

Sustainability is a Critical Criterion for Success in the Current Nigerian Railways Projects

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Introduction

The UN Sustainable Development Goal number 9 is: “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation ..” This Goal addresses three important aspects of sustainable development, namely: infrastructure, industrialization and innovation. Infrastructure provides the basic physical facilities essential to business and society, while industrialization drives economic growth and job creation. Most of the projects by national governments, especially in developing countries, are on infrastructure and industrial developments. The current projects on the Nigerian Railways should come under this description. Inevitably, sustainability is an essential criterion for their success in order that they can contribute to national economic development.

Following this brief introduction, other points that will be considered in this paper, are as follows:

1. Some of the current developments in the Nigerian Railways under the present President Buhari’s government.
2. Failure to sustain major and strategic projects by various past Nigerian governments.
3. Some examples of programmes that help to achieve sustainability of projects in some advanced countries, and a look at the Nigerian Ministry of National Planning.
4. Some suggestions to achieve sustainability of projects in Nigeria

1. Some of the developments in the Nigerian Railways under the current President Buhari’s government.

On July 26, 2016, President Buhari commissioned the Abuja – Kaduna railway track and the Abuja-Kaduna train services on the first ever Standard Gauge Rail track in operation in the country. The project was conceived by President Obasanjo’s administration, started by the President Goodluck Jonathan’s government, completed and commissioned by his government.

The President said: “... I wish to assure Nigerians that most State capitals and major commercial and production centres will be linked with railway system as a way of bringing about rapid socio-economic development and improving the quality of life of the Nigerians and promoting social and regional integration.

Furthermore, I wish to also reassure Nigerians that due attention will be placed on pursuing the 25-Year Strategic Railways Master Plan which is aimed at rehabilitating the existing 3,505km narrow gauge rail line and developing and constructing new standard gauge rail lines across the country”.

Chief Amaechi, the Minister of Transportation, revealed that about \$16billion was needed to actualise some of the Federal Government’s plans for the railways sector,

especially the construction of two deep seaports in Bonny, Rivers State and Warri, Delta State; as well as the Port Harcourt Railway Industrial Park.

He said: “Let me express my gratitude to the Ministry of Transportation and the Chinese government and the China Exim Bank for their financial support. The same gratitude goes to my colleague, Mrs. Kemi Adeosun, for discharging her responsibility as directed by Mr. President. Most importantly, it is the priority attached to transportation by the President, of which we are very grateful. ...”

Speaking in August 2017 on the new railways projects, the Minister, explained that the projects are to be partly funded by the China Exim Bank. He stated that the Lagos-Kano and Calabar - Lagos rail lines will include state-of-the-art train stations, digital signalling and communications systems and high-speed trains. According to a Nigerian newspaper, THISDAY, the Lagos-Kano and Calabar-Lagos lines could cost an estimated \$6 billion and \$11.1 billion respectively to construct[1]. The minister reportedly said: “We are building four large modern stations that will have shops and facilities for commuters to buy their tickets through e-channels. Two will be in Lagos – one in Apapa and the other at Ebute Metta – then one in Abeokuta and another one in Ibadan....”

Comments

Whilst the initiatives and projects by the Minister and his team appear attractive, the sustainability of the project deliverables should be the determinant of the success of these endeavours. It is necessary to request that efforts are made at this inception stage of the projects to ensure that long-term sustainability plans have been made for the operation of the project deliverables. In all the publicity given to these Railways projects, there has been no statement on medium-to-long term plans for the sustainability of the project deliverables. Without being overly pessimistic, the facts of our industrial history have been that a few years after project deliverables have been commissioned with fanfare, they are abandoned because we cannot support them. A review of this experience is the subject of the next section.

2. Failure to sustain major and strategic projects by various past Nigerian governments will be reviewed.

Various Nigerian governments over the years have imported modern equipment and facilities into our developing economy which has a comparatively poor and underdeveloped intrinsic industrial base. In the past sixty or more years, projects of the then ultra-modern power stations and steel plants, among other industrial facilities, have been implemented, commissioned and put into operations.

As a result of failure of parts which could not be procured, especially electronic systems and equipment, it became impossible to keep some production and ancillary plants in operation. This led to the abandonment of many commissioned industrial plants just three to four years after being put into operation. It is little wonder that our industrial landscape is littered as a “scrapyard” of abandoned projects in various stages of disrepair and failure. Some references on the failure of projects are as follows:

- A government commissioned audit revealed that 11,886 federal government projects failed in 40 years up to 2011, (that is about 300 projects failed every year) with the attendant loss of billions of dollar [2].
- Abandoned public projects led to the loss of the equivalent of N8 trillion, between 1966 and 1975 [3].
- In October 2016, a former Director-General of the Bureau of Public Procurement stated that there were 19,000 Federal Government projects in various stages of abandonment [4].

Personal experience

It is counterproductive, ill-advised and indeed a questionable use of national revenue for a nation to keep importing projects without any guarantee of their long-term sustainability. This writer finds this project procurement practice reprehensible because of the bad experiences which he personally had in working on projects in our Federal Government owned companies. In 1982-88 when as the Head of Control, Instrumentation and Computer Systems, he had the responsibility for engineering management of automation systems in the Delta Steel Aladja. As the responsible Chief Engineer, he had a first-hand experience of the problems created for the country when project deliverables that cannot be sustained and supported through their planned lifetime are imported and implemented in the country. They fail in a few years and become abandoned. Today, the costly and magnificent Delta Steel Complex, which was reportedly built at a cost of \$1.2 billion, has been abandoned; it is a sorry sight, an indictment and a disgrace to our national project procurement practice. We should therefore put an end to such short-sighted and ill-informed investment which inevitably degenerates to throwing money down the drain.

Nigeria Expects

It is expected that Chief Amaechi and his team at the Ministry of Transportation will have learnt from our past experience as they embark on costly ultra-modern Railways projects with the Chinese or whichever foreign company. Nigeria correctly expects and needs a guarantee of the sustainability of the project deliverables. The country cannot and should not for ever keep wasting money on projects that fail and are abandoned within a few years. The least that can be done is that we should learn from other nations where project deliverables are utilized to their lifetime of over twenty years whilst ours are abandoned after barely two years of commissioning. In the next section, some examples of programmes embarked upon in advanced nations to achieve sustainability of the project deliverables will be discussed.

3. Some examples of programmes that help to achieve sustainability of projects in some advanced countries are presented.

Before discussing any example, it may be relevant to explore the justification and necessity for such programmes. Expertise and skills in civil, electrical, mechanical engineering, finance, business administration, law, contract administrations, etc., are required in analysing the operations and sustainability of production and engineering systems, power projects, etc. There is no one person who has all the skills rolled into them. Or could there be that professional who should be well acquainted in current and best practices in civil engineering, electrical engineering, mechanical engineering, building engineering, architecture, chemical engineering, electric power generation; transmission and distribution, financial management, etc.? It is clear that there is no such person anywhere. Therefore, no one person is professionally qualified to

discuss the various aspects of a new project such as engineering, financial, legal, etc., on behalf of a country. This could be one of the reasons why in developed countries, there are national and government agencies staffed with appropriate professionals with expertise in various technical specialties who have responsibilities for both short and long-term national projects. Such professionals participate in project negotiations. They also plan for the long-term sustainability of major projects in the nation. In the UK for example, they have the Infrastructure and Projects Authority (IPA).

3.1 The Infrastructure and Projects Authority (IPA)

It is the government's centre of expertise for infrastructure and major projects. They describe their function as follows: "We sit at the heart of government, reporting to the Cabinet Office and HM Treasury. We work across government to support the successful delivery of all types of infrastructure and major projects; ranging from railways, schools, hospitals and housing, to defence, IT and major transformation programmes. Our purpose is to improve continuously the way infrastructure and major projects are delivered in order to support government priorities and improve people's lives. We aspire to create the best-performing project system of any government in the world...."

The IPA Report: The Infrastructure and Projects Authority (IPA) published its annual report on major projects. It is its fifth annual report on the Government Major Projects Portfolio (GMPP) released on July 19, 2017, revealing 43 major projects on the Government's Major Projects Portfolio (GMPP), worth £455.5 billion and spread across 17 government departments. The report is in support of the IPA's ongoing purpose to improve the way infrastructure and major projects are delivered and the commitment to transparency and delivering public services effectively and efficiently. It provides an overall picture of how well these projects are progressing as of September last year. The data shows a steady improvement in the way that government is delivering major projects:

- Over 60% of projects by whole life cost are likely to be successfully delivered
- Since last year's report, the number of at risk projects has reduced from 44 to 38, which continues to be an improvement from 48 the previous year
- Transformation projects continue to make up the largest category of the GMPP with 40 projects
- The infrastructure and construction sector is the largest area of growth on the GMPP, reaching a record value of £222.5Bn

John Manzoni, Chief Executive of the Civil Service, commented:

- "This year's report continues to reflect a broad and ambitious government agenda with transformation and infrastructure and construction remaining key priorities.
- "The data shows signs of steady improvement in the way government is delivering major projects. All government projects are designed to improve the lives of our citizens. As we continue to deliver, the benefits of these projects will be felt by the public."

3.2 Canada's Major Projects Management Office (MPMO)

MPMO is a Government of Canada organization whose role is to provide project management and accountability for major resource projects in the federal regulatory review process, and to facilitate improvements to the regulatory system for major resource projects. The MPMO, working collaboratively with federal departments and agencies, serves as a single window into the federal regulatory process, and complements the technical discussions between proponents and regulators. The Office provides guidance to project proponents and other stakeholders, coordinates project agreements and timelines between federal departments and agencies it tracks and monitors the progression of major resource projects through the federal regulatory review process. The Office also investigates and identifies short- and longer-term solutions to improve the performance of the federal environmental assessment and regulatory process for major resource projects.

MPMO Mandate: The MPMO was established in 2007 to support the Government of Canada's new approach to the regulatory review of major resource projects – an approach that ensures a more effective, accountable, transparent and timely review process.

The MPMO's mandate is two-fold:

- to provide project coordination, management and accountability for major resource projects within the context of the existing federal regulatory review process; and,
- to undertake research and identify options that drive further performance improvements to the federal regulatory system for major resource projects.

3.3 The Nigerian Federal Ministry of Budget and National Planning

It was originally established by Decree No 12 of 1992 as the *National Planning Commission* and later amended by Act 71 of 1993. The core responsibility of the commission is the formulation of medium term and long term economic and development plans for the nation. The Commission is headed by the Minister of National Planning, who is also the Deputy Chairman of the National Planning Commission. The Chairman of the Commission is the Vice President.

4 Some suggestions to achieve sustainability of projects in Nigeria

Some statistics which show respectively information on national project management in Nigeria and the UK hardly bear any comparison. In our case, losses running into billions of Naira from abandoned projects as have been discussed. While in the UK, 60% success is being estimated for the 2016 – 2017 period. Our statistics for this period may or may not exist. It is in our interest that we learn from the UK and other developed countries how they plan, invest and operate their programmes and portfolios of projects successfully.

National Government project management units that work across all ministries and departments

The UK **Infrastructure and Projects Authority (IPA)** is described as a unit which “works across government to support the successful delivery of all types of infrastructure and major projects;

ranging from railways, schools, hospitals and housing, to defence, IT and major transformation programmes.”

The Canadian Major Projects Management Office (MPMO) works collaboratively with federal departments and agencies. It serves as a single window into the federal regulatory process, and complements the technical discussions between project proponents and regulators. **It** provides guidance to project proponents and other stakeholders, coordinates project agreements and timelines between federal departments and agencies, and tracks and monitors the progression of major resource projects through the federal regulatory review process.

Difference between the Nigerian practice and practices in the UK and Canada

From the summaries of the philosophies of operations between the Nigerian Federal Ministry of Planning and the UK IPA and the Canadian MPMO, it appears that while the Nigerian Ministry of National Planning has little control of what each federal ministry does, the UK IPA and the Canadian MPMO work in collaboration with their respective national departments and ministries.

This lack of control is probably demonstrated in the case of the current Nigerian Railways projects. Chief Amaechi, the Minister in charge of Transportation which includes the Railways had words of thanks for the President and Mrs. Adeosun, the Finance Minister, and for people in his ministry. There was no mention of the Ministry of National Planning. He appears to be the “architect and engineer who planned, designed and implemented” the current Railways projects. Hence he was even congratulated by the President.

Our past experiences and the current examples from developed countries such as Canada and UK should teach us that a one-man show in which he works within his own ministry and outside the control, collaboration and regulation of a central national body is not the best for the country. It is simply because no one person is professionally qualified to discuss the various aspects of a new project such as engineering, financial, legal, etc., on behalf of a country. It is not just a case of having some professionals who take instructions from him in his ministry. It should be the case that there are professionals who do not take instructions from him, who are authorised to amend, or reject some aspects of a project if they consider that they are not good enough for the country. In addition, sustainability should be a critical criterion for success and should be included before projects are agreed upon.

Suggestions

- A suggestion that this paper seeks to underline is that, for success and sustainability of projects, we need professionals with expertise in relevant technical specialities to be constituted into a unit, a National Project Management Office (NPMO) charged with the responsibility of end-to-end project management in the country.
- The National Assembly should empower the NPMO to participate with government departments and ministries in discussion and investments in future major projects. No ministry should procure projects for the country independently.
- No minister should be authorized to work alone in negotiating national projects. For transparency, accountability and to ensure that factors that make for sustainability of project

deliverables are built into project plans from the beginning, negotiation on planning, designing and implementation of national projects should be conducted for the nation by a team and not by any individual.

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About the Author



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Dr. O. Chima Okereke, Ph.D., MBA, PMP is the Managing Director and CEO of Total Technology Consultants, Ltd., a project management consulting company working in West Africa and the UK. He is a visiting professor, an industrial educator, a multidisciplinary project management professional, with over 25 years' experience in oil and gas, steel and power generation industries. For example, On December 26th 2013, he completed an assignment as a visiting professor in project management; teaching a class of students on Master's degree in project management in the Far Eastern Federal University, Vladivostok, Russia. In August and September 2013, he conducted an innovative, and personally developed training programme for seventy six well engineers of Shell Nigeria to enhance the efficiency of their operations using project and operations management processes.

Before embarking on a career in consulting, he worked for thirteen years in industry rising to the position of a chief engineer with specialisation in industrial controls and instrumentation, electronics, electrical engineering and automation. During those 13 years, he worked on every aspect of projects of new industrial plants including design, construction and installation, commissioning, and engineering operation and maintenance in process industries. Chima sponsored and founded the potential chapter of the Project Management Institute (PMI®) in Port Harcourt, Nigeria, acting as president from 2004 to 2010.

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