27TH IEK INTERNATIONAL CONFRERENCE

VENUE: PRIDEINN PARADISE BEACH RESORT, MOMBASA

DATE: TUESDAY 24TH-FRIDAY 27TH NOVEMBER 2020

THEME: ENGINEERING A POST COVID-19 FUTURE

SUB-THEME: BIG FOUR AGENDA AND VISION 2030

TITLE: ROLE OF BIG FOUR AGENDA AND VISION 2030 FOR KENYA'S SUSTAINABLE DEVELOPMENT

PREPARED BY: ENG. PETER MUTINDA

EBK NO: A3000, IEK NO: M4893

ABSTRACT

Kenya, like all other developing countries in the world, is faced with the task of working strategically towards the achievement of the United Nation's Sustainable Development Goals (SDGs) 2030. These goals whose due date of accomplishment coincides with those of the national development blueprint, namely, the Kenya Vision 2030, have become a major focus of attention in the country. There are great areas of concern or priority areas that the country is focusing on as a strategic focus towards the achievement of the Kenya Vision 2030 and SDGs 2030. These strategic areas of focus have been isolated and declared by the President Uhuru Kenyatta, as the country's "big four priority areas".

The Kenya Vision 2030 comprises of three key pillars; Economic, Social and Political. The Economic Pillar aims to achieve and sustain an average economic growth rate of 10% per annum until 2030. The Social Pillar seeks to build a just and cohesive society with social equity in a clean and secure environment. The Political Pillar aims to realize a democratic political system founded on issue-based politics that respects the rule of law, and protects the rights and freedoms of every individual in Kenyan society. Foundations for the pillars consist of Infrastructure; Information and Communications Technology (ICT); Science, Technology and Innovation (STI); Land Reforms; Public Sector Reforms; Labour and Employment; National Values and Ethics; Ending Drought Emergencies (EDE); Security; Peace Building and Conflict Resolution.

The "Big Four" Agenda is the Government's set of priority programs and reforms, which will be implemented over a period of five years, that is, from 2018 to 2022. The Big Four include; food security, affordable housing, manufacturing and affordable healthcare for all. This Big Four Agenda was integrated into the Third Medium Term Plan of Kenya's long-term development blueprint – the Kenya Vision 2030. The MTP III is expected to consolidate the significant achievements of the Economic Transformation Agenda that has been implemented since 2008 under Vision 2030.

The goal of the Kenya Vision 2030 is to create a globally competitive and prosperous country with a high quality of life by 2030. The Budget Policy Statement (BPS) published by the National Treasury noted that the National Treasury issued guidelines directing Ministries, Departments and Agencies (MDAs) to prioritize public investments geared to the realisation of The Big Four Plan and that these are the Government priorities aligned to the MTP III of the Vision 2030.

Delivery of the Big Four Agenda requires the input of engineers and other key stake holders (partners from different sectors) to work in a collaborated way. The paper aims at highlighting the goals of implementation of the Big Four Agenda, the role of engineers and other key players critical in achievement of the Big Four Agenda and the interventions needed for achievement of Big Four Agenda

Secondary data was obtained for the paper. Findings of the paper show that little progress has been achieved with regards to implementation of the Big Four Development Agenda. This has been attributed to low resource allocation, inadequate planning for execution of the projects, shifted focus towards dealing with effects of COVID-19 Pandemic where significant financial resources have been directed for the exercise, among others. Since the Big Four Agenda forms part of Vision 2030, the paper gives more focus on this area.

1.0 INTRODUCTION

1.1 Background information

When the NARC Government was elected in December 2002, its primary mandate was to reverse the many years of poor economic performance and weak governance from the late 1980s through 1990s. Resulting from that poor economic performance was increased poverty, unemployment, high domestic and foreign debt, crime, deterioration in health status, declining school enrolments and generally a marked decline in the quality of life.

This Economic Recovery Strategy for Wealth and Employment Creation (ERS) was the blueprint meant to guide the Government's economic policies over the following five years between 2003 and 2007. Its implementation aimed at translating into sustained economic growth, wealth creation and poverty reduction, and a broad improvement in the well-being of Kenyans, therefore fulfilling the aspirations and expectations of Kenyans.

On 30 October 2006, President Mwai Kibaki instructed the National Vision Steering Committee to produce a medium-term plan with full details on the development programmes that would be implemented in the first five years after the expiry of ERS on 31 December 2007. A consultative approach was undertaken through workshops with stakeholders from all levels of the public service, the private sector, civil society, the media and NGOs while in rural areas, provincial consultative forums were also held throughout the country. The objective of all these consultations was to provide an in-depth understanding of the country's development problems and the necessary strategies to achieve the 2030 goals. A similar process and methodology was followed in identifying projects and priorities in the social and political pillars capable of resolving the social and political problems that Kenyans face today.

Kenya Vision 2030 is the country's development programme from 2008 to 2030. President Kibaki launched it on 10 June 2008. Its objective was to help transform Kenya into a middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. The Vision's adoption came after the country's GDP growth went from 0.6% in 2002 to 6.1% in 2006, under the ERS.

The Kenya Vision 2030 was to be implemented in successive five-year plans. The First Medium Term Plan (MTP1) covered the period 2008–2012. The Second Medium Term Plan (MTP2) covered the period 2013-2017. The Third Medium Term Plan (MTP3) covers the period 2018-2022. Under the Vision, Kenya expected to meet its Millennium Development Goals (MDGs) by the deadline in 2015, although this has not been achieved.

When President Kenyatta conceptualized the Big Four, he did so in appreciation of the fact that for the country to accelerate the achievement of our Vision 2030 aspiration, it would need to take a new approach to the medium-term planning, and focus to those issues that would have the greatest impact on the well-being of our people. In his Jamhuri Day Speech on December 12 2017, he listed the Big Four as the priority areas that his government would tackle during his second presidential term in response to the needs of Kenyans. Each of the identified Big Four strategic areas contributes to at least one of the United Nations Sustainable Development Goals (SDG). The Big Four does not replace but is part of Vision 2030. The big four sectors are prioritised in the Third Medium Term Plan (MTP III) of the Kenya Vision 2030, the African Union Agenda 2063 and the Sustainable Development Goals (SDGs).

1.2 Budget allocation for the Big Four

According to the budget statement 2019/20, the total expenditure that would enable implementation of the Big Four and other sectoral goals was estimated to be Ksh 2.8 trillion. The fiscal deficit in 2019/20 financial year was estimated to be KES 607.8 billion (including grants). The 'Big Four' Agenda projects have been allocated KSh 128.3 Billion in the 2020/21 National Budget. This was a massive drop from KSh 450.9 Billion allocated in 2019/20 budget and KSh 400 Billion allocated in the 2018/19 budget. This is because some funds have allocated for finding effects of Covid-19 Pandemic, among other factors. To achieve total funding of the Ksh 2.8 trillion within the five years required for the Big Four, an average budget of Ksh 560 billion should have been allocated. The reduced budget has a negative impact on its implementation.

1.3 Objectives of the paper

i) To highlight the goals of implementation of the Big Four Agenda
ii) To determine the role of engineers and other critical players critical in achievement of the Big Four Agenda
iii) To determine the interventions needed for achievement of Big Four Agenda

1.4 Pillars of the Big Four Development Agenda

1.4.1 Food security

Food security is "a situation in which all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life" (Kenya Food Security Steering Group, 2008). The agricultural sector contributes approximately 30% of the country's GDP annually. The government plan was to achieve 100% food security through expansion of food production and supply, reduction of food prices to ensure affordability and support value addition in the food processing value chain. This agenda conforms to the second goal of SDG; Zero Hunger - End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture

Under the Vision 2030, the Government identified the following seven flagship projects for implementation during the next five years:

a) Agricultural policy reforms
b) Three-tiered fertilizer cost reduction
c) Branding Kenya farm produce
d) Establishment of livestock disease free zones and processing facilities
e) Creation of publicly accessible land registries
f) Development of agricultural land use master plan
g) Development of irrigation schemes

Some of the legislation required to support the agenda includes;

a) Enact legislation to cap the cost of leasing land- to attract private/foreign investors
b) Enact legislation to halt further subdivision of arable land
c) Enforcement of the Road legislation to eliminate multiple levies across Counties.
d) Food Security Bill, 2014
e) Legislation to stimulate water harvesting across the Country
f) Legislation on irrigated land for each constituency
g) Enforcement of Agriculture regulations – Crops (Tea, sugar, potatoes)

Some of the projects picked by the government and put under irrigation to boost food availability in the country include; Galana Kulalu Project (Sh7 billion), a 10,000 acres model farm irrigation project on Tana River and Kilifi counties. The government projected harvesting of 40 million bags of maize (90 kg) by the end of 2017 as well as 112800 metric tonnes of rice. It also projected to produce 1.3 million metric tonnes of potatoes and harvest 67 million bags of maize by 2022. However, the project collapsed after the contractor abandoned the work in February 2019.

The Government through the National Irrigation Authority also launched the Lower Nzoia project, targeting 10,000 acres. Out of this, 5,000 acres were to be put under high-value crops and 5,000 acres under rice and other food crops. The project was also to assist mitigate against perennial flooding in Busia and Siaya Counties. Slow land acquisition and delayed compensations have been blamed for the sluggish implementation of the multi-billion project. Completion date has been revised to the year 2022.

1.4.2 Manufacturing

Manufacturing sector plays a vital role in sustaining economic growth and development, job creation and poverty alleviation. Infrastructure development e.g. roads, electricity supply, etc. is also boosted to support the sector. Kenya, like many other developing countries, has not managed to develop a robust manufacturing sector and growth has been primarily driven by the agriculture and services sectors respectively

The aim is to grow the contribution of manufacturing to GDP from 9.2% in 2016 to 15% by 2022 through establishment of industrial parks, Special Economic Zones and implementation of policies to boost processing of textiles, leather, oil, gas, construction material, foods, fish, iron and steel. This agenda conforms to the ninth goal of SDG; Industry, Innovation and Infrastructure - Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation

The manufacturing industry in Kenya has been sluggish over the years. This has been hindered by; the high cost of inputs such as electricity, increased competition from the cheaper 'Made in China' goods which has made it difficult for locally manufactured products to compete and be profitable, unforgiving tax regime that has led to job losses and reduced manufacturing efforts. Just like the other pillars in the Big Four Development Agenda, manufacturing, is experiencing a downturn mainly due to the COVID19 pandemic which has severely affected businesses. Most manufacturers are operating at low capacity due to dwindling demand for goods and services.

Very few countries in the world have managed to industrialize and develop without the manufacturing sector playing a leading role. Some of the government interventions required to promote manufacturing sector include;

a) **Taxation:** Promote taxation that encourages local competitive production.
b) **Becoming our own customer:** Development of clear procedures and guidelines for smooth implementation of "Buy Kenya Build Kenya" e.g. impose high taxes on imports to create market for our local goods. This will increase sales and in turn lead to creation of more jobs.
c) **Free market:** Creation of a free market and improve the ease of doing business. This will encourage companies to invest in Kenya, which will boost foreign investment and create employment.
d) **Export Processing Zones (EPZs):** increasing the number of EPZs to encourage more companies to invest in the country hence establishing Kenya as a manufacturing hub. This will in turn create employment.
e) **Subsidies:** Offering production subsidies to local companies for different inputs such as energy and fuel to encourage establishment of local manufacturing industries.

f) **E-commerce platforms:** collaboration with the private sector to establish an e-commerce platform such as China's Alibaba. This will open global markets for Kenyan products and create opportunities for manufacturers, increasing exports.
g) **Globalization of trade:** Sourcing for new global markets for Kenyan exports
h) **Devaluation of the currency to boost exports:** This will attract countries with stronger currencies to come and invest in Kenya (foreign investments and contribute to creation of more employment opportunities. This will also boost economic growth through the contribution of taxes and foreign currency to Kenya. Countries like China have done so.
i) **Promotion of Technical Vocational Education and Training (TVET) institutions:** Setting up more TVET institutions will encourage technical specialization among the Kenyan workforce. TVET institutions will create more training opportunities for youth, hence increasing their employability.
j) **More incubation hubs like Nailab, Metta and Moringa:** Setting up of incubation hubs will help young people develop new ideas into innovative solutions. Some of the ideas can lead to the development of companies that will employ Kenyans and contribute to the of revenue generation.

The Government has set up numerous development projects in the manufacturing sector. They include;

a) A modern industrial park in Naivasha, apparel industrial sheds in Athi River, the establishment of the Dongo Kundu special economic zone (SEZ) and rollout of genetically modified cotton.
b) Machakos Leather Park to train 5,000 cottage industries, change policies to stop imports of finished leather and identify three other industrial parks along the SGR.
c) Oil and mining; to attract one global mining player and export Turkana oil.
d) Iron and steel; to attract $1 billion in new investments and establish coal and iron deposits.
e) ICT; to assemble phones, TV's and laptops and have 5 BPO players, an IT entrepreneurs program and an innovation ecosystem of incubators and accelerators; to create 10,000 jobs
f) For fish processing, a $20 million fish feed mill, blue ocean policy and an aquaculture special economic zone on Lake Victoria, which could see Kenya's fish exports grow from 2,500 tons annually to 18,000 tons; to create 20,000 jobs.

1.4.3 Affordable Healthcare

The aim is to increase the current Universal Health Coverage (UHC) from 36% to 100.0% by 2022 through scaling up NHIF uptake, increased budgetary allocation to health and adoption of low cost service delivery models. This agenda conforms to the third goal of SDG; Good health and well-being - ensure health and well-being for all, at every stage of life

The health sector is facing critical challenges which may hinder achievement of UHC targets. These include; contentious policy changes by NHIF e.g. requiring new members to wait for three months before accessing scheme benefits, low staffing numbers, capacity gaps, actual availability and ease of access to health facilities as well as lack of essential medical products and equipment. Management of health facilities in counties is seemingly facing teething problems. Further, the cost of the roll-out has been slowed down by a poor performing economy.

The success of the UHC will require significant governance reforms and close strategic collaboration between the national and county levels of governments. It is dependent on improvement of health facilities in the counties and employment of more health workers.

The proposed initiatives towards the realization of UHC agenda for Kenya include:

a) Driving NHIF uptake through enlisting 37,000 banking sector agent network; 4 banks, 3 mobile telecom networks, Ajira Agents platform (95,000), leveraging on self-help groups, SACCOs and religious organizations for advocacy
b) Enlisting 100,000 Community Health Volunteers to each recruit 20 households
c) Align NHIF act to UHC, group insurance, multi-tier benefit package and review Insurance Regulatory Authority (IRA) Act to increase uptake of Private Health Insurance to cushion NHIF
d) Launch segregated multi-tiered package
e) Digitization of NHIF; creation of customer friendly processes (registration and claims), which improves productivity and reduces costs

1.4.4 Affordable Housing

Affordable housing implies the development of adequate, standardized and well-spaced houses with continuous supply of clean water and electricity. The houses are to be located in decent places and be readily available to both the lower, middle and upper class in the society. Article 43 of chapter four of the constitution clearly states that every person has a right to accessible and adequate housing and to reasonable standards of sanitation.

The aim is to provide at least 500,000 affordable new houses by 2022, thereby improving the living conditions for Kenyans. This agenda conforms to the third goal of SDG; Sustainable cities and communities – Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable.

Access to affordable, quality housing brings many benefits. In addition to the improved structure itself, there is the benefit of financial security—in many cases the new homeowner now has an asset that is far more secure and valuable than any asset they have ever owned. There are also proven health benefits of this new home. Disease thrives in the unsanitary, crowded conditions of slums and tenement housing.

There is 22% of Kenyans living in cities, and the urban population is growing at a rate of 4.2% every year. Nairobi alone requires at least 120,000 new housing units annually to meet demand, yet only 35,000 homes are built. This mismatched supply and demand has caused housing prices to increase by 100% since 2004. This pushes lower income residents out of the formal housing market and into the slums. About 60% of urban residents live in slums.

Nation’s Affordable and Dignified Housing Plan (AHP) benchmarks provided by the Ministry of Transport, Infrastructure, Housing and Urban Development include that the unit cost of a home to be built should not exceed 305 USD (~ 30,500 KSH) per square meter. Different housing types were meant to be provided according to three income ranges: 125,000 units for social housing programs; 225,000 of low-cost units; 150,000 units to resolve ‘mortgage gap’ of middle income earners. At the start of this year, the Government received the first 228 complete housing units out of the 1,370 under construction at the Park Road Project in Nairobi.

The following are some of the measures can be taken to achieve affordable housing;

a) **Enacting strict measures to regulate land costs and rates**- Land is being sold to investors in the housing sector at a very high cost. Tenants are forced to pay the entire costs of setting up the houses, pushing low income earners to the already congested slums where they can access cheap houses. The government should intervene to regulate land costs and prevent housing investors from exploitation by land sellers.
b) **Alternative Technologies**- There is need to explore cheaper building technology to lower construction costs. Training of labour sensitizing the public on the use of Alternative Building Technology is essential so as to boost its application.

c) **Availing public land for housing and settlement-**The government owns large tracts of land in both urban and rural areas. This land should be released for public settlement, especially by squatters. It should also be availed to developers willing to invest in affordable housing
d) **Enact measures to regulate land holding by investors-**Investors acquire large tracts of land, especially in urban areas, and wait for the prices to escalate before selling them. The government should come up with strict measures to regulate land holding by investors.
e) **Development of good infrastructure in both rural and urban centres-**Includes clean water, good transport, a communication system and sanitation services, especially in slum areas and urban centres. This will them attractive for people to settle in and for private investors to develop affordable housing.
f) **Effective zoning by the government-**The government should put measures to prevent investors from setting up expensive houses in specific zones known for low-income earners, such as the slums and be keen with the quality of houses being set up in such areas.

1.5 Role of Engineers and other critical players in achievement of the Big Four Agenda and Vision 2030

Multiple stakeholder partnerships is required at various levels to achieve the agenda. SDG 17 is about Partnerships for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development. Achieving the ambitious targets of the Vision 2030 Agenda requires an enhanced global partnership that brings together Governments; National and County, civil society, the private sector and other actors.

By combining complementary resources, partnerships have the potential to deliver far more than the sum of their parts. From supportive policy environments to the skills required for organizations to partner effectively; from the need for platforms that can more systematically catalyze collaborations and operate in ways that can support partnering, there is need for opportunities for multi-sectoral partnerships with engineers to enable the government realize the Big Four Agenda by 2022.

Engineering plays a key role in ensuring the growth and development of a country's economy and in improving the quality of life for its citizens. The achievement of the vision 2030 and the Big Four Agenda is highly dependent on the economic pillar where infrastructure development plays a key role. However, several challenges have affected the role engineers are supposed to play in achievement of the above which include the following;
a) Low level of engagement of Kenyan engineers in mega projects. Instead, these have been taken over by foreign engineers and contractors
b) Low level of engagement of engineers on policy matters
c) Low level of local involvement in development partner funded projects. There is no specific requirement to involve local firms

The roles played by engineers include;

a) Infrastructure Development and technological enhancement

The Engineer deals with the development, improvement, and protection of the infrastructure, providing facilities for living, industry and transportation; buildings, roads, bridges, canals, rails, airports, water-supply systems, dams, irrigation, harbours, docks, aqueducts, tunnels, energy, and other engineered constructions and enhances the use of ICT and rapidly changing technological advances in various fields

b) Engineers and Politics

Decision making for National Development is made at the highest level of Government. Involvement of Engineers in politics affords them the opportunity to be at these policy/decision making bodies where they use their professional knowledge to attract and defend important engineering infrastructural development projects. Similarly, Engineers in politics contribute to the enhancement of the welfare of other Engineers

c) Adherence to Engineering Projects Procurement and Specifications

Most of the Engineering Projects are being conceptualized, designed, supervised, evaluated and certified by the Engineers and executed according to specifications. They also make necessary input towards the procurement of the projects

d) Engineering Research and Development

Its aim is to improve on current technologies and develop innovations. Both the public and private sectors should invest in the area. "The Big Four" Agenda calls for establishment of policies (tax, standards, procurement, regulatory), the availability of skilled technical workforce and market access which would create an environment that fosters innovation.

1.6 Conclusion

There is a gap in terms of involvement, roles and responsibilities of the various stake holders (including Engineers) key to the implementation of the Big Four Agenda and Vision 2030. Some of the projects have also faced poor planning at initial stages, slowing down their rate of implementation. Resource allocation for the Big Four Agenda is inadequate and will impact on progress of its implementation by 2022. There is also a low engagement of the local content in implementation of most of the big projects.

1.7 Recommendations

a) The government should increase resource mobilization to enable adequate funding for the Big Four Agenda

b) Coordination between the County and National Governments is paramount. Legislation is needed to address the lacuna created by the lack of clarity on the role played by national and county governments in the industrialisation agenda.

c) Establishment of the Public Investment Management Unit; should be backed by legislation and adequate resources through the national budget and should include accountability and enforcement clauses, which will ensure effective implementation of public investment programmes.

References

Data Science Ltd. (2020). Kenya's Manufacturing Potential and the Big 4 Agenda. (Online). https://medium.com/@DataSciencing/kenyas-manufacturing-potential-and-the-big-4-agenda-7ee584621998 (03/11/2020)

Government of Kenya. (2003). Economic Recovery Strategy for Wealth and Employment Creation 2003 - 2007. Government Printer

Government of Kenya. (2017). Implementation of the Agenda 2030 for Sustainable Development in Kenya. Government Printer

Government of Kenya. (2017). The Big Four-Immediate priorities and actions. Government Printer

IEK (2019). IEK Strategic Plan; 2019 – 2023. (Online). https://www.iekenya.org/images/IEK Strategic Plan 2019-2023.pdf (01/11/2020)

Kaparo, S. (2020). New trade deals are key to achievement of Big Four Agenda. (Online). https://www.standardmedia.co.ke/business/article/2001360594/new-trade-deals-are-key-to-achievement-of-big-four-agenda (01/11/2020)

Kenya Association of Manufacturers and Kenya Business Guide. (2018). Manufacturing in Kenya Under the "Big Four Agenda": A Sector Deep-dive Report. Kenya Association of Manufacturers

Ngugi, S. (2018). Big Four Agenda: Manufacturing. (Online). https://kippra.or.ke/index.php/student-essays/129-big-four-agenda-manufacturing (01/11/2020)

Noppen, A.V. (2012). The ABC's of Affordable Housing in Kenya. Acumen Fund

Omolo, M. and Owino, B. (2019). Kenya's 2019/20 budget and the Big Four agenda: a pro-poor analysis. Development Initiatives

Parliamentary Service Commission: Parliamentary Budget Office. (2018). Eye on the 'Big Four': Budget Watch for 2018/2019 and the Medium Term. Government Printer

Petrus, F. and Newman, C. (2019). Affordable Housing in Kenya: A Performance-Based Analysis of Available Technologies in Kenya and Abroad. (Online). https://www.engineeringforchange.org/research/affordable-housing-kenya-performance-based-analysis-available-technologies-kenya-abroad/ (02/11/2020)