"THE APOGEE OF NATIONAL SERVICE AND VISION FOR THE NIGERIAN POWER SECTOR - - REFLECTIONS ON THE LIFE AND TIMES OF ENGR. (DR.) JOSEPH OYEYANI MAKOJU", BEING LECTURE DELIVERED BY AMB. (DR.) GODKNOWS BOLADEI IGALI, OON, FHSN, FNAH, FNAIA ON THE OCCASION OF THE INAUGURAL ENGINEER MAKOJU ANNUAL LECTURE SERIES AT THE FEDERAL UNIVERSITY, LOKOJA, 11TH APRIL, 2023

Protocol

EPILOGUE

It is exactly a year ago when Armageddon seemed to have visited us as news of the passing on to glory of our greatly treasured elder statesman, patriot and inspirator, Engineer (Dr.) Joseph Oyeyani Makoju, FNSE, OON, OFR, filtered through the news waves. For virtually all, this came with shock and disbelief but it was a reality that none could not derogate from. The mood was similar to when King David of Israel heard news of the death of his boss, King Saul and son, his bosom friend, Jonathan, lamenting thus: "The beauty of Israel is gone upon high places. How are the mighty fallen?"

Indeed, a giant had actually fallen in the greatest Black nation in history, carrying along with him, some of the finest virtues that any of humankind has ever had. But then, that is the way of men. So, we are here gathered today in the hallowed halls of this respected citadel of learning and scholarship,

¹ 2nd Samuel, ch. 1 vs. 20

Federal University, Lokoja (FUL), lying on the confluence of the Benue and Niger Rivers, to venerate and celebrate a man who by all standards could be regarded as one of the purest of human souls that ever treaded this our land of promise. Our Vice Chancellor and FUL family, thank you very much.

It is therefore fitting and proper to gather in this manner to reflect and give deep thoughts to those incandescent values and high moral philosophies which our brother stood for; ideals and values that dwell essentially on bringing the highest creative essence to human existence, both at the narrow pedestal level and in its reverberation across the world. Indeed, the life of Engr. Makoju was a full reflection of those transcendental qualities which makes the greatest of men to have become what they were. These are creative essence that could be considered fundamental in making human civilisation to have evolved over time. Peculiarly unusual and unapologetically outstanding attributes which radiates at the personal level and thereon conflagrate into a line of ideals and values and help to build societies. It is on such pedestal that men such as Makoju make their unique and important contributions to society by thinking with a different mind-set and leaving a lifestyle of unselfishness.

You have asked me to speak on the Challenges of Power Sector Reform in Nigeria - - The Way Forward but gave me the liberty of adjusting the topic to suit the day in a manner I consider appropriate. I therefore take the liberty to opine that on the Inaugural Session of this Memorial Lecture, it will be much uncharitable to box the legacy of Engr. Makoju into a single compartment of

his rich national service both in the private and public sectors. In this conversation, I intend therefore to look at the life of Engr. Makoju in its totality, going back to his home base, formative years and ultimately to his service to Nigeria, especially in the power sector of this country. Perhaps in the future, someone else will be able to talk more deeply on the power sector, of which I am much knowledgeable but will restrain from dwelling on in any particular details. We will thereafter conclude by having an overall reflection of his towering legacy.

CULTURAL AND PHILOSOPHICAL UNDERPINNING

From his day of birth on Saturday, 13th July, 1948, Engr. Makoju had always displayed what many consider to have been values that made him to stand out as a child of promise and of deep spiritual forte. He was said to have been very enthusiastic about all that happened around his environment, as an exceptionally deep and inquisitive child.

a. Egbira cultural infusion

Going back to the early years of nascence in the town of Okene, home of the great Egbira people from North Central Nigeria, he grew up to be absorbed in one of Africa's richest civilisations and cultures.² The Egbira themselves, also known as Ebirra, Igbirra, Ibirra are said historically to have migrated from the

² Retrieved from Wikipedia and Britannica February 2023 Also see "The History of Ebirra People of Ebiraland (Hopa Anebira) retrieved February 2023

Junkun area which was part of the Kwararafa multinational state in present day Taraba State, but briefly settled among the Igala people who are their neighbours, slightly northwards. Until the 15th century, the Kwararafa confederacy empire was the pre-eminent political entity in what is known as Nigeria's north central region, entering into north-west Cameroon. They were immediately south of the Kanem-Borno empire, along the Benue River valley and brought together tons of indigenous ethnic nationalities.³ Thereafter, their hosts, the Igalas supported the epochnomous founder of Egbira dynasty, named Ohimnage to move further down south to their present location spreading predominantly in various locations in Kogi State as well as the Federal Capital Territory (FCT), Nasarawa and Edo States.

It is a remarkable fact, that like their ethnic kins, the Junkuns and the Igalas, the Egbira also resisted the onslaught of the Jihad led by Usman Dan Fodio (1754-1817) in the early 19th century to foist Islam and Fulbe imperial rule on them. Although the Jihadist succeeded in stamping Islam into their lot, the Egbira, through such strong warlords as Achigidi Okino and Ajenomo, held back the Fulani's and therefore kept their autonomous indigenous leadership, culture and identity. It was after this period which lasted till the 1860s to 1880 that the British, on their own, began to have a more than casual interest in penetrating into Egbira land.

b. Church and spiritual bulwark

³ H.J. Fisher "The Sahara and Central Sudan" in the Cambridge History of Africa, Fage, CUP, 1975 p.134-34 See also UNESCO General History of Africa, Vol. 4, Paris, 1997

Perhaps the greatest influence on Makoju was his spiritual underpinning – the church. Under the auspices of the Royal Niger Company, Christian missionary work started to penetrate into the area led by the first African Bishop, Samuel Ajayi Crowther who soon established a church, one of the oldest of its kind in Nigeria in the town of Lokoja, near the area in Egbira territory. By 1865, the oldest primary school in northern Nigeria which was an offshoot of the church was established by Bishop Crowther. By 1884, the Roman Catholics, who had also been around the area, opened a new Mission Field in Lokoja with the intent of moving more inland into Egbira area. Hence till today, Egbira land is under the Diocese of Lokoja.⁴

So, between the 1860s and 1917, various Christian groups began penetrating lgbira land with the Catholics becoming more active than others. By 1910, the first Catholic presence in Okene was established and shortly followed by a Catholic School in 1917 which coincided with the reign of Attah Ibrahim Oloruoza (Ohinoyi of Egbira land). From that time, the city of Okene, birth place of Engr. Makoju and home of the Egbira people as a whole began to enter into an era of modernism as infrastructures such as railway line, post office, and a Teachers College, amongst others began to sprout around the city. The Catholic Church which was established since 1917 is now known as "Christ the King Catholic Church" or CKC Parish Church.

⁴⁴ The most detailed account on Christian incursion into Egbiraland remains Noah Yakubu's "Christianity in Ebirland in Focus", Lagos 2000

A more recent published work is Zacheus Asuni's "The Coming of Christianity to Ebiraland (2019). There is also the chronology of Egbira history in "Ebira Vabe Association; retrieved in February 2023 and Christ the King Homepage (retrieved in March 2023)

His father, Pa Augustine Makoju was a teacher and this saw to his siblings all becoming highly successful people. His family, though initially Muslims, was one of the few native indigenes of Okene that embraced the catholic faith. However, his mother and several relations remained Muslims throughout their life, but particularly his mother, Maria Makoju, imbibed in her children the innate qualities of being persons of strong faith and character which went beyond the ranges of creed and denomination. He grew up realising that higher than being a Roman Catholic, there were the more fundamental issues of life that border on the universal values of mankind. Hence, Engr. Makoju was at home in all parts of Nigeria and with persons, irrespective of tongue or persuasion.

Flowing from his deep catholic heritage are his alignments of life's outlook to the dictates on the "sermon on the mount". Indeed, the beatitudes as they are also called seemed to have dwelt on the defining the life and moral philosophy of Makoju. This includes injunctions on working towards common goods through a frugal life of spirituality, prayers, fasting and the shunning of materialism, as well as focus on love, passion, perseverance, compassion, a life of total self-abnegation, etc.

He therefore grew up with very strong catholic persuasions and Egbira values which many agree are some of the strongest traditional norms of morality to which people from any part of Africa could boast of. Despite all these,

⁵ Matthew, Chapter 5:3-12

throughout his private and public sector engagement, Makoju was a man of great simplicity and related with his friends in the closest and fondest manner.

c. The Home Base

It will be totally incomplete if we do not say anything about Makoju's home front which is considered one of the pillars of his success. He was, perhaps, one of the most affectionate persons of family and marital life. He maintained a very close and convivial relationship with the one that was understandably his first love, his wife, Gladys. Interesting enough, he met her during his high school days at Federal Government College, Warri. Thus, fulfilling one of the original inspirational objects for building these schools – "Pro Unitate", of both the heart of individuals amongst themselves and the soul of the countries, Mrs. Makoju is a proud daughter of in Edo State, the seat of the ancient Benin Kingdom. Gladly, his wife's penchant for knowledge, and scholarship which saw her rise to the position of a Director and Chief Inspector of Education at the federal level balanced his character trait as she brought that hawk-eyed moral comportment of a teacher both in managing Makoju's life and that of their very successful children.

Makoju was also a man who knew how to relax, a key nugget for success. Despite his extremely busy schedules and engagements, he was known as an avid golfer which he started from his days at the Ewekoro Cement plant. He was one of the champions and exponents of the sport. It was not surprising, therefore, that when he was sent to Sagamu Cement Plant, he quickly

acquired more lands to build the Lafarge Golf Course which today stands as one of the best private sporting facilities in Nigeria.

MATURATION INTO THE IDYLLIC CITIZEN

Against the backdrop of this complex milieu of culture, faith and family, the maturation of Makoju for self-actualisation and national service took place. This is in realisation of the fact that the greatest worth of an individual which in modern parlance we call citizen is to prepare self, provide self and position self for national service. The citizen is the most valuable asset to any community; therefore they are expected in a responsible manner to prepare their lives to be of the best of value to the common good and enhance the prestige, the good name, the civility and responsibility of society.

It is obvious that Makoju had greatly prepared himself consciously for national service. Having obtained his primary education at the Roman Catholic Primary School in 1954 in Okene, he proceeded to Government College, Kaduna in 1962. This institution was established as far back as far back as 1920 by the colonial administration with the motto "Success through Perseverance", symbolised significance of the school's leit motif, itself stamped an impact on his latter outlook to life. Again, the metropolitan environment of Kaduna, the capital of northern Nigeria, provided him with a boundless bandwidth to understand and appreciate Nigeria the more, a land of diverse and heterogeneous traditions in pursuit of universal, common brotherhood and

nationhood. The school also trained a great number of the intelligentsia from northern Nigeria.

On completion of his secondary education in 1966, he continued to Federal Government College, Warri for his post-secondary education. FGC, Warri, a pro-unity and a special breeding ground for Nigeria's post-independence young minds for nation building was established in 1966, along with FGC, Sokoto and Okposi (in Ebonyi State). Initially conceived by the Government of Nigeria's first and only Prime Minister, Sir Abubakar Tafawa Balewa as "Inter-Regional Secondry Schools", Warri was particularly the most outstanding of the three and a meeting point for some of the brightest young people from all the four corners of Nigeria, till present times.

While in secondary school at Kaduna, Makoju won the Harford Award Prize for best Arts student and at higher school at Federal Government College, he was winner of the JF Kennedy Memorial Essay Award. Both of these were highly competitive prizes in Nigeria at the time and critical to future career and academic progression. Interesting enough, he switched from being the best Arts student in secondary school level to most outstanding science major at "A level" – thus becoming a very balanced young adult.

a. Making of an ace Enginer

With such high flying record, he was offered admission to the University of Nottingham, UK, on scholarship from Shell, which was extremely competitive at the time, where he graduated in 1972 with a First Class in Engineering. His alma mater, Nottingham University has kept a record since its establishment in 1889 as one of the leading intensive research universities in the world. The calm disposition and magisterial outlook of Makoju is very much in synch with the University's motto of "Sapientia urbs conditur (a city built on wisdom)". The University of Nottingham is also reputed for producing some of the highly respected Noble Laureates in the sciences and economics. It is against this background that he received his training in engineering, both first degree and his master's.

In other respects, much later in his professional life, he also enrolled at the National Institute for Policy and Strategic Studies (NIPSS), Kuru, Jos, Nigeria's apex policy formulation institution in order to prepare himself for higher state duties. This home for the elite class of Nigeria's decision makers has for about 34 years since its founding seen some of the country's former Heads of State and leadership in almost all disciplines, both public and private sectors, pass through its classrooms.

As alluded earlier, the highest calling of a citizen is to prepare himself and to yield when duty calls. Through dint of hardwork, he had received all necessary professional trainings, certifications and accolades to be on the payroll at both government and the private sector. As an Engineer trained by one of the best institutions in the world, he was also well formed to start his own business if he wished to do so.

OTHER PROFESSIONAL ENGAGEMENTS

Outside his formal education, he further worked to sharpen his skills and expertise in virtually every professional group and body that mattered to his calling. He was a Fellow and Council Member of the Nigeria Council of Engineers. Similarly, a Fellow and Council Member at the Institute of Management and the apex body in the field of engineering, the Nigerian Academy of Engineers. Outside the shores of Nigeria, he was a member of the British Institute of Engineers.

At a time in his career, he was a pseudo trade unionist as President of the Chemical and Non-metallic Employers Federation (1994-99) which is the number one body of its kind in the manufacturing sector and he was also a member of the National Employers Consultative Assembly (NECA) from 1988-1992. He was at a time also Vice President of NECA, an umbrella body that creates network and interaction with labour and employers of labour with the aim of creating industrial harmony. Indeed, Makoju was at various times, a Council Member of the Manufacturers Association of Nigeria (MAN) and belonged to almost every think-tank which existed for economic development of Nigeria and advancement of Africa regional development.

He was also known to have been a good promoter of vocational and technical education, including the establishment of his own private university. He was latterly appointed as Pro Chancellor of the Confluence University, owned by the Kogi State Government.

NATIONAL SERVICE IN THE REAL SECTOR: THE WAPCO YEARS

With such robust background, Makoju was all formed and capacitated to plunge into service of the country in various spheres. As a professional engineer, he had been involved in various responsibilities and projects within the real sector of the national economy.

After engagement in several engineering roles including at Shell-BP which was a natural expectation, Makoju, in course of time, took up employment in 1975 and rose steadily to become Managing Director and CEO of West Africa Portland Cement (WAPCO) in 1991. Today, that industrial conglomerate is known as Lafarge Cement and under his watch became the largest organisation of its type in Nigeria and the entire West Africa. Although WAPCO had existed in Nigeria since 1959, it is Makoju's period that is still regarded as the golden era of the business which for decades was the country's largest player in the construction industry. The company became known not only for the quantity and quality of cement that it produced but its competitiveness in terms of pricing. With Makoju on the steering, its cement production rose from 2 metric to about 4 metric tonnes with the brand known as Elephant Cement still regarded by many to be Nigeria's product of value and of high demand.

During his period of stewardship, he took Lafarge to the level of a publicly quoted company on the Nigeria Stock Exchange in 1979. He also expanded

a number of factories owned by the company from the small base in Ewekoro in Ogun State to growing the more modern plant in Sagamu as well as establishing another at Ashaka in Bauchi State. Makoju was known also for his emphasis on corporate responsibility, while he served as Chief Executive, which today has seen the company institute several academic prices in secondary and post-secondary schools around the country.

His last public service appointment was in 2017 as Managing Director of Nigeria's Manufacturing Conglomerate, the Dangote Group, specifically its cement manufacturing arm, from his earlier position as a Special Personal Adviser to Alhaji Aliko Dangote, Africa's richest man. In other respects, he remained an Honorary Adviser and also Board Member of the West Africa Power Pool, arising from his work as MD of PHCN. He was also Special Adviser to the Cement Group of the Manufacturers Association of Nigeria (MAN). There was no breathing space as he was greatly multi-tasked and combined various positions as long as it pertains to pushing the national economy forward.

NATIONAL SERVICE AND VISION FOR THE POWER SECTOR REFORM

a. The PHCN Story

Affirming the euphemism that a gold fish has no hiding place, Makoju's planned retirement meritoriously from the cement industry saw to his secondment, on request from former President Olusegun Obasanjo as

Managing Director of then apex national electricity asset, Power Holding Company Nigeria (PHCN). He assumed duties in September 2000. PHCN which he inherited was Nigeria's electricity conglomerate and had its root in 1896 when the first electricity company was established in Nigeria. Then, it was only 60 kw. In 1946, a dedicated unit was established with the Power Works Department (PWD) of the colonial administration. However, the coverage was only around Lagos, the capital. By 1950, the Electricity Corporation of Nigeria (ECN) was established by the colonial government by an Ordinance of the Legislative Council to produce and control the electric power sector as a state owned monopoly.⁶ This was however without bias to other entities such as the Native Electricity Supply Company (NESC) which was allowed to cater for other parts of the country.

Thereafter, the Niger Dams Authority was established on 25th November, 1964 by Parliament to be able to put in place hydraulic structures on the River Niger, while not impeding other uses such as navigation and fishing. However, the intended hydropower so generated were to be sold exclusively to the ECN.

Still in search of the best condition for improving upon this critical sector, in 1971, the then Military government appointed Canadian consultants known as Showmet to consider various measures of electricity agencies around the country. So, by Decree 24 of 1974, the Nigeria Electricity Power Authority

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⁶ Much of the information here is retrieved from Government archives and brief at the Federal Ministry of Power. But also see O.I. Okoro "Power Sector Reforms in Nigeria: Opportunities and Challenges", Journal of Energy in Southern Africa, p.52-57

(NEPA) was promulgated, although it did not take off until 1976. All the electric assets including the existing dams, Niger Dam Authority which operated the Kainji, were all merged into this new octopus known as NEPA Plc which was now a public limited company.⁷

Despite all these changes and reforms, Nigeria electricity supply industry remained lethargic, wasteful and unable to play its critical role in the national economy. Between 1983 and 1999, average electricity generation was about 2,000 megawatts. Value addition in terms of new generation and transmission capacity was minimal. It was at this point that the government of President Obasanjo who had taken over power after democratic election came up with the plan for the Electric Power Sector Reform (EPSR) Act of 2005. This led to the eventual "unbundling" of the national power utilities into a series of 18 companies of which six are generation companies, 11 are distribution companies and a national power bulk company known as Transmission Company of Nigeria (TCN).

b. The Electric Power Sector Reform (EPSR) 2005

The EPSR of 2005 also came with the establishment of several other institutions to cover the entire value chain of the sector. Principal amongst these was the Nigerian Electric Regulatory Commission (NERC) as a new regulator for the entire sector. Among other things, NERC was expected to

⁷ Adeghe, et al, "Power Sector Reforms – Effects on Electric Power Supply Reliability and Stability in Nigeria" in International Journal of Electric Power, 2009, p.36-42

set and enforce standards and protect consumer rights. NERC was also to promote the sustainable development of the sector by taking measures to ensure other sources of energy such as renewables are encouraged. Under the EPSR, NERC was also supposed to be in charge of managing the multi-year tariff order, that is setting of tariffs.⁸

Another institution that was created in the Act is the Nigerian Electricity Liabilities Management Company (NELMCO). This was essentially to cater for the management and eventual disposal of all non-core assets hitherto owned by the power sector as well as defray all the outstanding liabilities. As we know, NEPA was one of the biggest owner of landed assets all over Nigeria and also abroad. In like manner, it had a large number of litigations and liabilities traceable to the Federal Government.

The other institution that was created is the Nigerian Bulk Electricity Trading Company Limited (NBET). The essential duty of NBET was to act as a trading licensee, to engage in the purchase and resell of electric power. This is crucial because a privatized industry is expected to be defined by vesting contracts between those who produce electric power and those who buy in bulk and sell to consumers.

Another institution created is the Rural Electrification Agency (REA) whose mandate was essentially to promote electrification in the areas not covered by grid. This organisation was also to manage dedicated funds known as Rural

⁸ Roadmap for Power Sector, August 2013

Electrification Fund to take power closer to all parts of the country. This was with a view to ensuring that many Nigerians as possible have access to power.

Last but not the least institution of the power sector which has become relevant quite lately is Nigerian Electricity Management Services Agency (NEMSA). Previously, this had existed as the Inspectorate arm of the Federal Ministry of Power and was the hold which Government had in ensuring that safety standard was being maintained in the sector. The Ministry had a Department responsible for this function but due to the privatisation of the power sector, the Ministry had to reduce direct involvement in the sector and therefore created an extra ministerial department known as Electricity Management Agency (EMA) to take up responsibility for continued enforcement of safety standards in the sector.

c. What Makoju achieved in Power

The first step was therefore to break NEPA into manageable entities, under a structured supervisory body. With this unbundling, it became imperative to look for a Nigerian with a midas touch to ensure the survival of these new 18 companies and prepare the sector eventually for infusion of private sector creativity and private sector innovation. It was in this process that the Okene son, Makoju was headhunted and appointed as boss of the new Power Holding Company of Nigeria (PHCN). This was a kind of Super Executive because each of these 18 companies has an individual Managing Director controlling various parts of the 36 states of the country.

From when Makoju took over at PHCN, it is common knowledge that he inherited a sector which was totally unmarketable. His main thrust therefore was to provide strong supervision over the various Chief Executives and by so doing, shore up the integrity of the plants and installations around the country and enhance their corporate governance profile. He brought along with him, private sector dynamism and versatility during the transactional period before full blown privatisation. He came with a change management mantra and saw to its full implementation. He also created a needed link between the autonomous companies and the national grid under the Transmission Company of Nigeria (TCN), to which all related.

At last, a breath of fresh air came into the cycle as aggregate power generation increased sporadically. At the same time, power transmission through the national grid also jacked up. After stagnating between 1,500 -2,4000 megawatts, transmitted power hiked to 2,799 mw, 2,943 mw, 3,223 mw and 3,479 mw between 2000 – 2003 and continued incrementally until he completed his tenure. Another major achievement was the role which he played in giving life to the sub-regional West Africa Power Pool which was aimed at integrating unified regional electricity market. The idea was to integrate power generation and build common infrastructures among West African states, following the decision of Heads of State in 1999. It was, however, during the tenure of Makoju at PHCN that Nigeria rose up to its responsibility as the lead economy in the sub region by concluding Bilateral Agreements between Nigeria and some of its neighbouring countries such as

Republic of Guinea and Niger Republic to activate the Pool. The expectation of Makoju was that on medium term basis, Nigeria could become the net exporter of electricity with improvement made on developing its gas to power assets. At present, Nigeria has over 600 trillion TSF of gas and therefore could flood the entire sub region and the whole of Africa with electric power if there is consistent development.

Ahead of the eventual privatisation of the sector in 2013, Makoju who was adjudged exceptional, transitioned to become Special Adviser on Electric Power to three Nigerian Presidents, Olusegun Obasanjo, Umaru Musa Yar'Adua and Dr. Goodluck Jonathan. Up till 2011, when he finally existed from formal national assignment, he was the intellectual forte or actual arrowhead for every government policy in the power sector. It is also important to mention other ongoing projects within the sector, all of which have a touch of Engr. Makoju one way or the other. These are the 3,050 mw Mambilla Power Plant which is still being developed, 700 mw Zungeru Power Plant, 215 mw Kaduna Power Plant, the Kashimbilla 40 mw Power Plant and the 30 mw Gurara Power Plant. There is also a Katsina Wind Farm construction, which has stalled.

c. The Privatisation Exercise

With government decision to privatise its power sector, the Bureau for Public Enterprises (BPE) which has a statutory responsibility for such transactions

under the National Council on Commercialisation and Privatization (NCPC) chaired by the Vice President was given the responsibility to come up with the best framework to ensure that a competitive market emerges from the exercise. Working together with the World Bank and its appointed consultants, the BPE divided the exercise into two phases:

- i. The old PHCN assets; and
- ii. The newly established NIPP assets.

The old PHCN assets were partially privatised with private entrepreneurs owning 80% shares of the GENCOs while 20% shares were left with the In the case of the DISCOs, the ratio was 60/40. This first government. phase of privatisation was concluded in November 2013. Prior to privatisation, on 30th September, 2013, PHCN was effectively brought to an end and the successor companies took off effectively from 1st of November. these steps, the various preferred bidders took over the assets and the entire sector effectively came into private sector control. Thenceforth, they were to be supervised by NERC which was sector regulator while BPE represented government of various management boards to cater the interest of the general public. Having totally sold the old PHCN assets, pressure mounted on government to go the full haul by also selling the Nigeria Integrated Power Project (NIPP) plant assets, most of which were being built and were advanced at various stages.

In retrospect, the NIPP project was brought into stream as part of the strategy to prepare the sector for private sector interest. On discovery that Nigeria's power generation capacity was unable to sustain meaningful economic development; the government of President Olusegun Obasanjo came up with the idea of establishing the 10 NIPP plants as collaboration between the three tiers of government, i.e. Federal, states and local governments. In particular, these plants were expected to take advantage of the huge gas reserve in the Niger Delta. For this, a Special Purpose Vehicle known as the Niger Delta Power Holding Company (NDPHC) was established in 2004. After a lot of initial conceptual and operational issues, most of these plants were now completed.

Accordingly, they are also along the line of privatisation and procedures adopted with the first set of privatisation. The policy at the time was to ploy back the sales of the NIPP into development of renewables, especially solar and wind. This was more so as funds for the building of NIPP received seed money of \$2.5 billion from the excess crude accounts. Today, the NIPPs which have now been privatized have a capacity of 4,700 mw of electricity which, as conceived, also have in addition a projected 1,834 km transmission lines at 330 KVA and 709 kilometres on 132 KVA. The NIPPs also have several transmission sub-stations, a total of 296 distribution process of various capacities. Since 2015, the privatization of the various NIPP plants have been concluded with preferred bidders at various stages taking over (although recent government policy have approved take back of 5 of the plants for outright full privatization).

THE FUTURE OF THE POWER SECTOR

None is in doubt that the reform of the sector was well intended at ensuring a well-developed National Power Sector Industry. However, it is common knowledge that improvements in service delivery have been lacklustre and have been unable to meet the expected targets. The implication of insufficient power according to the World Bank is a gross economic loss of about \$26 billion (over N10 trillion every year). The reasons for these are complex and unyielding. These include:

- i. serious payment issues;
- ii. unimpressive regulator of the sector;
- iii. low level of capital infusion; and
- iv. limited energy mix.

For a population of the size of Nigeria, the proper development of its power sector is critical to the country's march into a rightful standing as one of the leading economies of the world. At a Gross Domestic Product (GDP) of about \$500 billion, Nigeria is already the leading economy in Africa. However, this could be well bolstered if the country would be able to get its power sector right and bring to conclusion the sector reforms. These include the Power Sector Policy, 2001, the EPSR Act of 2005, the Power Sector Reform Road Map of 2010 and the current Power Sector Recovery Program of the

Muhammadu Buhari led administration. Although power generation reached a peak of 5,075 megawatts, this was at best a spike and no substantial progress has been made beyond that.

a) What Government has to do

Going forward, a number of things will need to be critically examined and worked on. Most fundamental is the overall supervisory and regulatory environment. In the new privatized environment, as it is in the rest of the world, Federal Minister of Power is expected under the regulation of the Heads of State to provide robust policy guidance and supervision in the sector. Without interfering in anyway in day to day activities, this responsibility has to be carried out with greater thoroughness.

At the onset of the reforms, what was known as the Presidential Action Committee on Power (PACP) was setup to hold high level meetings of all stake holders personally chaired by Mr. President at scheduled intervals "weekly, bi-weekly and monthly". This problem solving and decision making platform, needs to be revived. There was also the Presidential Task Force on Power (PTFP) which was a full time adhoc agency, bringing together young talented Nigerians both from within and diaspora to daily brainstorm on performance strategies and targets in the sector. This body considered an Ombudsman that helped the sector to experience the growth which occurred was disbanded, thereby creating a gaping vacuum. Recently the current administration working together with development partners has come up with

what is called Central Data Management System (CDMS). This tool is expected to aid the Federal Ministry of Power and other market participants, both public and private, monitor the infrastructure across the value chain and also weigh in on their performance.

Of critical importance also is the significance of NERC to weigh in with a more robust regulatory framework and come up with a new paradigm for attracting investments. For this to be achieved, there is a need to balance the interest of consumers and putting in place a cost reflective tariff. In addition, NERC, working closely with the Federal Ministry of Power, Federal Ministry of Finance and the Central Bank of Nigeria must deal with the liquidity issues of the sector. A sector that is sagged with a web of countervailing indebtedness among its members is not likely to attract much investment. With the potentials of the sector, these government entities must not shy away from accessing resources through bilateral and multi-lateral resources to improve sector financing (Farouk 2021).

b. The Power Generation Conundrum

Despite the fact that the privatized companies are now free from the stranglehold of government red tape, these entities are now confronted with totally new set of problems. At the generation end, the problems include low generation level, shortage of gas for the thermal plants and inability to evacuate adequately what is produced. More troubling occurrence in the power sector is the low level of energy mix. For a country that is greatly

endowed with multiple sources, it is a sad reality that these have not been fully tapped. We also need to build more dams around the Benue River system.

Although REA has continued to undertake spot intervention activities in tertiary institutions and other public spaces, this cannot in anyway bring about a major change in the level of availability of solar in Nigeria, which still appears to be the most available source of energy. The mega solar projects numbering 14, which were given license at the onset of the Buhari administration in 2015, are all still unable to take off due to inability to conclude negotiations on issues bordering on the off tick and power purchase agreement. Government's intention of investing N240 billion to provide 5 million new connections of solar power in 12 months pronounced recently, itself remains doubtful due to the serious budgetary constraints.

c. The Transmission Backbone

Mid-stream that is transmission still have serious problems of out-dated and poorly maintained lines, shortage of investments on new 330kv and 132kv lines as well as recurrent problems of right-of-way. The transmission line therefore has been unable to sufficiently handle what is produced. not much progress seems to have been made in dealing with the resolve for progressive network expansion of the transmission grid possibly to at least 5 networks. However, government's bilateral agreement with Siemens of Germany contains great future as the initiative is structured into 3 phases,

this includes development of 7gw in the first phase, 11gw in the second phase and 25gw in the third phase. If this is followed scrupulously, it could be a major spinner for the sector and will help in attracting substantial private investment into the sector.

d. Distribution of Power

At the distribution level, the utilities are seriously impacted by lack of access to affordable funding sources for investment in optimization, digitalization, upgrading, metering etc. The distribution companies also are confronted with problems pertaining to a very high level of electricity theft and the inability of the regulator, NERC, to put in place a cost reflective tariff. The distribution companies also have high level of Aggregate, Technical, Commercial and Collection (ATC & C) losses.

e. Funding and financial liquidity

In a general sense, the sector remains encumbered with serious cross sectional payment issues. This is to the extent that Discos are seriously indebted to Gencos to the tune of N1 trillion at the minimum, who on their part are seriously indebted to gas companies. Similarly, both market operators, that is Discos and Gencos themselves, have serious payment issues to TCN. Besides the cyclical impact of the state of indebtedness, is the low level of investment. At the time of privatization the assumption was that huge private sector investment will come in especially from offshore to bridge

the funding gap. For a sector that each unit of megawatts bring in a revenue of about N100 million naira a day, this made a lot of sense. However, this is not the reality, for two reasons. First, local investors have developed a fatigue from lending to the sector due to the fact that the privatized utilities still maintain high exposure levels of about \$1.95 billion indebtedness which were obtained at the time of privatization. Secondly, foreign investors have generally been uncomfortable with Nigeria's high debt-service-to-revenue ratio; aggregate foreign direct investment into Nigeria has dwindled. What this means is that Government has continued to look through its own infrastructure fund as well as access to multinational sources to make resources available for the sector.

THE DESIDERATUM OF LIFE'S WORTH

His national service both in private and public sector was robust, earning him a string of recognitions such as Officer of the Order of the Niger (OON), and Officer of the Federal Republic (OFR) which are some of the highest honours bestowed on any Nigerian citizen and also reserved for those who were considered to have given exceptional service to the country. Since it was instituted in 1963, the Nigeria National Honours and Awards has seen only 5,341 persons receive either one or another of these eight categories of awards out of the country's population of over 200 million people. In neighbouring Niger Republic, Makoju was conferred with the award of the

⁹⁹ Nigeria: Power Sector owes banks over \$1.95 billion in loans (retrieved from ESI.Africa.com) March 2023

National Grand Commander, the highest which the country can give to any citizen or individual. Additionally, several Nigerian institutions have also decorated him by awards of honorary doctorates, most prominent of which is Doctorate in the Sciences (DSS) from the Federal University, Makurdi.

Weighed on the balance, the life of Makoju truly reflects the injunction "do not allow the world to add a price tag to your life because you are of more invaluable worth". From his adolescent years, up to his full plunge into national public service, he held the highest and most gallant attributes of moral rectitude and distinctiveness. He was of the finest stuff of ethical, moral and social attitudes. His core values to life were not circumstantial but were normative and engrained in his person. It is on account of this that his imprimatur in all engagements, particularly in his work within the community are typical "Anebira" and a dogged Christian faithful or as a professional engineer and manager in the private sector or in the service of the realm were accompanied by the finest of principles and outcome. His personal conduct was predictable as replete of trustworthiness, responsibility and dependability.

The Nigerian nation has produced some of the world's most cherished and venerated persons, men and women who are held with fondest of care, respect and applaud. Of particular value are the many who in various strata of life, without rest and sleep, toiled to bring the Nigerian nation to what it is today. In this category lies the type of Engr. Joseph Makoju who daily lent his mental, spiritual, emotional, creative being acumen to making Nigeria what it is today. Even as his footprint and landmark stands in the sands of time at

WAPCO, in the Nigeria electricity industry, in Dangote Cement, in the construction industry, in the Presidency and within the Egbira community, this nation called Nigeria will continue to celebrate and regard with highest level of reverence his life for many generations to come. As for the power sector, as the good old book says: one has planted, another watered and the increase is left to God to accomplished. In the power sector which he came on a special mission, he has laid a foundation on which the nation can now build. More significantly, his name, his memory would be given the highest distinction in the pantheon of the greatest heroes of our common national patrimony.

I thank you very much.