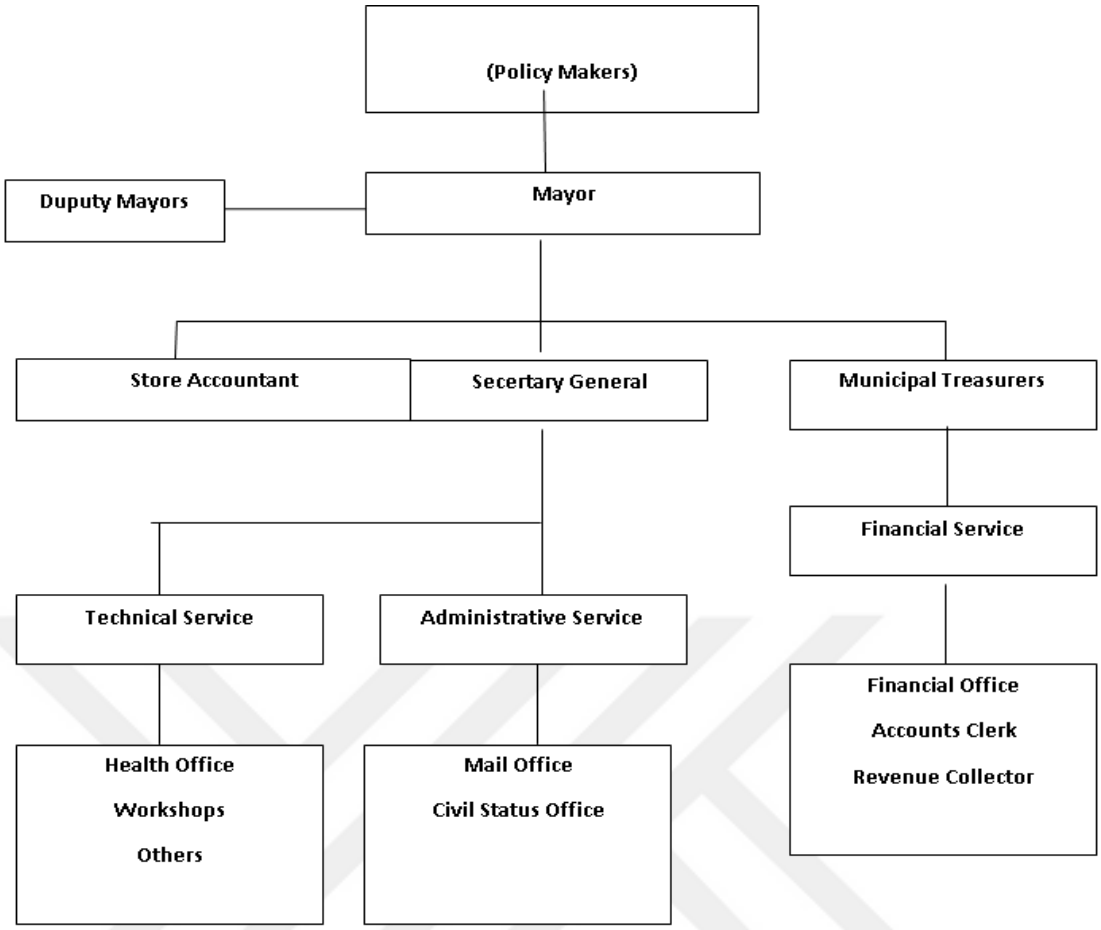


Figure 2.2: The Buea Municipal Council Organizational Chart

Additionally, municipal councils in Cameroon do not occupy a significant position in the administrative ranking of the government, they sometimes get paltry funds from the government which is however small. But, they are responsible for local development, implementation of local projects; deliver basic social services, and other tasks which are intended at improving the wellbeing of the inhabitants. Still, the State government has decentralized resources and power in order for the Municipal Councils to carry on with their own obligations, it has enable the councils to expand their supports from other sources such as International Organizations, civil society, private institutional bodies, international aids of development and local states. Councils in Cameroon especially those of the rural areas have no independent sources of income on their own, they depend on the little funds that they received from the central government for their own functioning (Ambe J. Njoh, 2001).

High unemployment rate in Cameroon is mostly between the ages 17 to 40 year and it is largely common in the rural areas, and the people who are mostly affected are university graduates, but the government has created a better way to solve the

problems of unemployment. More jobs were created and most university graduates were employed, Statistics have also shown that the percentage of Female employed is 60% whereas the percentage for male is 40%. Also in 2005-2010, there was a decrease in the unemployment rate from 4.4 % to 3.8%. [9]In 2011 a decree N 040/CAB/PM of 18th February was issued by the head of state to recruit 25,000 Cameroonian from ages 17-40 years in the public service which eventually improved living standards, and in early 2017 the public investments in roads, agriculture, stadiums constructions increased by 12.6% which supported the economic growth in a positive way and also increase the 1.8% GDP of the country.

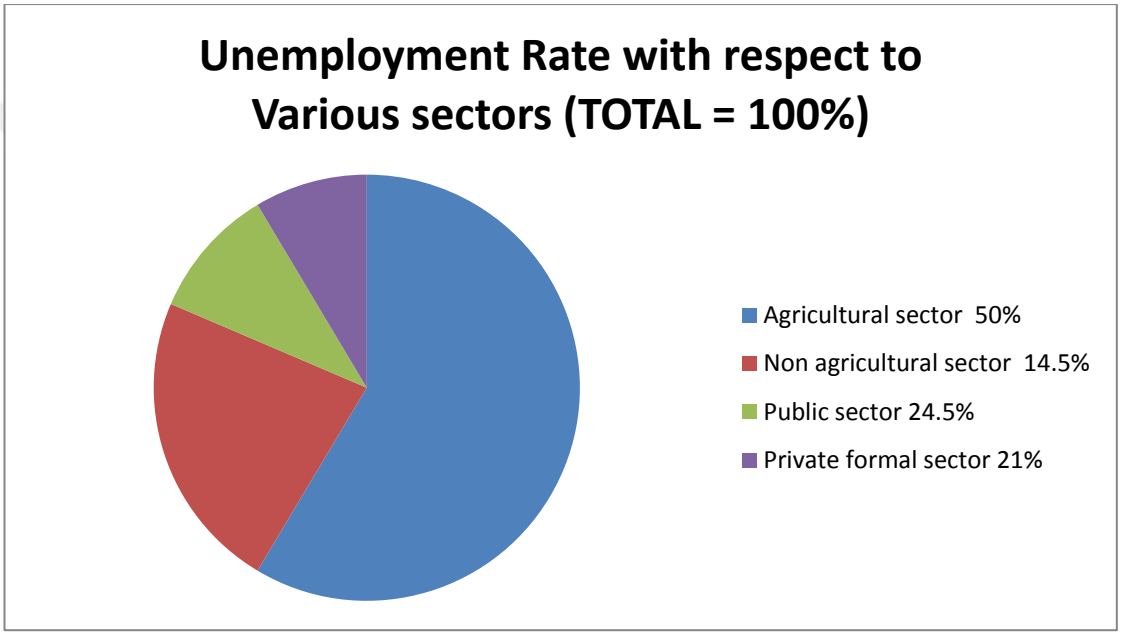


Figure 2.3: Unemployment Rate in Cameroon from 2005-17 [10]

In summary, the creation of the new policy for regional development has brought tremendous help to the economy; it has increased the levels of citizens' awareness; create employment, increased productivities for both agricultural and industrial products because of the activities of the Municipal Council. Furthermore, it has improved on the living conditions of citizens.

2.3 The Regional Innovations in Cameroon in Social Capital and Economic Development

Innovation is the putting in place considerably improved processes, organizational methods in practice or developing external relations. Social innovation on the other hand is the bringing of new ideas, products, services, positively changing and health of the community with the intention to solve crucial socioeconomic challenges face by the civil society (climate change, resources efficiency, continuous education, health care provisions, healthy aging, and the decrease of social exclusion) (Kvieskiene, Kvieska, 2012:33). It is also intended to satisfy social needs of the society or build new social relations and cooperation that seek to better the society. According, to Putnam et al (1993) social capital is a Stock of trust and an emotion attacked to a group of people or society which smooth the progress of public goods and services, on the other hand, the World Bank defines it as the relationships, institutions, attitudes and mean, that outline the quantity and quality of the society´s social interactions which contributes to social and economic developments. Again, Social capital is the value that comes from social networks that permit persons to accomplish things they couldn't do as individual. It has facilitated to establish trust, provided assistance and sharing of information and resources among social groups. Social capital was introduced by the UNESCO to do away with poverty, to ensure that poor people will enjoy their right and it was use as a way to solve the problems of underdevelopment and the poor economics of African countries like Cameroon.

In Cameroon, there are various forms of social capital for instance; religious organizations, meetings, non- governmental organizations, solidarity groups, political parties, and extended families (Tchuindo, 1999). These groups make obtainable psychological and socioeconomic needs to the rural areas, such needs includes electrical supply, road constructions and healthcare services. They also create links to trim down poverty in the communities and at the national levels, by civilizing agricultural productivities, hygiene and sanitations, education and access to good drinking water. Social capital innovation in Cameroon has a considerable impact on the poor people in the rural areas it humanizing actions that are associated to them (equality and growth), it has also support to decrease the levels of poverty in the because of the responsibility played in the economic by bringing citizens, families collectively for a common interest such as social contract and trust which ultimately

lead to social and economic development and give poor people the right to bring their resources collectively and as such improve their agricultural productivities and other social facilities. The innovation of social capital in Cameroon has greatly reduce the poverty level; it has given the local people the right to participate in decision making and right to be heard socially, economically and politically (Slamet, 2011).

Furthermore, because innovation play an exceptionally role in the economy, many countries in Africa are aimed at achieving an increase in development, these countries especially Cameroon is trying to improve on their levels of development, despites of their underdeveloped nature and poverty conditions. In order to arrive at this level of development, the government has put into operation a number of policies to help resolve issues akin to environmental problems (pollutions, global warming and conflicts); a case in point was the creation of the GESP in 2009 to eradicate poverty especially in the rural areas. However, as a result of this, the evils of poverty are speedily on the way out. In Cameroon and other African countries like Nigeria and Ghana, Social Capital is known as friendship association or njangi (servings) which is usually done in a group or family. Again, this form of capital has given political power to the poor and has given them the right to participate in making decision facilities that the rich enjoy which the poor possibly will not enjoy being in a group, still, it has created security and reduce risk, flow of quality information, reduce household poverty level and reduce the cost for economic transactions which in time lead to a raise in income. Nevertheless, it has led to the mobilization and utilization of natural resources (minerals), development in human capital through the provisions of learning materials make available to school and health centers, that has subsequently reduce poverty level, health, illiteracy, and lack of confidence, There is also the flow of information to the rural areas that has led to economic growth and equality in the distribution of resources which in this era has reduce the lack of income, means of production, and prosperity. Hence social capital is set to reduce the levels of household poverty, increase socio economic development, construct a peaceful environment and will eventually increase the creations of more social grouping within the country.

Accordingly, there is a connection fixed between innovation social capital and economic development in Cameroon and other parts of the world. The main aim of

African countries and Cameroon in particular is to create a good market for its economic productions and to give a dynamic role to entrepreneur (Masden, 1993). According to Shumpeter, (1934) innovation is an endogenous process that is persuasive to economic development; he added that the businessperson is an innovator because he combines production factors and the changes in technology to improve production. Innovation has improved economic development as more importance are added to SMEs (Small and Medium sized Enterprises), hence the success of a businessperson is his ability to increase innovation in the economic sector to go well with the market (Ngoasong, 2007). After the independence of Cameroon, the state permitted the establishment of private enterprises and also sponsors them so that more economic progress will be obtained in the economic (Ngoasong, 2007). The Ministry of Small and Medium Sized Enterprises, Social Economy and Handicraft (MINIPMEESA) was also created to give guiding principle (taxation policy, business laws, finances and markets) on how these enterprises are to be operated and to guarantee their smooth functioning. SME is supporting the productions of agricultural products (cotton etc), and increasing the training and working environment of workers. Even though, Innovations in economic development needs lots of positive feature as well as hard work, the regional innovation in economic development level in Cameroon has basically improved due to the exploitations of raw materials like oil, coal etc., increase the methods of agricultural productions which has reduce the cost of productions, as well as boost the levels of production. The government has also increased the accessible of goods and services (pubic taps, tarred roads, public hospitals and public toilet) in both the rural and urban areas. Still, the creation of the National Employment Fund has made the provisions of over 6000 jobs within the country, the Central Unit for Rural Organization Reforms is giving financial (CUROR) support to both the rural and urban areas to support them on agriculture which is the main activity in the Country (Ngoasong, 2007). The South West Region of Cameroon is the region where almost all the country´s resources and agricultural activities are most common (oil, palm oil production, cocoa, banana plantation and the rubber plantation). In this region, socio-cultural and economic wellbeing are evenly distributed within the area. On the other hand, the most common activity is farming and small-scale enterprises, still citizens migrate from different parts of the country and outside the country to seek employment opportunities from the plantations. This section analyzes the regional

innovations in Cameroon social capital and economic development in Cameroon; it also analyzes the activities of the entrepreneur to eradicate poverty through the set up of the SMEs. SMEs enterprises contribute to the highest degree to develop economic development through the creation of employment opportunities and the donations of financial assistances for both the rural and urban areas in that way improving their standards of living. Innovation is there an important policy for economic growth in all countries of the world.

In summary, social capital and economic development are playing major rules in the innovation process in Cameroon because of the activities of entrepreneurs, the government and the citizens, to establish better living conditions.

3. ELEMENTS OF SMART CITY MODELS IN LITHUANIAN SOCIAL CAPITAL

3.1 Building Smart Regional Capacity

Social capital is the social interaction and model of shared, belief which permit groups and organizations to increase their right of entry to resources such as; social services, professions, or government deals. It is associated with trust, co-operation, mutual engagement and social unity; it can as well influence development in the production of institutions, firms, and various other forms of capital, and it is also use to create smart cities. Besides, social capital can improve the fast flow of knowledge between individuals, communities and firms. Human and social capital is an effective instrument for individuals and societies to become accustomed efficiently and quickly to the economic and social changes.[11] Furthermore, Social capital is increase of trust of social relations (Fukuyama, 1995, Kvieskienė, 2005), civil participation (involvement) developed by participating in voluntary organisations (Putnam 1993, 2000), a structure of the society by creating willingness to participate in development of physical capital (Kvieskienė, Kvieska, 2012), Based on scientific research the researchers of the Legatum institute, when assessing social capital, distinguish 3 classical groups of conceptions of social capital which are associated with a social unity, involvement and civic societies (networks of communities, non-governmental organisations, families). "The Social Capital sub-index measures the strength of personal relationships, social network support, social norms, and civic participation in a country".[12] According to assessment of social capital it consists of social cohesion and involvement (a formal volunteering, assistance to strangers, donation, trust networks of communities and family, etc.).

Still, it involves strict trust among network members, not widespread trust that exist in the general community. People can mistrust members of their own race which they didn´t know but yet have tough, trusting dealings among friends and association that facilitate them to find the resources needed,[13] the connection of people through groups or institutions can assist them to find steady employment that will enhance the quality of life in their communities. However, this connection might not work in all situations but at times, someone may know many people or institutions, but not have trusting ties with them, these pathetic connections may not symbolize social capital because individual or organization cannot depend on them to get access to resources (Anne Schneilder, 2004:7).

What's more, a smart city is a metropolis where the states and citizens are not frightened by change, open to competitions, and it is also a society where people are happy because they enjoy fairness in the distribution of income and resources, good public health facilities security in economic, better access to education and skill improvement. In addition, in the economic view Smart city is use to expose municipalities with smart industries that use ICT in their production procedures, modern technologies such as modern transport to improve urban development. Smart city laid more emphasis on sustainable development by putting into practice strategic planning and smart technologies, to achieve the following growth principles such as; to endorse growth, uphold communication between stakeholders and the community for developmental purposes safeguard farmland and the natural beauty of the environment, form movable locality and to make housing opportunities for all citizens (Tunc, Karadag, 2013). Some centuries back, there were less than 10 cities around the world. Also, in the 18th century less than 5% of the world's population lived cities while the greater part of the population occupied themselves in generating an adequate amount of food in order to survived (UN Demographic Yearbook 2011, 368-383; IBM 2010, 1-2). As time goes by, urban population began to increase from the 5% to 30% all around the world. Nowadays, Cities are advancing economically and political, besides there is an increased in employment rate and more advancement in technological capabilities to improve on their developmental process. Over half of the world's population lives in the city and the

percentages keep increasing as time pass by and its estimated that by the end of this century the figure will increase up to 80%.

Additionally, economically, many cities around the world have turned into agglomeration center for universal services. This has led to the attraction of both human and physical capital in the cities. Once more in the political domain, the governance systems are changing from the national levels to local level all around the world, this has given cities greater freedom, greater legal and financial powers. The monitoring and control of various developmental projects can be more accurate, successfully and constantly repeated because of the advancement of technology, additionally, cities are stand on by systems such as infrastructures, networks and environments. Cities are as well directly related with people and other resources such as transport, communication, business, energy and water.[14] They are some center scheme that works collectively in order to increase competence in cities, they include the following:

- The scheme focus on people for instance communal groups and the society, to ensure public safety, provide health care services, improve on the systems of learning and fight against natural disasters like flood, as well as climate change.
- The scheme also focus on water systems such as refined water, the hygiene and sanitary conditions of the water, reserves and storage, to make certain there are no leakages, and to ensure that there is a regular supply to the communities.
- The scheme guarantee that all policies and regulations of business are put in place to for smooth functioning, to safeguard trade in both national and international level, investment and to also safeguard the product and labor market of the country.
- In addition, it makes sure communication, which includes the wireless system, and telecommunication for mobile communication, open wireless networks and Interactive voice response.

- Furthermore, it focuses on energy, which comprise of power supply within the regions to maintain smart power supply, efficiency and renewable energy supply (Tunc Karadag, 2013).

Furthermore, in Lithuanian Social Capital has led to the enlistment and utilization of natural resources (minerals), also, there have been the development in human capital through the provisions of learning materials to school and health center, which at that moment has reduce poverty level, health, illiteracy, and lack of confidence. There is a flow of information to the rural areas that has led to growth in the economic and equality in the distribution of resources which in this era has reduce the lack of income, means of production, and prosperity. As a result, there is a connection trapped between innovation in social capital and economic development in the Vilnius Municipality and other parts of the world with the aim of building up the smart city concept. Social capital helps to improved economic development, as well as economic development helps to improved social capital.

The Elements of a Smart City models in Lithuania Social Capital can be used to talk about diverse scopes although it is complex to find smart cities in our world. Yet the Lithuania state is still working harder to build high-quality life for their citizens. The scopes include; smart economy, smart governance, smart environment, smart people, smart mobility and smart living, these scopes are based on theories of regional competitiveness, transport, ICT economic, natural resources, quality of life and citizens participation in the governance of the city. [15] A number of urban activities related with smart cities include manufacturing, teaching, contributions and technological communications. Moreover, the Smart City projects in the Vilnius City in Lithuania share the following characteristic:

- Uses network infrastructure to improve on economic and political efficiencies and social, cultural, and urban development.
- There is the use of ICT to increase prosperity and competitiveness – for citizens and local businesses.
- Collective public intelligence, based on effective planning for urban and regional development, and innovation.

- Focus on social and environmental sustainability via citizens' participation in the balancing of growth initiatives with the protection of valuable natural resources.

Moreover, Builders of Smart cities are always organized, competitive, benevolent to build an energetic society where citizens will accept to work together with the states to achieve smarter societies. The following points assist in building up smart cities.

- Independent, energetic society, healthy and creative**:** the states need to build its own society and environment. The citizens as well needs to be creative and think critically, the states should be able to ensure good public health and citizen's participation because a healthy life leads to a decline in diseases.
- Strengthen, dignified, responsible for a common fate brought by the citizens: the state need to build up cultural and political consciousness in the country to endorse national identity, stress on constructive past experience; to reinforce historical self-awareness and self-worth to support different educational and creative appearance, also, to manage national study programs as the foundation for humanistic educational training for common cultural competencies; to generate a vivacious public space for information by promoting social and responsible media for information in the community; to introduce media literacy programs in learning organizations; to value the autonomy of the media, and support self-regulation processes in the media, to create more job in order to limit migration; to create constructive working conditions for workers.
- Creating an efficient structure of learning: to successfully adapt information communication skills (ICT) to gain and expand information and expertise necessary for an energetic society. To extend national programs to let loose learners' prospects and talents, as well as academic mobility; to support non-formal education for talented children and to bring together the country's most excellent teachers, science, culture and sports professionals; to be a magnet for overseas expert; also to build an environment constructive for science and research and to make a world-class studies and research centre, to rally the best scientific and teaching latent which will bring interdisciplinary network for research and development, and open up the research

infrastructure for business-science dealings; moreover, expand a wealthy artistic milieu by investing in the expansion and amalgamation of public cultural institutions, and supporting public contribution in artistic growth; finally, to ease cultural vitality, principally during global cultural connections and worldwide artist mobility.[16]

The details of the smart city models for Lithuanian will be known below;

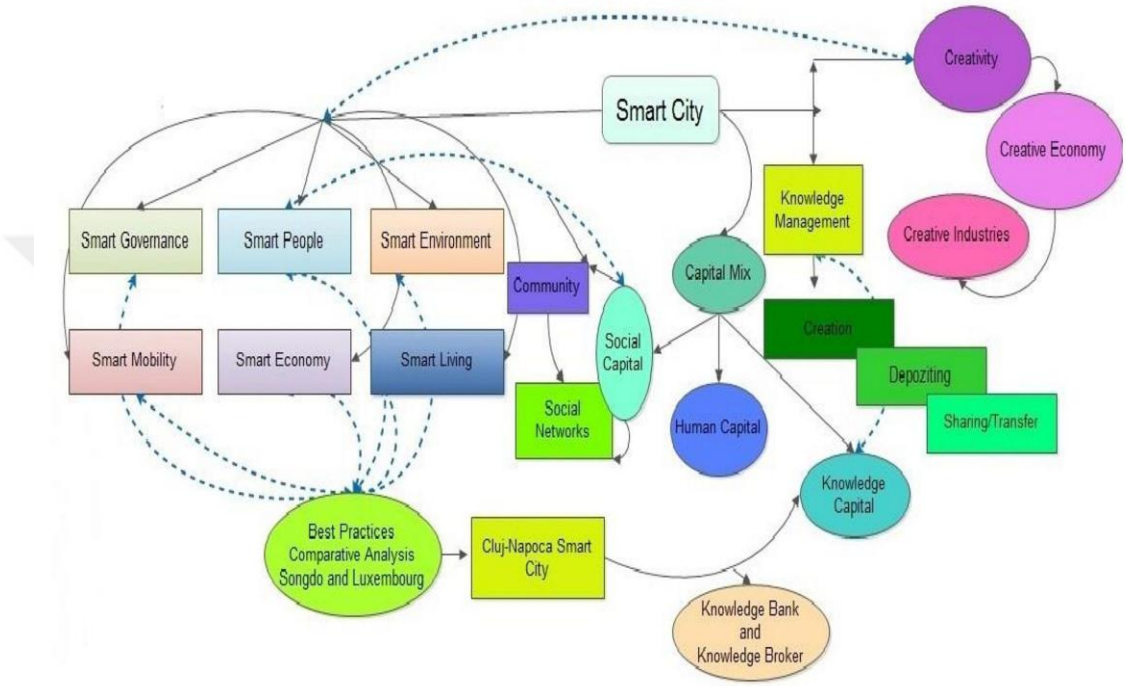


Figure 3.1: Smart City model.[17]

To start on**,** Smart Economy Vilnius is pro in economic, political social and environmental change in Lithuania and the whole of Eastern Europe and it is the fastest-growing cities in the region; the city has the world fastest internet connection, which has let loose wide potential for technology and growth in modernization.[18] The city's smart and progressive administration has been accredited by analyst and the media, which has attracted overseas investors, their efficiency has been accounted as well. Besides, Lithuania has a vision to achieve social and economic development by 2020 for this reason there is lot of innovation force to achieve the

developmental goals. Competitions for development, entrepreneurships are encouraging; creativity is high, labor market is flexible and it is link to local and global markets. The innovations spirit in the city has brought new ideas to the state and it has guarantee socio economic development not forgotten the high employment rate.

Also, Smart People are the outcome of cultural and collective multiplicity, inventiveness, and commitment. Cities may propose programs and services to citizens in order to elevate social capital and qualification (Letaifa, 2015). The level of development in Lithuania is higher than that of other European countries because, citizens try to participate in public affairs, bring flexibility and creativity in both social and human capital, and integrate with the community to improve public relations.

Furthermore, Smart Governance comprise of e-services and social media, use to improve citizens' empowerment and participation in public administration, transparent decision-making procedure (Neirotti et al, 2014), citizen contribution and the government provision of social and public services. In Lithuania the government strive for transparency in states affairs, facilitate citizens participate in decision making as well as collaboration between local administration and NGO.

In addition, Smart Mobility in Lithuania is a cooperative priority for the 3 largest municipalities in the country, specifically Vilnius, Kaunas and Klaipeda. The reason for this is due to the extensive development of housing; increase in private cars and traffic in cities. Despite the limited amount of people living in the city, there is overcrowding in major roads which longer journey time, causes pollution, and other related problems. Some developmental activities are funded by the Ministry of Environment, while some are funded by Regional development priority put into operation by the Ministry of Interior. The public transportation system has gone through constructive changes, for instance a single card for public transportation was introduced together with brand new vehicle and fast-track buses were made available to ease transportation. What is more, bike sharing system has been launched to ease movement within the city; the bike sharing has become one of the most popular means of transportation around the city center.

A new mobile applications app was recently launched in the city, the app permits city dwellers to buy tickets on their mobile phones, arrange their trips and make schedules for programs easily. The portable parking app was also launched; the app has a start-stop function which allows consumers to pay only for the precise time they had parked. Smart Vilnius.

Again, there is the city's route planner app that was design, the app includs all the various modes of transport such as; buses, city bikes, and the car-sharing system as well. It serves as a smart tool for planning journeys.

Once more, Smart Environment is the preservation of the natural urban environments by reducing noise, water and air contamination, managing environmental waste as well as resource and other environmental problems. In the next three years to come, the Vilnius city of Lithuania will modernize its road lighting to a high-efficiency contemporary LED lighting tools to reduce the city energy consumption to 70 percent (www.vilnius.lt).

According to analyst, it is the first time in Europe that a city's whole lighting system has been completely modernized at same time. This saves taxpayers money and will also make the streets safer at night, reduce traffic jams and also reduce environmental contamination. Marie Donnelly, Director of the European Commission's Energy Directorate described the Vilnius lighting renovate project as a good example for the EU, to save energy and implement the best sustainable natural solutions.

Moreover, Smart Living entails humanizing life quality in terms of services, attractive health care facilities, cultural facilities, pleasant appearance for tourists, encouraging social cohesion, and safety (TOPPETA, 2010; LETAIFA, 2015). It also entails a number of aspects like culture, health, individual safety, housing, tourism, energy, education, social cohesion, (Vienna Univ. of Tech – Centre of Regional Science, 2007:11-12), These factors makes Vilnius a smart city.

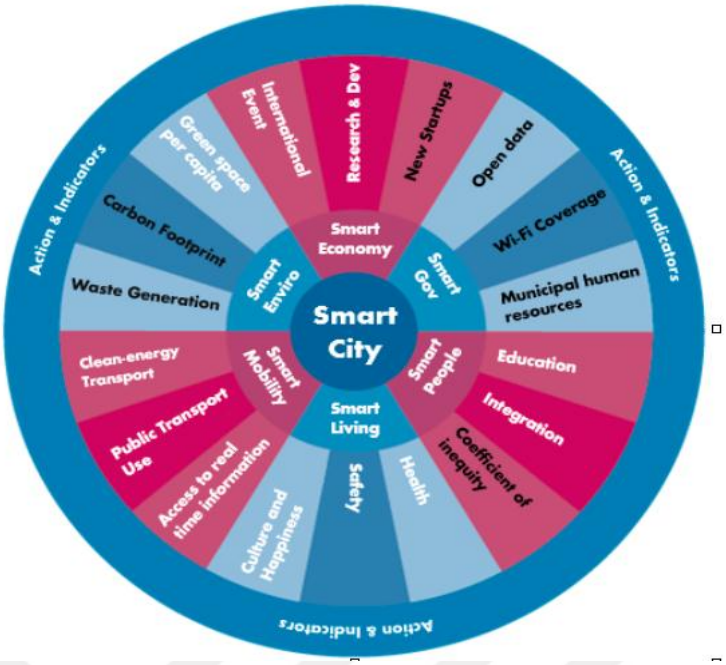


Figure 3.2: Smart City Wheel Model.

The figure represents the Cohen's Smart Cities Wheel Model is a holistic structure for allowing all of the key mechanism of what makes a city smart (smart mobility, transport, living, governance, people, and smart economy). It was used as a criterion to categorize Twitter's interpretation. Texts in white symbolize subject that are discussed on Twitter while the Text in black indicates topics which are not talked about on Twitter.[19] It shows the awareness of the social media on the measurement of resources. The main view is that Twitter should become a vital place where citizens get involved to discuss about the misuse of energy, the total energy consumes and the waste volumes produce by the city per capita.

Yet, a city cannot be defined "smart" if not take into account the iniquity. Gini coefficient of inequity that seek to measures the inequality of income. It was initiated by an Italian statistician Corrado Gini. His technical data was accepted to become part of the education for citizens throughout social media. If the community human resources gave interest to citizens' opinion expressed on social media, the constitution developers would be bound to consider the process. Even though it is inappropriate to tell what new forms of contribution will exist, it seems pleasing that

smart and aware people on social media could be the key tool for spreading information favoring the participation of others. However, innovation on green space, mobility and smart living are well talked about on Twitter.

The effectiveness of this scheme does not lay only on the advancement of technologies but citizens participation as well. However, the contributions of citizens on the social media show the value of the experiment.

In summary, living smart is the goal of most countries, though other countries might not have the resources to make changes, yet they work hard to make sure that citizens enjoy some reward of economic development. Nevertheless, countries that have the resources to be smart put the resources together to make better innovations.

3.2 The Regional Development for Smart Regional Innovation in European Countries

Smart cities involve groups of that are working together, making use of energy supplies, raw materials, social services, financing and changes in technology to facilitate a flexible, excellence life and a sustainable regional economic development. These aspects become possible through the making of innovations, planning and strategies to meet up with the needs of the citizens. Innovation on the other hand is the remarkable enhancement on goods and services which is as a result of technological improvement. Still, in order to achieve innovations, manpower also known as the traditional method, investments in research, development (R&D)[20] and education are required to make the most of innovations, However, there are other factors that powered innovation; social capital which is gotten from our social environment; findings for R&D and the institutional environment, these factors helps to reduce cost and the risks involved in innovation. The study gives the meaning of smart city as it looks into the many smart city projects all around the world, it also gives an insight and statistics from a number of ABI researches that looks into the amount of technologies which are used to make Municipalities and other agents for citizens' satisfaction, it also makes sure that infrastructure and transportation make use of energy effectively and efficiently. Europeans Cities are pleasantly becoming a central point of interest in their societies and in the world at large, principally

because of the process of economic development and urbanization in Europe countries, and the increased in the utilization of resources. In other to meet up with the depends of the citizens, nevertheless, there is a need to bring a transformation in the cities and in the underdeveloped areas by developing them to become more smarter, consequently this need have to be achieved in a smart way so that they can be called smart cities. Defining the Smart City concept is not easy given that "smart" is a relative term. IBM struggled with this when developing programs to help business, government, and civic leaders utilize technologies "to achieve economic growth, near-term efficiency, sustainable development and societal progress," ultimately labeling its concept Smarter Planet. In addition, the company's name for its municipally focused solutions, Smarter Cities, underscores the idea that a city's improvement and forward-looking development should be benchmarked against itself (via improvements to its technological systems) and avoids the implication that any city or municipal technology program not labeled "smart" should be considered "dumb." Still, municipalities around the world are exploring the Smart City concept. These cities may be installing municipal wireless networks, implementing e-government initiatives by providing access to city departments and initiatives through websites, adding intelligent transportation features to public transportation systems, or developing ways to cut their carbon footprints and reduce the amount of recyclables consigned to the trash heap. While definitions vary, it is generally agreed that a Smart City can be judged on the basis of six dimensional axes:

- Smart Economy
- Smart Environment
- Smart Governance
- Smart Lifestyle
- Smart Transportation
- Smart Community

Furthermore, Smart city technology in Europe is predicted to grow from annual revenue of 2.2 million dollars in 2014 to 6.6 billion dollars in 2023. The objectives of the Europe 2020 are to boost the efficiency and reduce carbon emission. However, much of the European smart city is based on efficiency of existing infrastructure

rather than building new cities equipped with smart city technology. The Europe 2020 Agenda also centers around the three earlier established pillars: innovation, sustainability and social cohesion by renewing the underlying approach of the Lisbon Strategy, which is based on a partnership for growth and job creation that relies on a mix of the commitment of Member States to take action at the national level (including the usage of indicators and target levels), while making also the best use of governance mechanisms and instruments at the EU level. In that regard, greater emphasizes on the coordination of those levels, hence national and European policy, has been given as well as a more binding character for the achievement of the goals as underlined in the final agreement (Barroso, 2010; Natali, 2010).According to Kvieskienė, G., (2003, 2005, 2012), Putnam, R., (1993) the growth of socioeconomic dynamics depends on the quality of smart education, positive socialization, whereas the perspectives of individual's life are predetermined by possibilities of individual's involvement in the socioeconomic system, results and accessibility of education. The objective of this Master degree thesis is to conceptualize the smart innovation ecosystem characteristics in research and practical experience that elucidate the assembly of all smart city notions and elements like green, interactive, happiness, interconnected, instrumented, open, integrated, intelligent, and innovating layers composing a planning framework called, Smart City Reference Model, which was analyze by Sotiris Zygiaris[21] and others[22]. Smart Cities[23] research can be in different shapes and sizes, the models can be created or implemented in a range from smart policy paradigms, policy elements that clinch the green, broadband, and city economies. These paradigms study can be taken from global sustainability challenges and integrated in a local context. Smart cities researchers and planners could use the reference models to define the conceptual layout of a smart city and describe the smart innovation characteristics in each one of the six layers. Case studies about smart cities, such as Barcelona, Edinburgh, Amsterdam, USA smart cities[24] examine and evaluate their entirety in relation to the Smart City Reference Model. Next to other spheres of life, the impact of globalization and network culture is also observed in various education and socio-cultural cycles and at all levels: pre-school and pre-

primary, non-formal education, general education, continuous adult teaching, sector of socio-cultural services, etc. Due to various reasons this impact is not equal on different education levels, separate institutions and geographical locations. With the greater part of the world's population residing in urban areas for the first time in human history, cities are rising as key sites of social experimentation and problem solving in the 21st century (Glaeser, 2011; Grabar, 2013; Lehrer, 2010; Katz and Bradley, 2013; Kvieskienė, Kvieska, 2012). Also, innovation has a great duty as far as economic growth and development are concern. It is essential to identify different aspects, which decide on the intensity of innovation in different regions and countries of the world, more emphasis will be on European countries and the old member states of the EU, countries with no communist setting and transition countries. Finland for example, is a developed country and they receive the highest incomes. It also the most educated country, because of the safe learning environment for students and of teachers. And another good example is Singapore. Singapore is one of the leading cities that apply ICT strategies and smart policies in urban area expansively. The three pillars of Singapore IT strategy are IT education, IT infrastructure and IT economy. An imitation of the Link NYC project is planned in Barcelona Spain where touch screen kiosks will be installed throughout the city. Connected sensors for parking spaces, environmental watch, and garbage bin fill levels will be set up within the city. in the city of Santander, Spain over twelve million sensors have been installed to monitor the cities every mover and for this reason the city act as a testing ground for sensor technology all over the continent (Karadag, Tunc, 2013). In the United Kingdom, smart parking sensor was deployed in 2014 in the whole of Westminster road network. The project was installed by Park Ya, which is an app in Dublin Ireland that uses open data from the Municipal Council to recommend a parking app that makes parking and driving easier. Besides, Germany is acting as a pro for Europe smart city technology. Most programs in Germany have been implemented to subsidize smart city programs that bring the country more closely to the carbon neutrality goal.

Nevertheless, Vilnius is an emergent city in Eastern Europe. It is also the heart for political, economic, social and environmental transformations in Lithuania and the other regions of the country. Recently a decision was made by the Vilnius government to pursue smart solutions to the city's environmental challenges, and to

engage its citizens in administrative decisions. The city has the fastest internet connection in the world, an excellence standard of living, and the cleanest water and freshest air of any European city. The latest study shows that 93% of citizens are contented with their life in Vilnius Lithuania. The citizens in Vilnius represent an extensive market for shareholder. 16 million people live within 300km of Vilnius. It is also a flourishing city, which produces almost 40 percent of Lithuania's Gross Domestic Product.

The most important lead identified in the city of Vilnius includes the following (Andrius Pleckaitis, 2016):

- Vilnius City Sustainable Mobility Plan
- Traffic light executive system and upgrade
- increase of the public CCTV watch technique
- Number plate capture and billing system
- Subversive ravage compilation container.

Also, because of the growing population and urbanization in Turkey, the state through the Ministry of Environment and City Planning has put in place major strategy plans and regulations to target the 2023 vision. However, the best European countries to live in are Finland, Switzerland, Sweden, Australia, Luxembourg, Norway, Canada, the Netherlands, Japan, and Denmark. United States.[25] A countries welfare, happiness, civic index confirms in part that investments in education, social and economic innovation and investment in science and development leads to changes in economic and quality of life (Giedre Kvieskiene, 2017). In March 2011 The European Commission launched the Social Innovation Europe initiative; it was intend to help social innovators to develop goods and services, to find experts to develop social innovation and new businesses, latest working methods that will impact organizations, customers, and the society at large. In order to achieve the innovation goals, the states and non-governmental organizations have been carrying out scientific and technological research and development (R & D) to improve on innovation. Also, to achieve the Europe 2020 developmental visions measures have been put in place to mobilize more participants, networks and consultants. Innovation

that expresses new social structure formation in societies is directly related also to public culture and mentality changes and the growth of social capital (Giedre Kvieskiene, 2017).

Most European economies are affected by a decline in economic and finance. Therefore, there is a need for innovation to assist in solving this problem by promoting competitions, improvement in technology and businesses, which will therefore increase research institutions, economic growth, create an innovative society, encouraged foreign investment, promote business network and innovation network, to build a creative society and improved the living standards of the citizens. For example, the three has been a lot of improvement in the Lithuanian economy because of the improvement in research. In addition, to overcome the financial crisis more attention has been given to social inclusion and the idea to promote social innovation, and so, this have help to close the gap between the rich and poor in the country. Hence, most residents in Lithuanian are faced with poverty and exclusion making the country to be at the fourth place from the bottom in the European Union (Giedre Kvieskiene, 2017).

Additionally, in 2010 the European Commission issued the Europe 2020 Agenda, with several essential topics that Europe has to deal with in the near future, there were also some fundamental questions like "what will be the basis for Europe's future competitiveness, as public deficits are reined in to repair public finances and as our labor force begins to shrink? How will we create new growth and jobs? How will we get Europe's economy back on track? How will we tackle growing societal challenges like climate change, energy supply, and scarcity of resources and the impact of demographic changes? How will we improve health and security and sustainably provide water and high-quality, affordable food? Consequently, these fundamental questions can only be answered by putting more emphasis on certain policy priority with several goals and targets. The European Commission (2010:10a) labeled the five most important headline targets in terms of quantifiable indicators by emphasizing that each single Member States, but more importantly the whole EU, must achieve those goals by the year 2020:

- Raising the employment rate of citizens between the ages 20-64 to at least 75 percent;

- Achieving the aim of investing three percent of the GDP in R&D by improving the conditions for R&D investment.
- Climate change and energy policy the 20/20/20 goals which is (a) to trim down greenhouse gas production by at least 20 per cent (b) enlarge the total share of renewable energy in the total energy utilization to 20 per cent, (c) increase to 20 per cent of energy efficiency;
- Reduce the rate of untimely school leavers to 10 per cent, at the same time increase the share of people (aged 30-34) that has finished tertiary education to 40 per cent;
- Finally cut down on the total number of Europeans living under the national poverty lines by 25 per cent, as a result lifting more than 20 million people out of poverty.

Again, European Innovation Partnership on Smart Cities & Communities search for an extensively increase in the industrial sector for the smart city resolution; amalgamate technologies from Energy; Information and Communication Technologies (ICT); finally, transport system. To make every effort to bring more benefit to Europe countries; a noteworthy development in the life of European citizens'; an improvement in the level of contest of European industrial section, innovative of Small and Medium Sized Entrepreneur and a strong involvement in the Europe 2020 vision for energy and climate change. All this will be accomplish through integration, changes, sustainable Smart City resolution, in areas where energy production, distribution of resources, transport mobility, information and communication technologies are closely linked. The European Innovation Partnership aims to triumph over the challenges that get in the way in achieving smart European cities. Adding together, to create innovation Strategic by Implementing Plans that as well will create value for Europe cities, to generate more successful knowledge allocation and also to institute partnerships among industry, innovation of SMEs, in European cities and other local stakeholders crossways European borders.[26] Citizens are consequently involved in these developmental processes but they are absent to motivate and make powerful to contributions. Hence, if they participate the strategies put in place will become more successful; on the

other hand, measures and tools are put in place to furnish citizens to be actors in smart city developmental systems to ensure that they are educated, forced to act correctly, hands-on and participative, in this ongoing innovation process. In the long run due to their participations, creativity and entrepreneurship could be mammoth, offering massive unexploited prospective. Furthermore, the ICTs is another hindrance to this process of innovation, the most significant is the Internet, through the use of smart phones, because of the enthusiasm open towards new citizen programs that may not fit in with the current organizational system. There is a Strategic Implementation Plan (SIP), which is a product of the work of a High-Level collection, contributions from the Smart Cities stakeholder platform and their supporting Sherpa group. The plan concentrates on some unambiguous, straight up areas at the moment in order to focus on energy and to put on some propulsion together: Sustainability of urban mobility, energies, public transportations, improving the energy competence of buildings and districts, mounting the allocation of renewable energy sources and the livability of the communities; Integrating ICT and transport to improve the effectiveness and sustainable cities all over Europe. [27]

In summary, social partnership and Research are important tools for economic innovation and social innovation because they help to bring in new ideas, workplaces, and improvement of quality of life and more qualitative and more efficient social solutions.

3.3 Community Social Capital

Social capital is not about what you know; it’s who you actually know. It is the resources available to community to achieve their goals. There are also other capitals such as human capital (the skills and abilities of individuals in the community), natural capital (the lands and waters within and around the community), and built capital (a community's infrastructure such as water, sewer, road, electrical, educational, and health care systems). Some frameworks add other types of capital like cultural, political, or financial capital.

There are three types of Social Capital

- Bonding Social Capital; its show connections between people inside a given social group. It's also strengthening the relationship among members.
- Bridging Social Capital; signify the relations between people coming from various social group and between different social groups It also include more distant bind between members of society.
- Linking social capital; It is the extent to which an individual's or group's network are linked by those with very unequal resources. It does also refer to unbalanced power relations between individuals and groups.

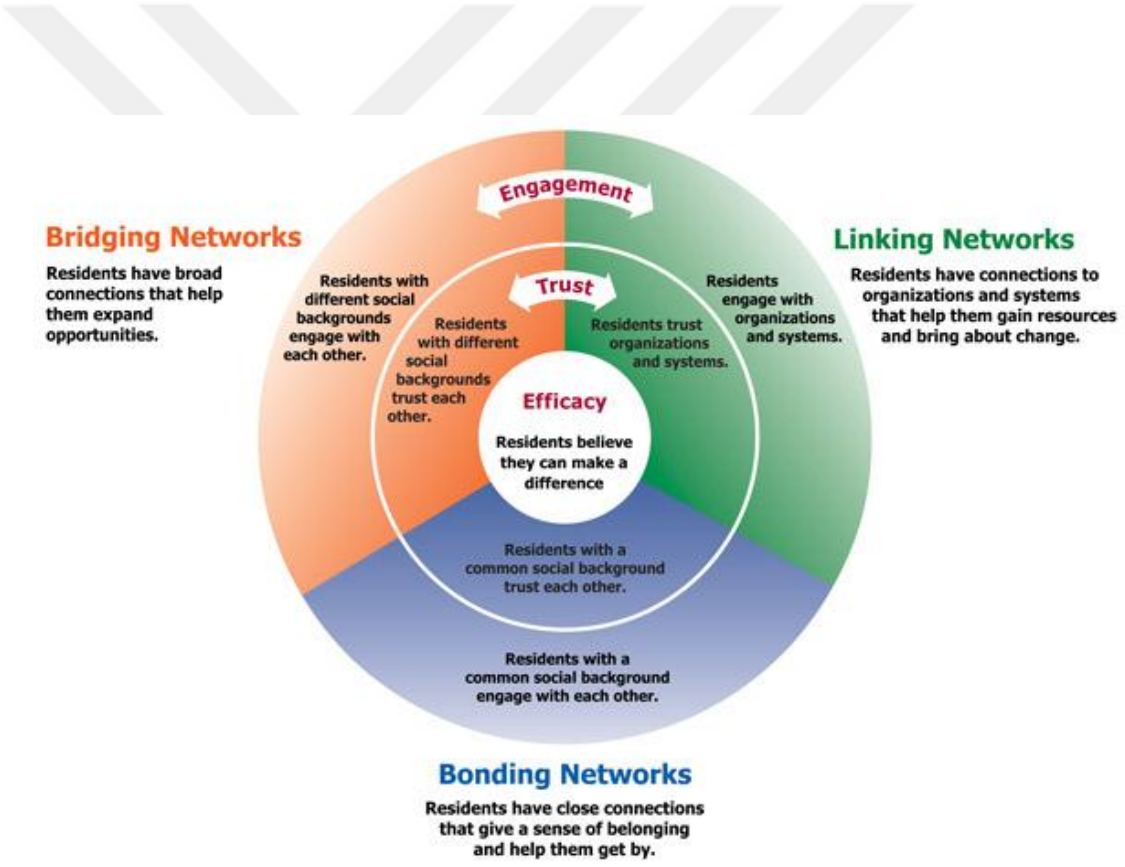


Figure 3.3: The whole picture of Community Social Capital.[28]

The picture shows how citizens relate with their natural environment, it also illustrates that we live in an environment which is natural with green grasses and through that we create a community with smart education, lots of social innovations,

service learning which led to the creation of social, human capital and social partnership. This chapter examines social entrepreneur and the ability to attract capital in various forms: not just financial capital, but also human and social capital (see Lundström et al., 2013)[29]. Human capital primarily comprised of the skills that existed in the Board of a Tennis club in a village in Sweden known as Docksta. Above all, there were three types of competencies on which the business was based. The first was the skills to be visionary and to recognize the value of networking with various financiers. One of the founders of the club has been able to make contacts with people in the county administration and the municipality to which the village of Docksta belongs – both have been key funders for several of the club's projects. The same person has had the ability to write grant applications, which led to the club received funding for development projects. The second competency consisted of the person in the club's leadership that had practical knowledge of property management. This expertise has been of great importance in that the club could be able to develop the property section. The section gave the club the financial possibilities for the projects. Without the income that the club received from their properties, they had not been able to make the investments that have been central to the social entrepreneurial commitment. The composition of competences can be seen as an exemplification of Adizes theory (1997) arguing that a single person cannot be assumed to have all the skills necessary for successful organizational operations, and that it is therefore necessary to have a management team with complementary properties, including practical / "producing" skills, entrepreneurial/innovative skills, and administrative/coordinating skills. Financial capital is the backbone of social entrepreneurial activity. It is the ability to mobilize the financial capital necessary for various investments in order for the club to contribute to a relatively positive development in the local society during the half century that has passed since the club was founded. The cash flow that the club has received from their own properties and from the music festival has been the economic backbone of the club's involvement in the development of society. "When we ran everything ourselves, climbing, etc., we earned several hundred thousand a year in to the company. Then you dare to take risks, too. If you have losses, you are not as keen to start something new. But if we have financial capital then it is clear that we can support. Have given

bank guarantees for the school, so we've got to be a bit of the bank there too." The funds received by the club from the municipality to operate the schools and the home for the elderly have been important sources of income. Moreover, EU funding has been an important source of financing. One of the members of board was a key figure in this context. He had excellent contacts with public administration, not only in the regional government, but also in the municipality and the country council. He also had the ability to write grant applications, which resulted in project funding. His whole network was used in order to contribute to fund projects aimed to solve problems in the community. "When we had these EU projects, yes it was a period that we were making money. Social capital is the network of relationships that has been embedded in. Crucial to this network has been the trust that the club have been able to work through the activities they pursued. They have engaged the local community in building and renovate facilities and real estate. The club has always kept its promises which have meant that a trust grew over the time, not only internally in the club, but also in the local community as a whole. This included the local bank office, which put up with a loan to an "impossible" project because they relied on the club's ability to do the right thing. The capital that has been mobilized by the club has been used as risk capital and the club invested their own funds in costly investments. Then others in the community followed – which ultimately led to that the club has been able to make investments that would otherwise have been unthinkable. The club management: "Why did it go so well for us? We were contractors and we were making money. If we were not able to earn that money so... We were a social enterprise, so with the money we earned we invested in new projects that were beneficial to the entire district. Even when we saved the school it was like that. We got more members when we bought the retirement home, they said: 'now its table tennis club that bought, so now we're going to join.'" Central to the social capital that has been built up that the club has been responsive to the needs existed in local society. "We would not buy any school or apartment building but it is public opinion that has come to the table tennis club based on how they did in the past when it was the churches that had big meetings.". And about the school it was the parents and staff that came and said now we want you to take over the school.".

Furthermore, Social partnership, social clustering, Non-Governmental Organizations, social educators, generate better circumstances for smart education, small and

medium sized entrepreneur (SMEs), social economy (Giedre Kvieskiene, 2017), they ensure quality of relationship and greatly increase social capital, development of social networks. Moreover, Communication and partnership is the most important human activity, it promotes creativity, helps to speed up decisions. Still, mobile phones and the internet communication are at the center as far as networking is concern, because it makes communication easier not only within the family but also at work place, nowadays youth as well as adults put more important on cell phones and computers to access information and to give out information from the social network for example Facebook, Instagram, and Snapchat (See pictures No 7).

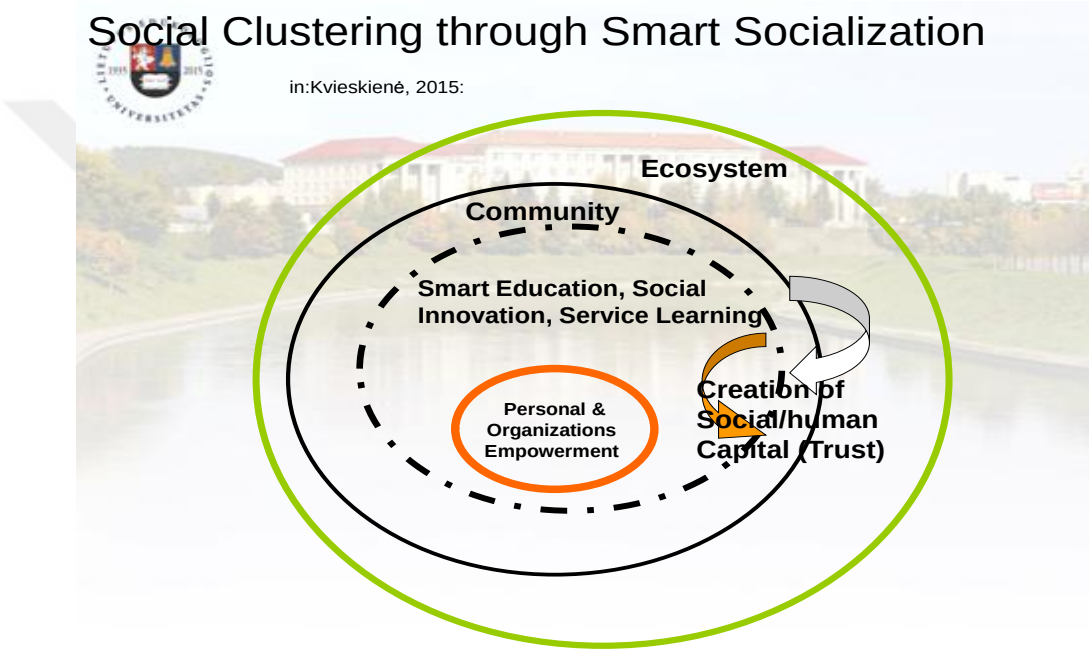


Figure 3.4: Social Clustering Through Smart Socialization.

Source: Giedre Kvieskiene, 2017

In summary, research (social partnership, social clustering, NGO) and networking helps to bring in development in all aspect and it further link people together through communication from the social media, cell phones and create together strong social capital.

4. PROMOTING SMART CITY COUNCIL GROWTH CONTRIBUTING TO THE DEVELOPMENT OF REGIONAL SOCIAL CAPITAL

4.1 Methodology and Design

The Strategic Municipal Advisory, Research and Training Solutions (SMART) Program is an inclusive intercession that wires the foundation of business mandates in local regions, cities and district municipalities, it ensures planning, growing in the local economies, providing infrastructure and services to the public, improving revenue. The research and advisory services takes action to the ever-challenging demands of operating in a municipal space. The objective is to enhance not only service delivery but also capacity[30]. Hence qualitative research approach is valid for these analyses, because it allows secondary method of data collection to be used in obtaining information for the study. Secondary methods of data collection are research surveys, books, articles, documentaries and online information, which generate convincing information for the research. The previous chapters presented smart city concepts and described elements that make smart city in Vilnius as well as other cities in Europe, how regional policies promote, economic developments. While this chapter includes the methodology implemented to fulfill the goals of this thesis stated in the first chapter.

In addition, a structural interview was developed to tackle the research questions. The questionnaire consists of 12 questions and the questions were based on the following

- Experts' personal information (sex, age, professions and levels of educations)
- Experts view about the level of innovation in Cameroon
- Experts personal contributions on how to realize the developmental objectives

- Analyses between the BMC and the VMC
- Lastly, recommendations and comments for regional innovations in the two cities.

Still, seven experts were selected (politicians, entrepreneur, scholars, and lecturers) according to their professions and also because they could clearly understand the meaning of innovations and how it improves cities, advancement whether negatively or positively. In addition, the time spent by each expert ranges from 10 to 15 minutes for all 12 questions (see attachment No 1). The chosen experts are listed below:

Table 4.1: List of Experts

Name	**Company**
Mr. Jean Beron	Councilor of the BMC
Mr. Tang Enow Ayuk	PhD Student, University of Buea
Miss. Ladi Kinyuy Mokiah	PhD Student Vilnius University
Prof. Feka Franklin	Lecturer University of Yaounde
Mrs. Forbi Eya	Entrepreneur, Tiko Cameroon
Mr. Vallery Ndumbe	Entrepreneur, Vilnius
Mr. Sixtus Chiwongde	PhD Student University of Yaounde

The Seven different experts were selected from Cameroon and in Lithuania, they gave their opinions about smart cities, and there were also lot of different answers, but in same way similar.

4.2 Analyzing of The Case Studies

In this day and age, nations (Lithuania and Cameroon) are working extremely hard to promote and develop result for financing economic development in cities and countryside to create smart environment whereby the urban and local areas will access the necessary resources for developmental strategies. Also, the United Nation Habitat Local Government and Decentralization Unit work with local governments to reinforce their ability in three ways; firstly, to set up dialogue between the local and the central government, public and private sectors; secondly, to create a management system and public financial system to generate capital for economic development and for the benefit of the poor for public services; thirdly, to endorse

transparency and to monitor the use of scarce public resources. Furthermore, development is the most significant trend of the society nowadays because of the increase in the world's population, social segregation, gender inequality, climate change, environmental issues and urban sprawl. Below is the 2017 prosperity property index for Lithuania and other EU countries by Legatum institute ranking.

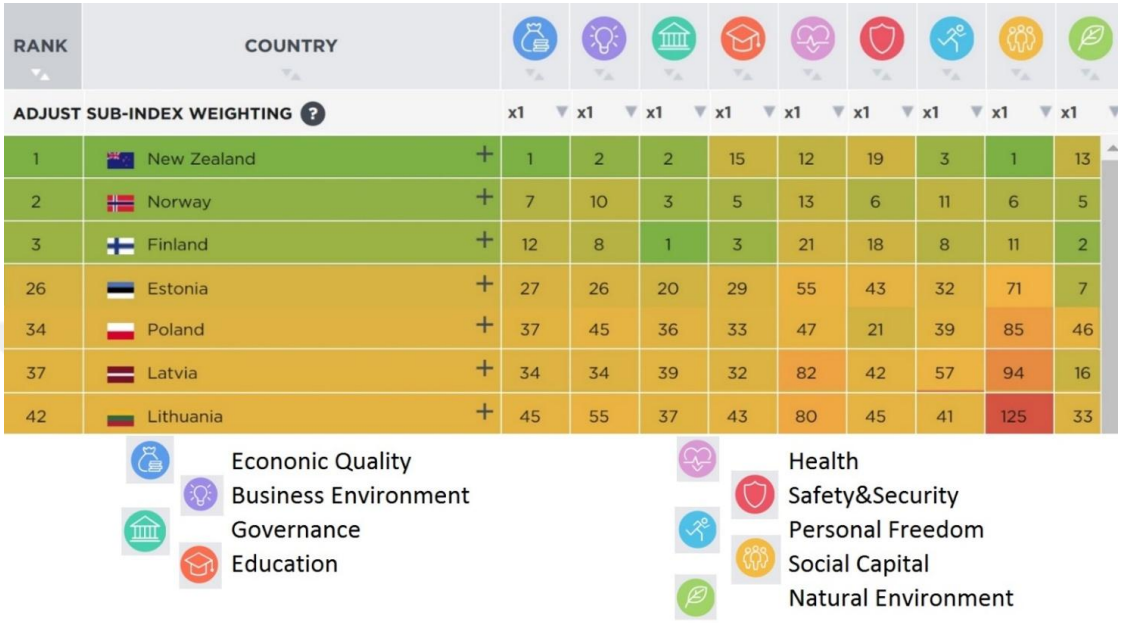


Figure 4.1: Lithuania Comparing with Other Countries On Welfare Ranking

Source: Adapted by Giedre Kvieskiene, 2017

The unstable economic situation, low social capital (trust) level has a direct impact on families and children living conditions. In the Prosperity Index (2017) Lithuania ranked in 42 place (Norway 2; Estonia 26, Latvia 37).[31] Although the 42 place is high enough, but it is surprising that even the index compilers recognizes that quality life in Lithuania is ruined by "excessive pessimism" rather than the real situation, and the place could/should have been higher. According to them, the Lithuanian economy is growing rapidly, but the population is still dissatisfied with the country's economy; Lithuania's communications infrastructure is better developed than in most other countries (ultra-fast internet and mobile phone use), costs to establishment business are low, but the Lithuanians still believe that business conditions are bad; the education situation in Lithuania ranked in 43 place, but residents, the educational system are consider as poor; health care system is adequate, and state security has no

major risk, but Lithuanians still feel unsafe in every sense. These are investigating London's Legatum Institute findings.[32]

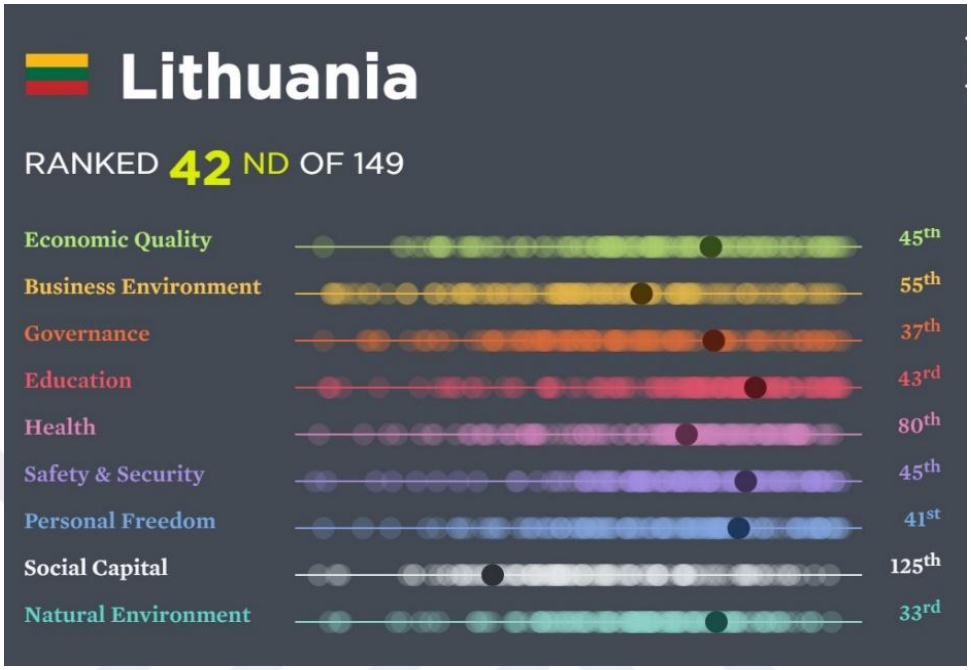
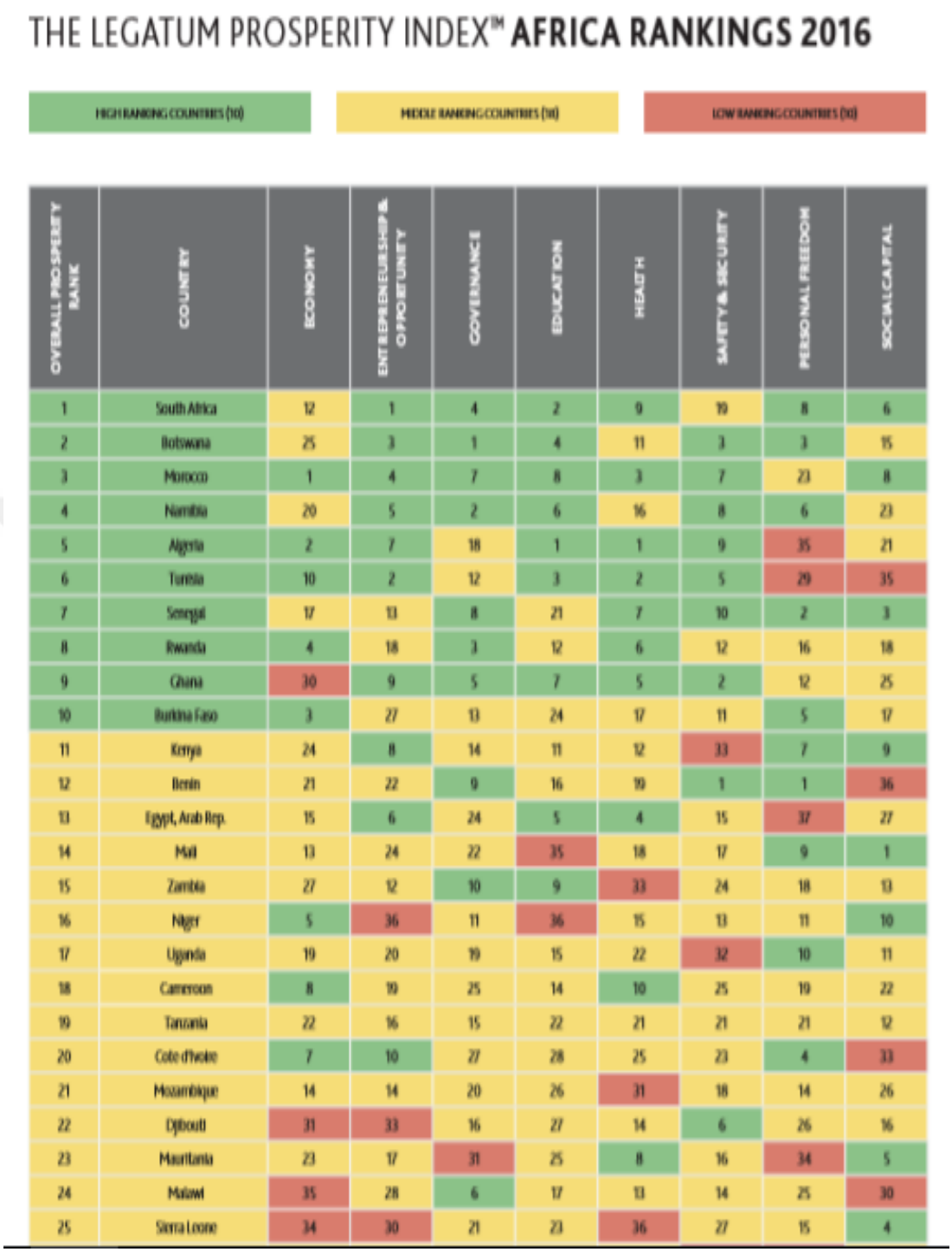


Figure 4.2: In dexing of Lithuania in accordance with the studies of *Legatum* Institute



THE LEGATUM PROSPERITY INDEX™ AFRICA RANKINGS 2016

HIGH RANKING COUNTRIES (10) | MIDDLE RANKING COUNTRIES (10) | LOW RANKING COUNTRIES (10)

OVERALL PROSPERITY RANK	COUNTRY	ECONOMY	ENTREPRENEURSHIP & OPPORTUNITY	GOVERNANCE	EDUCATION	HEALTH	SAFETY & SECURITY	PERSONAL FREEDOM	SOCIAL CAPITAL
1	South Africa	12	1	4	2	9	19	8	6
2	Botswana	25	3	1	4	11	3	3	15
3	Morocco	1	4	7	8	3	7	23	8
4	Namibia	20	5	2	6	16	8	6	23
5	Algeria	2	7	18	1	1	9	35	21
6	Tunisia	10	2	12	3	2	5	29	35
7	Senegal	17	13	8	21	7	10	2	3
8	Rwanda	4	18	3	12	6	12	16	18
9	Ghana	30	9	5	7	5	2	12	25
10	Burkina Faso	3	27	13	24	17	11	5	17
11	Kenya	24	8	14	11	12	33	7	9
12	Benin	21	22	9	16	19	1	1	36
13	Egypt, Arab Rep.	15	6	24	5	4	15	37	27
14	Mali	13	24	22	35	18	17	9	1
15	Zambia	27	12	10	9	33	24	18	13
16	Niger	5	36	11	36	15	13	11	10
17	Uganda	19	20	19	15	22	32	10	11
18	Cameroon	8	19	25	14	10	25	19	22
19	Tanzania	22	16	15	22	21	21	21	12
20	Cote d'Ivoire	7	10	27	28	25	23	4	33
21	Mozambique	14	14	20	26	31	18	14	26
22	Djibouti	31	33	16	27	14	6	26	16
23	Mauritania	23	17	31	25	8	16	34	5
24	Malawi	35	28	6	17	13	14	25	30
25	Sierra Leone	34	30	21	23	36	27	15	4

Figure 4.3: Legatum Prosperity Report for African Countries (2016)

The Africa Prosperity Report search for the level of wealth African countries can and should be anticipated to bring given their level of assets. This is done by evaluating a country's level of wealth (GDP per capita) modeled against its overall ranking in the Legatum Institute's annual Prosperity Index (Entrepreneurship & Opportunity; Governance; Education; Health; Safety & Security; Personal Freedom; and Social

Capital.) Legatum property index (2016) put South Africa in the first position, Botswana in the second position and Morocco in the third position meaning that the countries have good economic, governance, health system, safety & security, education, social capital, social factors, entrepreneurship & opportunity, needs & freedom. Cameroon on the other hand is on the eighteen positions which is fairly surprising because Cameroonian are dissatisfied with the fact that facilities such as health, safety & security, need and freedom are extremely low, because the facilities are poorly distributed equally to all citizens, on the other hand, Cameroonians believe that facilities such as education, social capital are moderate within the country while entrepreneur & opportunity are low because of high taxes imposed for business owners. Furthermore, the overall Prosperity Index rankings in 2017 Cameroon fall by 3rd positions, from 126 to 129 contrasts to the previous year. From the time when the Prosperity Index began, (2006), Cameroon has stayed at the same position. Also, the prosperity pillar rankings; shows that Cameroon performs best on n natural environment and social capital and attain a low mark on safety & security. The major positive change, contrast to last year, came in Safety & Security increasing by 3rd places, whereas they dropped 31 places on Social Capital.[33]

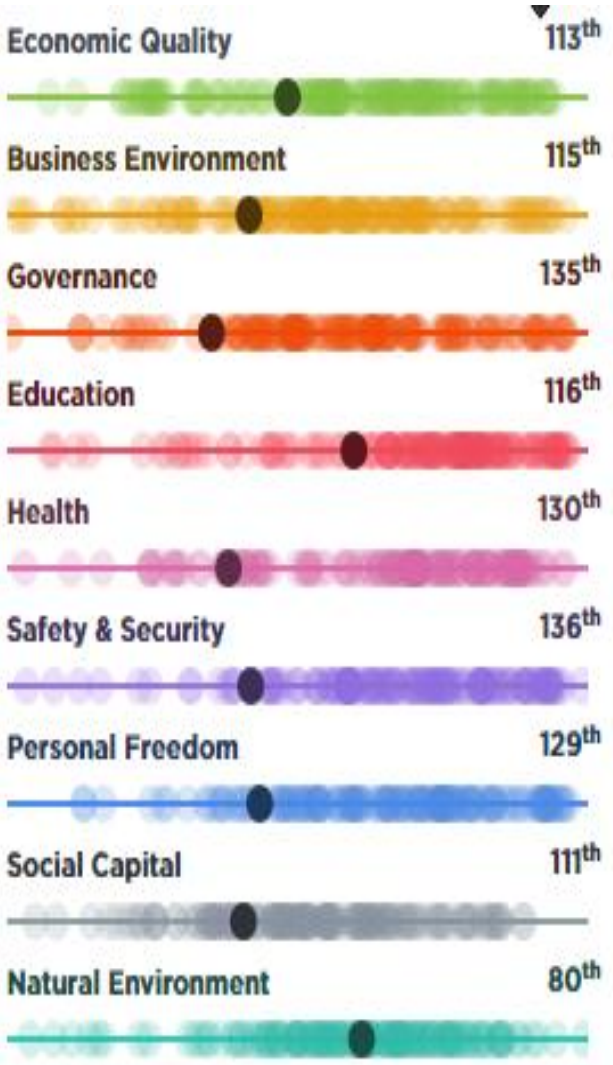


Figure 4.4: Cameron Prosperity Rank [34]

In summary, because of the over growing world population, most countries in Europe especially Lithuania and other countries in Africa especially Cameroon is working on their levels of development to improve on their economic, social and political facilities to make their cities smarter.

4.3 Smart Cities Models and Categories from The Lessons Cameroon and Lithuania

In the world today, business owners want to establish in areas that will be a magnet for customers and most excellent workforce, while people want to move, work and live in areas where they can enjoy better quality of life and have access to the

following smart city benefits such as; education, healthcare, agro, disaster management, safety and security, transport and mobility, digital infrastructure (ICT), development infrastructure, waste management, water management, energy and governance. Nevertheless, states in Europe e.g. Lithuania as well as local governments in Africa e.g. Cameroon are effective in improving the living conditions and working conditions for citizens and entrepreneurs so as to achieve the smart city concept. The following principles are used to effect this changes, they include;

- To provide variety of transportation choices.
- By encouraging communities and stakeholders to collaborate in decision making
- To make developmental decisions predictable, cost successful and fair
- To protect open space, farmland, and ecological areas.

Furthermore, the world is changing constantly and because of this, there is a need for states to adopt some principles that will sufficiently equip them to face these changes. Cameroon as well as Lithuania has a vision to achieve social and economic progress on development by 2030 and Cameroon in 2035. Consequently, these countries are working to meet their smart city goals. After a careful study about Lithuania, it was understood that it is a country surrounded by the Scandinavian countries (Denmark, Norway, Finland, Iceland and Sweden) which are rich as a result of their wellbeing creation policies. Thus, Lithuania is striving to become successful; politically, socially and economically. Furthermore, Lithuania being a member of the EU and NATO is serving as a simple means to become more modern, energetic, and have a strong sense of national unity in order to achieve it smart city objectives. Cameroon on the other hand is a country with happy people; lots of natural resources, fertile lands for agricultural produces and lots of minerals. The government in order to improve on the social, economic, and political environment has set up a vision to achieve regional innovations for better living.

Moreover, after the completion of the questionnaire by the expert's, analyses were drawn which prove the lessons learned from the smart city innovation in the BMC of Cameroon and the VMC of Lithuania. The experts were both men and women and their ages range from 25 to 50 years.

Again, 3 out of 7 experts agreed that the vision of the Cameroon state to achieve smart regional socio economic and smart city development till 2035 is succeeding, according to them the government has been promising this for a long time and now it is successful because there are lots of innovations going on in every domain that is from the presidency, to the local authorities, dilapidated houses, have been demolish in most parts of the country while new roads have also been constructed in many cities in the country.

The government is training more qualify teachers in the educational sector, creating jobs for them and to other unemployed citizens.

On the other hand, 4 of 7 experts disagree with the fact that the regional socio economic and smart city innovation in Cameroon is moving on well. According to them the vision is not succeeding because there is no political willingness to achieve the vision, also politicians talk more that they can do because of the need to satisfy their quest for power without putting in place an efficient mechanism to achieve smart city development.

With the current political upheaval in Cameroon and the methods used by the government to bring solutions to it, it will be impossible for the government to achieve the innovation goal. There is also a high level of corruption, tribalism and lack of democracy.

Again, the vision will be impossible because we are already in 2018 and the innovational developmental process is still in an experimental state, many other cities are lacking behind. The vision is possible for some cities but for the whole country is totally impossible.

5 out of 2 experts suggested that to develop a sustainable government, municipal unity and collaboration of the smart city vision, relationships must be built at the mission and technical levels, to ensure that process hand-offs, key performance indicators and digital platforms will be interoperable. While 2 other experts suggested that it can be possible by facilitating development of interest and understanding of goals and pain points for all potential partners.[35]

Moreover, experts gave various suggestions to assist the government to realize the smart city innovations they include the following;

Moderate or manage smart city strategies, by connecting social and government goals with the ability in technology to execute and scale it across the citizenship,

The government should appoint groups such as Urban Dynamics to run it, developing interesting projects in a bimodal and innovative environment

The government should sensitize citizens about the importance of development and also encourage them to vote for new mayors in the municipalities when the need arises.

Once more, jobs should be created to reduce unemployment and also educate citizens how to become self-employ.

Agriculture should be encouraged because it is the main source of income for the state, the state should also fight against corruption because it kills innovation.

Finally, the government should create inspiration around projects needs and prioritization.

The experts gave their views about the Smart City innovation concept in the Buea and Vilnius Municipality, this will be explain using the smart diamond picture and it will be demonstrated using percentages for both cities.

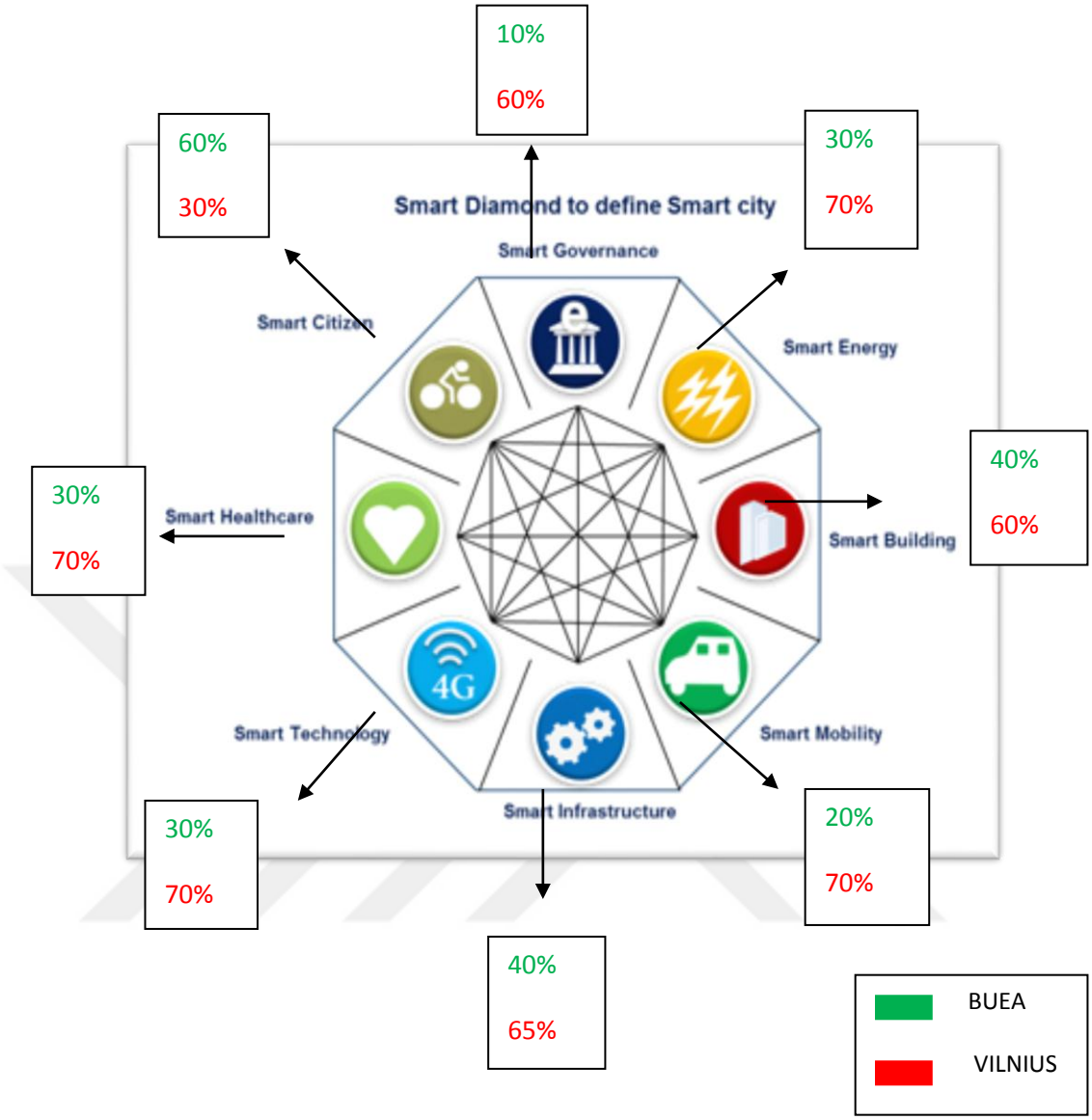


Figure 4.5: Smart City diamond.

The green color shows the level of innovation and development for the BMC in percentages while the red color shows the level of innovation and development for VMC in Lithuania.

However, there are some shortcomings or drawbacks to socio-economic development face by the BMC and the VMC in executing developmental projects in their constituencies. Some of these drawbacks include the following;

The deputies and councilors have no powers to challenge the mayor especially when funds for socio-economic development are being misused or mismanaged by the Mayor. However, it is only the supervisory organ that is the Senior Divisional

Officer (S.D.O) that has the right to question the activities of the Mayor or place a sanction on him or her when the need arises. Such a system weakens the powers of the Councilors because they have little privileges to be part of the decision making of the municipality. Hence this helps to brings down the socio-economic development in the city.

Technically the municipality does not have a national standard to ensure the treatment and management of waste within the city, this is typical in the BMC, and the council focuses on the removal of waste from public places and show concern very little about the other parts of the city. And there are no sanitary standards for the treatment of this waste in the city.

Inadequate Financial Resources is a problem in the municipalities. The financial support that the municipalities get from the central government is usually very small to handle the needs of the cities. Sometimes the inhabitances are not ready or willing to pay the global tax which brings and raise the financial status of the council, thus hindering innovational development in the cities.

Unemployment is also a problem in the municipalities. The municipalities are faced with high level of unemployment, this is because of the lack of jobs for school leavers and also because of the large number of students that graduates each year from Universities and other educational institutions. This high level of unemployment is also one of the obstacles for socio-economic development in the municipality. Without the availability of jobs for graduate and other citizens, the socio-economic development is bound to be slow.

There is a constant violations of sanitary rules by the inhabitance this has been a big problem over the years' despites all the efforts put in place by the council to maintain cleanliness around the cities. They are also defaulters who violate the sanitary rules of the Municipal Councils and are not ready to pay penalties for their damages cause. Stray animals are also a problem; they go about destroying crops and sometimes people's properties, this is very typical in the BMC.

Bribery and corruption, this form of malpractice is also an obstacle hindering development in the world particularly in the BMC and the VMC. Some individuals are made to work or occupy certain positions of work based on power, family name

and financial status rather than based on merit, which therefore make development ineffective.

There is a large degree of mismanagement and embezzlement in the Municipalities, funds for developmental projects are either wrongly allocated or put in private pockets. Sometimes money allocated for development is abuse hence; these malpractices tend to hinder innovations.

Still, tribalism his obstacle has gradually eaten up the individuals in power and it has also become a normal phenomenon in our societies. This form of malpractice is usually carryout during recruitment, where favors are granted to those much affiliated to the employer. This system of employment puts unskilled people in certain positions rather than those who have the qualifications and skills to take the position (Eyong, 2007).

In addition, the council does not follow any strict control on town planning, either because of the inhabitance reluctant to accept changes, poor communication in the work place or too much procrastination and laziness. This action has hinder the socio-economic development in the cities principally in the BMC, now people are force to live their present locations because the council has destroyed their houses for innovational purposes.

The poor Maintains of public properties is another shortcoming in the municipalities. the council is putting very little effort to maintained its public properties, for example no measures have been taking to reinstall street lights in the city of Buea since after the old ones could no longer brightened the city, and to serve for security the purpose for which it was install. There is also no proper care for public toilet and roads.

Furthermore, the BMC lack construction machines which are used for the construction of council markets, houses, farm-to-market- roads and the construction of bridges that leads Buea to other cities like Limbe, Mutengene and Kumba. Most of their machines used are either hired or given as contract to other International construction companies.

On the other hand, drawbacks affecting Lithuania smart city innovation includes the following;

Lithuania is a sparsely populated with only 1,340 inhabitants per kilometer square and least –industrial capital of Europe when compared with cities like Paris which

has over 21,060 inhabitances per kilometer square and Barcelona with 16,055 inhabitants per kilometer square.

Most of the population of Vilnius is made up of the elderly people who are mostly clustered around the city centers and they are reluctant to make changes.

Again, there is a high level of emigration from the country of people who are expert in technical skills including energy efficient construction and renovation. More than 6,000 buildings need to be renovated within the city.

Most of the lands within the city is owned by private developers which makes it difficult for the municipality to take a leading role in the development of the city

The former industrial areas are contaminated and thus the remediation of soil and building imposes a heavy financial burden on developers, hence hindering smart innovation in the city.

In summary, Cameroon as well as Lithuania because of their visions to achieve economic growth and development had been on the move to make their countries smarter by improving the systems of governance, mobility, their Environments and living conditions. Social Capital on the other hand is performing an enormous function in other for the countries to achieve their objectives. However, there are some shortcomings of the socio-economic development in the cities, and such drawbacks have prevented the citizens to enjoy better standards of living.

5. CONCLUSION

This research studies the building of Smart City Innovation in the BMC of Cameroon and the VMC in Lithuania over the last five years (2013-2017). Again, the research studies the innovation process of the BMC of Cameroon and VMC of Lithuania to understand how the inhabitants of the two cities have been benefiting from the social, economic and political environment whether positively or negatively; problems faced by the Municipalities to achieve their goals, and possible recommendations to make the cities smarter.

The project is relevant in the sense that it brings out the weaknesses of the Smart regional socioeconomic development, it shows various initiatives used by the municipalities to improve on their visions. Also, the research brings out the shortcomings of Smart regional innovational development and possible suggestions on how these shortcomings can be transformed into strengths. Furthermore, it studies the level of innovational development of other countries in European, how they have been able to improve on their levels of development so as to build smarter cities. Nevertheless, the research gives an idea about the activities of the Municipalities and how they are transforming their cities to smart regions through innovations.

In addition, the thesis is divided into four chapters. Chapter one is the introduction of the research, it gives the definition of smart city and explains how states around the world for example Barcelona, Oslo, Singapore London, San Vilnius, Buea Municipality are working to improve on their ICT approaches and smart city strategies in their urban areas to bring about a flexible and successful, economic, infrastructure, health, transportation system and social capital to make their cities smarter. Again, chapter two analyzes the new regional policy in Cameroon; it explains how the new regional policy in Cameroon has made it possible for economic and social resources to be equally distributed in order to close the gaps between the poor and the rich. The new regional policy also helps to enhance growth, fight unemployment, improved quality of life and it finance by the state, council and NGO.

Chapter three stresses on the element of smart city models in Lithuanian social capital. the smart city projects in Lithuanian social capital includes; the use of network infrastructure to improve on economic, political efficiencies, social and cultural development within the country; there is the use of ICT which increases prosperity and competitiveness for citizens and local business; collective public intelligent, based on effective planning for urban and regional development. The chapter analyzes the smart city model in Lithuanian such as; smart economic, smart people, smart governance, smart environment, smart living. Once more, Countries in Europe are working to bring transformation in their urban and underdeveloped areas by 2020. Chapter four which is the last chapter, focuses on the methodology; the contributions of smart city growth on the development of Lithuania and Cameroon social capital; it also analyzes the case studies with the use of the Legatum prosperity index of 2017 which shows the level of prosperity between the two cities. The chapter also shows some differences that exist between the two cities after the questionnaires were distributed to the 7 respondents.

Also, Innovation involves all segments of the society particularly rural areas; innovation has increased citizens' awareness, create employment, increase productivity in the agricultural and industrial sector.

Nevertheless, Studying and carrying out research on the building of smart city innovation in the BMC of Cameroon and the VMC of Lithuania was challenging because it was difficult to narrate information from the journals, articles and newspapers with what citizens are experiencing, this was typical in the Cameroon context. Furthermore, despite the Cameroon vision to achieve regional socio economic development by 2035 the country is still lacking in many innovational prospects for example resources are not equally distributed throughout the cities and in the rural areas, there is high level of crime waves, water and sanitation is limited in many parts of the cities and also the government doesn't give room for participatory development, hence hindering the analyses of the research questions.

In addition, Cameroon developmental processes are slow, despite the vision of 2035 to achieve regional socio economic development; citizens do not feel the impacts of change in the Municipality. According to the questionnaire respondents the vision is a promise which will be low or never to be achieved, because there are no measures put in place to reach the smart city goal in the BMC.

Also, it was difficult to get enough experts for the questionnaire that will give exact information of the regional socio economic development in the BMC and the VMC. Most of the experts found only give brief and little analyses of the questions, making it difficult to get clear information about the research questions.

Finally, in order, to improve on the levels of development in the BMC and the VMC, the both government should take into consideration the following recommendations;

• Make thorough studies beforehand in order to identify the challenges that prevent seamless revenue collection and adequate actions to improve tax collection and management, instead of just raising tax rates.

• Partnerships with a variety of institutions and strong dialogue with all stakeholders, particularly banks and telecom companies, to ensure that citizens would be able to make payments at any bank or with any operator.

• The negotiation with banks was crucial as the Cities program enables people without a bank account to effect payments with Mobile Money. Collaboration and Communication with global, national, regional and local agencies, although compliance has increased, there is still a strong lack of voluntary tax payment culture.

• Communication and sensitization campaigns are still needed to make sure the citizen understands its obligations and rights. The local government must also create communication channels to receive the citizens' enquiries and feedback. Related communication campaigns showing how funds are being used are crucial to make sure that extra revenue is reinvested in public services and that the citizen knows it.

• Combine traditional and innovative solutions. The administration encountered resistance from the citizens who still fear to use technology or do not have the capabilities to do so; so it has to offer alternatives adapted to different category of people (elderly, illiterate, rural population, etc.).

• By developing projects based on the use of tools such as Google Maps, GSM or more complex Geographic Information Systems (GIS) that enable cities to gather data and better visualize the dynamics of their territories.

• By deploying SMART applications that aim at increasing citizens' participation in services management, mainly composed of tools to report incidences or corruption (for example Kigali, Rwanda).

• By deploying SMART systems that enable municipalities to remotely control their street lighting systems which make it easier to achieve important cost savings (for example Salé, Morocco).

• By deploying SMART tools to improve tax and fees collection such as Mobile Money. Many African cities have followed the example of Nairobi, Kenya that uses the Mpesa mobile money system to collect tax revenues or tariff bills for services such as electricity or water, which is particularly interesting for people working in the informal economy in that they save precious time that otherwise would have been spent in lining up in front of billing offices at the municipality or the service provider premises. The use of these technologies has drastically improved revenue collection in African cities, thus contributing to widening their financial autonomy vis-à-vis the national governments.

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APPENDIX

Questionnaire for Experts

Building of Smart City Innovation in the Buea and Vilnius Municipality.

Honorable Expert,

I am Mercy Teme Etoke a masters student at Istanbul Aydin University in Turkey and also an Erasmus student at the Lithuanian University of Educational Sciences, doing my field work on the thesis titled the building of Smart City Innovation in the BMC of Cameroon and the VMC in Lithuania over the last five years (2013-2017). This questionnaire is intended to gather valid and reliable responses from you. I am working within a time frame of four years, between 2013 and 2017. Be assured that this will be used for purely academic purposes. Tick the right answer, or explain where necessary. A structured interview is anonymous and your expert data will only be provided with your personal consent, and without your consent, your opinion will be used for scientific work without the need for your personal data. For me, your opinion is very important because I believe that sincere answers will help to discover the unknowns that our countries government and the responsible institutions have not yet found.

Please define the correct answer for one or more of question numbers, or if the answer is not complete or incomplete: enter your opinion. If you have any questions: call or write me, I will answer all your questions personal by phone or by e-mail. (Tel: +37063908478, mercyberon66@gmail.com).

Thank you in advance for the sincere answers and at the same time for the indifference to the modernization and prosperity of our countries:

1. Sex:

1.1. Male;

1.2. Female

2. How many years have you been professional / non-formal Do you associate yourself with activities in politics, education, social, cultural or others innovation? (Underline)

a) Up to five years;

b) Up to ten years;

c) Ten and more;

d) Other: (Insert);

3. What is your education?

a) Higher university degree;

b) Master degree;

c) Ph Doctor of .....Science (type in)ė;

d) Other.....

4. **Your Age range**:

a) 25-30;

b) 31-40;

c) 40-50;

d) 50 and more;

5. What do think about the vision of the state of Cameroon to achieve regional smart socio economic and smart city development till 2035?

Please explain in 2-3 sentences.....

.....

.....

.....

6. How to develop sustainable government, municipal utility and agency collaboration around smart city vision, data exchange and engagement?[36]

a) Developed operational or strategic goals of a smart city vision.....

b) Build relationships at the mission and technical levels, to ensure that process hand-offs, key performance indicators and digital platforms will be interoperable.....

c) .Facilitate the development of interest and the understanding of goals and pain points for all potential partners: .....

d) Win-win situations, for both citizen and program mission, provide sustainable smart city strategies;

e) Others:

7. As an expert/ citizen of Cameroon how will you assist the government to realize these objectives?

.....

.....

.....

8. Who should be responsible for Smart City Leadership and how do you manage long-term smart cities challenges in short-term political cycles?

a) Roll out resides in the ability to connect key performance indicators (KPIs) from the beginning of the initiatives, to ensure alignment of adequate resources and get traction;

b) Moderate or manage smart city strategies, by connecting social and government goals with the ability in technology to execute and scale it across the citizenship;

c) Have government appointed groups like Urban Dynamics to run it, developing interesting projects in a bimodal and innovative environment;

d) To create inspiration around project needs and prioritization;

e) Include buy-in from all parties interested in smart city;

d) Others: .....

……

9. How can we avoid big data turning into bad data?

a) Evaluating data sharing and data governance as a strategy and methodology to avoid big data turning into bad data;

b) Obtain data only from some agencies, with other agencies either not ready or not interested;

c) Data management and data oversight for a transparent and valuable data exchange that in the end honors data privacy and security issues;

d) Smart cities analysts are developing a framework for this;

e) Others: .....

……

10. How to create safer cities by including emergency response, public safety and community resilience together, especially after the natural catastrophes like hurricanes, flooding, storms and acts of violence?

a) Safety is not only a function of video surveillance but also how the community experiences the collaboration and work with law enforcement, emergency response, non-government organizations and the community leaders;

b) The "feeling" of safety is becoming an attribute of communities, impacting not only the way residents react in emergencies but also prevention and mitigation steps taken by both the government and residents.

c) Others:

.....

.....

11. What do you think about the following Smart City innovation concept in the Buea?Vilnius (underline) Municipality and other cities in Cameroon/Lithuania (underline): (Build your way)

a) Smart Governance;

b) Mobility;

c) Living Quality;

d) Smart People;

e) Technology;

f) Infrastructure;

g) Environment;

h) Economy;

I) Social Capital;

k)

Others:.....

12. in your opinion, what do you think is the reason(s) for the successes/ failures of Cameroon/Lithuania?

a) Hard work and the collaborative effort of the citizens

b) Lack of autonomy

c) Freedom and empowerment;

d) Any other comments

Any other comments.....

.....

.....

THANKS FOR YOUR TIME!

T.C.
İSTANBUL AYDIN ÜNİVERSİTESİ REKTÖRLÜĞÜ
Sosyal Bilimler Enstitüsü Müdürlüğü

Sayı : 88083623-020
Konu : MERCY TEME ETOKE Etik Onayı Hk.

Sayın Mercy TEME ETOKE

Tez çalışmanızda kullanmak üzere yapmayı talep ettiğiniz anketiniz İstanbul Aydın Üniversitesi Etik Komisyonu'nun 13.09.2018 tarihli ve 2018/17 sayılı kararıyla uygun bulunmuştur.

Bilgilerinizi rica ederim.

e-imzalıdır
Prof. Dr. Ragıp Kutay KARACA
Müdür

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Unvanı: Enstitü Sekreteri

7./8./2018

T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
SURVEY PERMISSION PETITION

I. Student Information

Name:	Mercy Terne	**Department:**	Political Science and International Relations
Surname:	Etoke	**Program:**	Political Science and International Relations
Student Number:	Y1412.110049	**Level:**	☐ PhD ☑ Masters
Thesis Supervisor:	Dr. Gosken Ugur Gokcel	**Date:**	

II. Thesis Information

Thesis Topic:	The conceptualize, ~~Butt~~ the building of smart city innovation
Surveys that will be implemented	Questionnaire

The places and persons to whom where the survey will be implemented: (Needs to be listed)			
1	Mr. Jean Beron: Buea Cameroon	6	Mr. Valery Ndumbe: Vilnius Lithuania
2	Mr. Tang Enow: Buea Cameroon	7	Mr. Sixtus Chwangyde: Yaounde Cameroon
3	Miss. Ladi Kinyuy: Vilnius Lithuania	8	
4	Prof. Feka Franklin: Yaounde Cameroon	9	
5	Ms. Fobi Eya: Tiko Cameroon	10	

Student First and Last Name

Mercy Terne Etoke

Thesis Supervisor Name and Last Name

Appropriate President of the Main Branches of Science Name and Last Name

Attachment: 1 Survey Form, 1 Thesis Proposal.

T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
SURVEY INFORMATION FORM

1) Student Information:

Name and Surname	Mercy Teme Etoke	Department	Political Science and International Relations
Student Number:	Y1412.110049	Program	Political Science and International Relations
Thesis Supervisor	Dr. Gosket Ugur Goksel	Level	☐ PhD ☑ Masters

2) Thesis Information:

Thesis Topic:	The conceptualize, the building of Smart city innovation.
Surveys that will be implemented:	Questionnaire
Survey that was implemented before	
Is there a permit from persons or organizations before applying the survey?	Yes
The places and persons to whom the survey will be implemented	Buea, TIKO: Cameroon, Vilnius: Lithuania Lectures, P.H.D Student, Entrepreneur

Signature
Student Name and Surname
Mercy Teme Etoke

Signature
Thesis Supervisor Name and Surname

Signature
Appropriate
President of the Main Branches of Science
Name and Surname

RESUME

Name Surname: Mercy Teme Etoke

Place and Date of Birth: Buea 19/12/1989

Email: mercyberon66@gmail.com

Education:

- **Bachelors** **:**2012, Sociology and Anthropology (University of Buea)
- **Masters** **:**2018, Istanbul Aydin University, Social Sciences, Department of International Relations and Political Science Program

Language Skills:

English (Advanced)

French (Average)

Reference

Available on your Request