

**THE ROLE OF DEVELOPMENT FINANCE
INSTITUTIONS IN INFRASTRUCTURE
DEVELOPMENT:
WHAT NIGERIA CAN LEARN FROM BNDES AND
THE INDIAN INFRASTRUCTURE FINANCE
COMPANY**

KEYNOTE ADDRESS

BY

**SANUSI LAMIDO SANUSI, CON
GOVERNOR, CENTRAL BANK OF NIGERIA**

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INTRODUCTION

1. I am delighted at the opportunity to deliver a keynote address on the occasion of the 3rd Infrastructure and Regulatory Commission (ICRC) PPP Stakeholders Forum, here in Abuja.

2. Across the African continent, infrastructure challenges account for an average 2 per cent decline in economic growth per annum. The 48 countries in Sub-Saharan Africa with over 800 million people generate roughly the same power as Spain with only 45 million people¹. Bridging Africa's infrastructure gap as a means of overcoming the continent's numerous developmental challenges cannot be overemphasised.

3. Better roads and rail systems can enable increased intra-continental trade and investment; increased power generation enhances the productivity of businesses and manufacturing; better communication services can facilitate financial transactions; access to clean water and sanitation improves the general health of the population, thus enabling more people to work and contribute productively to the economy. On the other hand, weak and inadequate infrastructure impacts severely on economic growth and human development. Africa needs an estimated US\$93 billion per year to develop its infrastructure, with two-thirds required for new physical infrastructure and the remainder for maintenance and operations.

4. Nigeria is unfortunately no exception. Although we are currently investing around 7% of GDP on infrastructure, which is above the average for sub-Saharan Africa, research has shown the need to increase this figure to at least 12% of GDP. Overall, the country requires an annual investment of US\$10 billion over the next ten years in order to reduce its infrastructural deficit; an amount the Nigerian government cannot solely provide.

5. To address these challenges, we need to look beyond traditional approaches, particularly with regard to financing. The scope for making investments of the required scale is severely constrained by government finances. There is a lot we can learn from other emerging economies. My keynote today will focus on two countries, India and Brazil, in an effort to see what we can gather from their approaches. But first, let me start by outlining some of the infrastructure challenges that we face in Nigeria.

¹ African Finance Corporation (2010), *Long-term Infrastructure Financing Options for Africa*, Presentation at CBN 1st Infrastructure Finance Conference.

INFRASTRUCTURE GAPS IN NIGERIA

6. The current level of infrastructure deficit in the country is perhaps the major constraint towards achieving the national vision of becoming one of the 20 largest economies by 2020. Approximately 70 per cent of the 193,000km of roads in the country are in a poor condition, whilst only 20 per cent are paved. According to enterprise surveys, the power outages the nation experiences amount to over 320 lost days a year, with over 60 per cent of the population lacking access to electricity. At the same time, over \$13 billion is spent annually to fuel generators². A country, which once had one of the most extensive railway systems in Africa, can barely boast of a functional route either for passengers or freight today. These conditions are unacceptable and pose a significant threat to the growth of the Nigerian economy.

CHALLENGES IN INFRASTRUCTURE FINANCING

7. The sustainable growth and development of our country hinges greatly on the provision and maintenance of adequate infrastructure. The current state of infrastructure in Nigeria poses a significant problem; and the financing gap has proven to be the 'thorn in the flesh' of efforts to alleviate this problem. The non-availability of long-term funds, absence of risk sharing structures, lack of clarity around the governance of the PPP framework, and a dearth of expertise to assist banks and other firms engaged in infrastructure financing, are some of the challenges that are hampering development efforts.

8. In general, building infrastructure is a capital-intensive process involving large initial costs, low operating costs and long term finance given the gestation period of projects. Furthermore, infrastructure projects are often characterized by non-recourse or limited recourse financing i.e. lenders can only be repaid from the revenues generated by the projects. This results in greater market and commercial risks for the lender, who has to be prepared for a longer horizon of debt repayment. The non-recourse nature, unique risks, and complexity of arrangements also call for special appraisal skills.

9. In addition to general project risks, some infrastructure projects typically possess externalities, whereby the social returns are often greater than the private returns. This necessitates some form of subsidization, such as

² ICRC (2012), *Making PPP for Infrastructure Development Happen: The Nigerian Experience*.

government guarantees or viability gap funding, in order to attract the private sector.

10. Government has traditionally been the main financier of infrastructure projects, including responsibilities for implementation, operations and maintenance. However, declining financial resources and competing priorities have made it difficult to continuously utilize the fiscal budget. Experience has shown that funding for infrastructure through budgetary allocations can be volatile and inadequate.

FINANCING OPTIONS FOR NIGERIA

11. To reiterate my earlier point, Nigeria requires over US\$10bn annually over the next ten years to bridge on infrastructure gap. Foreign direct investment receipts outside the traditional oil and gas sector, and more recently telecoms, are far from significant for infrastructure financing needs. Existing sources of long-term financing such as multilateral loans, euro and/or dollar bonds, private equity and so on, are either grossly inadequate, expensive or unavailable based on the present global economic realities. Furthermore, they are usually accompanied by currency and interest rate risks. For local Deposit Money Banks, the maturity transformation risk is high based on their present funding structure which mainly consists of short-term deposits, coupled with limited skills to perform their intermediation role. It is thus critical that we identify alternative sources of low-cost long-term funding for infrastructural development, preferably in local currency so as to mitigate exchange rate risk.

12. One potential solution is the use of pension funds. Nigeria has over N2.3 trillion in Pension funds, which yield predictable streams of income in the long-term that match their typical long-term liabilities. In addition, they hedge against inflation and are less volatile. Across the world, pension funds, insurance companies and private equity are playing an increasing role in infrastructure financing. The Pensions regulator, PENCOM has performed creditably well in trying to balance safety, liquidity and maintenance of fair returns. They have recently amended the regulation on investment of Pension Fund Assets to allow for the investment in infrastructure bonds that are registered by the Securities and Exchange Commission.

13. The capital market in Nigeria also provides a variety of financing instruments that could lead to larger pools of funds. There exist numerous

possibilities of raising finance through the issuance of bond instruments (Federal Government (sovereign) bonds, Government Agency bonds, State/Local Government bonds). The advantage of the bond market is that it offers less risky investment and regular returns, which guarantee investor patronage.

14. With the on-going debt crisis in Europe and the US, Nigeria must begin to explore financing opportunities in emerging markets in Asia and the Middle East. For example, the Dim Sum Bond Market, which is essentially bonds denominated in Chinese Yuan Renminbi (RMB) and issued in Hong Kong for foreign investors who desire exposure to RMB-denominated assets, provides a viable alternative source of funding. By issuing Dim Sum Bonds to finance infrastructure assets, Nigeria can take advantage of the lower yields compared to Euro bonds. An agreement for oil sales to China in RMB can also be reached so as to hedge any currency risk.

15. The Sukuk bond market is a substitute for the conventional interest-based securities. The Malaysian experience in which the government could undertake a Sukuk issuance program comprising both government guaranteed and non-government guaranteed issuances of varying tenors, sizes and expected returns and yields to maturity can be drawn from. In the case of Nigeria a special purpose vehicle could be set up that buys a building to be used (e.g. an Airport) – a sovereign Sukuk bond could then be issued raising 15-30 year funds, service charges and fees from the asset used to service the bond.

FIXING THE GAPS: THE PPP APPROACH

16. Despite the options available for government to raise finance, the overwhelming consensus is that it cannot be done without private funds. At their best, private funds ease budget constraints and raise efficiency by leveraging private sector management expertise and innovation. Public-Private Partnerships (PPP) refers to an arrangement between the public and private sector for the delivery of public infrastructure or services. Both parties function as partners in project development and implementation, and share the responsibilities, resources, risks and returns. In some case, the private sector may play a more active role in service delivery, however, it is important to point out that the government is ultimately accountable and responsible for the provision of quality services that meet the needs of the public.

17. PPP arrangements are usually long term in nature and provide an opportunity for government to make use of private sector capital to finance infrastructure projects. The private sector benefits from the investment through service charges from the public body or revenues from the project. PPPs also enable the private sector to play a greater role in the planning, finance, design, operation and maintenance of public infrastructure. For the public sector, it provides an opportunity to transfer risk to the partner who is best able to manage them.

18. The major benefit of PPPs is their ability to deliver value for money in public service procurement and operations. They enable the public sector to raise capital and bridge the financing gap, whilst making efficiency gains in the process. However, certain key factors are necessary for PPPs to be successful. These include the need for a clear institutional framework to govern PPPs, legislation and its enforcement, political will, transparency, as well as developing the capacity of staff in government to effectively prepare and implement projects.

19. The PPP approach is used all over the world and has yielded impressive results in both developed and emerging economies. For Nigeria, this presents a viable opportunity for the provision and sustenance of infrastructure delivery in Nigeria. In recognition of this, the Government has made great strides in establishing the mechanisms and frameworks for PPPs, including the adoption of the ICRC Act in 2005 and the subsequent creation of the ICRC office and National Policy on PPPs. However, it is fair to say that so far the impact of PPPs in Nigeria has been somewhat limited as the capacity and political will to enforce the existing governance framework for PPPs is missing.

THE STATE OF DEVELOPMENT FINANCE INSTITUTIONS IN NIGERIA

20. Development Finance institutions in developing countries exist traditionally to address market failures and as a complement to government resources and market financing. The dual roles of these institutions involve financing development projects and acting as facilitator of finance in the broader industrialization and economic development strategies of countries.

21. In addressing infrastructural challenges, DFI's in addition to their existing mandates, seek to enable expansion of already existing pro-poor infrastructure and act as catalysts for accelerated industrialization, economic growth and human resource development. Presently Nigeria has the

following Development Finance Institutions in existence, which by and large have these objectives as well;

- (i) Bank of Industry (BOI);
- (ii) Federal Mortgage Bank of Nigeria (FMBN);
- (iii) Nigerian Export–Import Bank (NEXIM);
- (iv) Bank of Agriculture (BOA);
- (v) Infrastructure Bank (formerly Urban Development Bank of Nigeria Plc.; and
- (vi) National Economic Re-construction Fund (NERFUND)

The DFIs are largely owned by the CBN and Ministry of Finance (which acts on behalf of the Federal Government) and are to a large extent mandated to provide financial services to sectors and projects that would contribute to the growth of the economy and promote real sector activity.

22. Some of the major challenges faced by these institutions include poor corporate governance, low capitalization, inadequate skilled manpower, and poor business models. In order to be repositioned to perform the role envisioned for them, the DFIs need to be granted operational autonomy.

WHAT CAN WE LEARN FROM OTHER EMERGING ECONOMIES?

THE BRAZILLIAN STORY

23. Brazil's economy is set to experience a boom as the nation gears towards hosting the World Cup in 2014 and the Olympic Games in 2016. In preparation for these global events, the country's infrastructure is undergoing large-scale reforms with airport expansions, construction of hotels, stadiums etc. underway. Another major driver of infrastructure development in Brazil has been the increase in middle class individuals leading to the rise in demand of basic infrastructure over the last couple of years.

24. The Brazilian development bank (BNDES) provides an example of how a DFI could play a vital catalyst role by its use of the tool of counter-cyclical lending not only to overcome the global financial crisis of 2008/9 but also using the response to the crisis to turn around the country's economy. It is worthy of note that in Brazil, the BNDES has been involved in financing industrialization to such a large degree that since the 1950's, there has not been a single major undertaking involving Brazilian capital that has come about without the support of the BNDES.

25. The BNDES is the largest supplier of long-term debt and equity financing for public and private enterprise, and is Rated BBB+ by S&P. The bank issues bonds and lends to projects based on its selection criteria with financing modalities divided into products, according to the aim of the undertaking. The financing period can be as long as 30 years at 6 per cent per annum with a 7 year moratorium.

26. In 2011, BNDES which offers several financial support mechanisms to companies of all sizes thereby enabling investments in many sectors of the economy, closed the year with disbursements to the tune of R\$139.7 billion, with infrastructure projects receiving the largest share of 40% (R\$56.1 billion) of the total amount disbursed.

THE INDIAN STORY

27. Despite high growth rates over the past few decades, India continues to experience significant gaps in the supply of essential social and economic infrastructure and services. Water, power, roads, and ports are all in urgent need of additional supply and upgrade. It is not so long ago that infrastructure in India was mainly financed by the public sector, from government budgetary allocations and internal resources of public sector infrastructure companies. However, in the last ten years, the private sector has emerged as a key financier by bringing in investments and building infrastructure. Private investment for infrastructure financing now constitutes 20 per cent in India.

28. By the end of its 11th Five Year Plan (2007-2012) the Government of India intends to raise infrastructure investment to over 9% of GDP, accompanied by a projected rise of private sector investment to 30 per cent. For the 12th Five Year Plan (2012-2017), the Indian Planning Commission estimates that achieving GDP growth of 9 per cent would require gross capital formation of 38.7 percent of GDP, and a rise in infrastructure investment from a baseline of 8 per cent of GDP in FY12 to 10 per cent in FY17. The total amount of infrastructure investment required for the five-year period is US\$1 trillion, that is, an investment of at US\$200 billion every year for the next five years³.

29. In developing its infrastructure, Indian like many other countries, has embarked on a model that includes private sector participation. The government has long recognized that public savings are insufficient to fund infrastructural needs, in addition to having limited implementation capacity.

³ IDFC (2012), *Growing Steadily: 15th Annual Report 2011-2012*.

The government is actively promoting the expansion of PPPs across all key infrastructure activities (highways, ports, power, and telecoms), as well as putting in place the appropriate institutional and regulatory frameworks.

30. One of the successful institutional initiatives for PPP introduced by the government is the Infrastructure Development Finance Company of India (IDFC). The Company, which is entirely owned by the government, has played a pivotal role since its establishment over fifteen years ago by providing long-term capital to help finance PPPs. The model is such that IDFC borrows money guaranteed by the Government of India from multilateral organizations, and lends this to infrastructure projects directly or through refinancing long-term debt. The Company can lend up to 20 per cent of the total project cost under certain conditions.

31. To date, it has funded over one fifth of the national highways being constructed with private participation, helped create more than half of the country's telecom towers and two-thirds of the wireless subscriber base, financed more than half of the container cargo capacity addition at Indian ports, and created more than half of India's private sector thermal and large hydro-generation capacity⁴. It has also been acknowledged for the quality and transparency of its corporate governance structure. The company is now focusing its efforts on research and policy discussion related to sustainable and inclusive infrastructure development, that takes inconsideration climate change impacts, affordable housing and natural resource management.

32. What can we learn from Brazil and India's experiences with infrastructure development and financing? The table below provides a snapshot comparison of the three countries, where it is evident that Nigeria lags very far behind in its stock of infrastructure compared to the other two countries.

⁴ IDFC (2012), *Growing Steadily: 15th Annual Report 2011-2012*.

Table 1: A comparison of Nigeria's stock of infrastructure with Brazil and India

COUNTRY	POP. (Millions)	AREA (m2)	STOCK OF INFRASTRUCTURE				
			Telecom (Millions)	Electricity (MW)	Rail (KM)	Roads (KM)	Airports
Brazil	198.74	8,514,877	191.78	43.88	28,857	1,751,868	4000
India	1166.08	3287,263	464.84	76.17	63,327	3,316,425	349
Nigeria	149.23	923,768	64.27	2.19	3,505	193,200	56

Source: CIA World Fact Book, ICRC (2009)

33. Both countries have demonstrated that an approach based on establishing an infrastructure bank can help unleash the required finance. I would like to spend the rest of this address outlining some thoughts on what Nigeria should consider as a sustainable way of supporting DFIs that could support the financing of infrastructure. Nigeria could pursue such a model, whereby a new government-owned bank is created that can raise tax-free bonds to fund projects. Alternatively, the mandate of an existing government-owned bank such as the Bank of Industry could be expanded to enable it to partake in infrastructure financing. The *Bank* could be financed from funds recovered from petroleum subsidy removal, and equipped with professional and qualified management recruited globally. Funding could be by way of non-callable tier-2 capital, returning a decent rate of return to the Ministry of Finance.

34. In terms of lending, the *Bank* could lend to projects based on a selection criteria with a moratorium of up to 7 years at single digit interest rates repayable over 20-30 years. The Government would earn money from the interest and share of the PPP arrangements. The operating and management fees, consultancy and project management, as well as loan loss provisioning could be covered by a minimal yet competitive spread. However, we could have a requirement where a minimum of 70 per cent of the *Bank's* portfolio must be invested in hard infrastructure (seaports, airports, railways, highway, power plants etc), while 30 per cent can be reserved for financing procurement (e.g. ships, trains, aircrafts etc).

35. When all is said and done, such a model can only function if the right enabling environment is created including political stability, enforcement of a legal framework, and increased transparency and openness to foreign investment coupled with an institution that has strong corporate governance and is shielded from undue political interference. Only then can we hope to widen the liquidity pool for infrastructure financing. Since it became operational, ICRC has made great strides in identifying and regulating PPP projects, as well as setting the guidelines for PPP processes. However, the capacity to appraise and implement PPP projects is still relatively low, resulting in incomplete project preparation, inadequate financial models and business plans, and a general lack of experience in developing high quality concession contracts and monitoring. We need to do more to address these weaknesses.

36. The CBN is strongly of the opinion that without adequate infrastructure, the Nigerian economy cannot overcome its structural challenges and achieve sustainable growth and development. In recognition of this, the CBN established an Infrastructure Finance Office in March 2010, with an accompanying N300 billion 'Power and Aviation Fund' (PAIF). The Fund is administered by the Bank of Industry for onward lending to Deposit Money Banks at a maximum interest rate of 1.0 per cent, and disbursement at concessionary interest rates of no more than 7.0 per cent to client/projects of a 10-15 year tenor. The African Finance Corporation serves as Technical Adviser to the Fund. It is our hope that the Fund will act as a much-needed catalyst to bridge the nation's infrastructural gap through lending at concessionary rates to the private sector. As a further demonstration of our further commitment to the development of infrastructure, the CBN has in partnership with ICRC and in collaboration with other stakeholders, almost completed the work on Nigeria's Infrastructure Financing Policy. The main objective of this policy is to institutionalise the sources of long-term funding and serve as a guide to investors and other stakeholders in making infrastructure project investment/financing decisions.

37. The CBN commends the efforts of the Nigeria government so far, and stands ready to partner with all stakeholders in an effort to build lasting infrastructure for our great nation and future generations.

Thank you.

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