

# **RIVER BASIN DEVELOPMENT AUTHORITIES IN NIGERIA: THE NEGLECTED TOOLS FOR NATIONAL DEVELOPMENT**

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## **Abstract**

It has been established over the years that Nigeria cannot solely rely on crude oil exportation as the mainstay of her economy. Hence, the need to refocus on agriculture (the once abandoned economic backbone) as alternative. On the basis of this, River Basin Development Authorities (RBDAs) were established in the seventies to accelerate agricultural development, power generation, navigation, rural development among other development indicators. However, it is sad to note that many years after, the RBDAs have not been able to make impact on the development crave of the nation. It is against this background that this paper explored the chronicle of RBDAs in the country, the challenges that hindered them to deliver on their core mandate and how the challenges can be surmounted to ensure sustainable development of the country. The paper concluded that once the challenges were addressed and overcame, the RBDAs would be effective tools that could bring about national economic development.

**Keywords:** River Basin, National Development, Authorities, Tools.

## Introduction

The pre-independent economy of Nigeria was mainly agriculture dependent. However, the advent of crude oil in the sixties shifted attention from agriculture to exportation of crude oil and oil products as the mainstay of the Nigerian economy. The oil boom of the seventies led to the proliferation of oil related companies which accounted for about 90% of the nation's gross earnings and subsequent economic development which are visible in infrastructural and human development. Similarly, attempts were made to use the proceeds from the crude oil exportation to develop agriculture as a means of diversifying the economy. This led to the establishment of River Basin Development Authorities (RBDAs) in different parts of the country in 1976.

The RBDAs were primarily established to provide framework on how to ensure agricultural development through provision of water for irrigation (to ensure all-year farming), fisheries projects, mechanized farming and livestock development. Also, they are to improve navigation, hydro-electric power generation and encourage the establishment of industrial complexes that could bring about the private and public sectors in joint business partnerships. Furthermore, RBDAs are meant to bridge the gap between the rural and urban centres by taking development to the grassroots and prevent rural-urban migration which is one of the scourges affecting the nation's economic development.

However, decades after the establishment of these RBDAs, they are yet to accomplish their potential as tools for comprehensive development of the nation as a whole. Although, there are improvements in the local production of cereals especially rice, Nigeria still depends on importation of agricultural products such as livestock, fishes, wheats among other food items to feed her teeming population, and provide raw materials for agro allied industries. In similar vein, the irrigation systems adopted were yet to ensure all-year-round agricultural practice, rather the construction of large scale dams which were later abandoned or defectively constructed became the order of the day (Barbier and Thompson, 1998).

These problems have been attributed to policy somersault, corruption as well as economic recession as a result of constant fluctuations in the global crude oil price which dwindled the budgetary allocation and implementation of RBDAs objectives (Akindele and Adebo, 2014).

Notwithstanding these challenges, experts are of the opinion that with effective management under right political atmosphere, the RBDAs are formidable tools for economic development (Akindele and Adebo, 2014). This paper therefore, examines, the state of the river basins in the country, their management, the challenges confronting them and how these can be surmounted to ensure economic diversification for sustainable development.

### **Concept of Development**

The term 'development' means different thing to different people depending on the context in which it is being used. Burcky (1993) conceptualised development as the sustained elevation of an entire society and social system towards a better or more meaningful life. From economic point of view, Essien (2012) viewed development as a process in which a society undergoes a gradual unfolding (positive transformation) in various components of its economy in order to achieve improvement in the welfare of its people. In this context, development is not only economic growth but also includes structural changes which only start when man is able to take control of his environment, manipulate it and progressively manage everything in that environment to increase his production and productivity of all those things he needs for a qualitative better life. Akpakpan (2007) further explained that such "improvement in the welfare of the people" as observed by Esien (2012) includes the following and more;

- Reduction in the level of absolute poverty;
  - A reduction in the level of unemployment;
  - Improvement in the provision of infrastructures;
  - Improvement in the level of technology of the people which will practically engender a greater ability to draw on local resources (human and material) for local need and for exports.
- Premised on the core objectives of the establishment of RBDAs in Nigeria viz-a-viz the core values of development, there is no doubt that a focused and well managed RBDA has the capacity to bring about the needed development in the country.

### **River Basins and Basin Development Management**

River basins are geographic area contained within the watershed limits of a system of streams and rivers converging towards the same terminus, generally the sea or an inland water body. In other words, a river basin is the portion of the land drained by a river and its tributaries and drained by many streams and creeks that flow downhill into one another and eventually into the sea. Except for a few islands or desert areas, all land on the earth's surface is

part of one river basin or another. If too large for planning and management, basins can be divided into sections using hydrological and catchment characteristics (e.g upper, middle and lower basin) or sub-basins by tributaries. Although, there are some processes or activities that cross the boundary basins which are biogeophysical units with a high degree of functional integrity and are relatively homogeneous systems even when the upper, middle and lower sections have different conditions and human activities. Though, each basin is unique, there is enough affinity in hydrological, geomorphological and ecological characteristics for them to serve as widely applicable non-ephemeral, operational landscape units for planning and management and most importantly for maintaining environmental quality and pursuit of sustainable development (Barrow, 1998).

According to Molle (2006), efforts to control rivers go back to many thousands of years, and that the concept of river basins as units of planning, developing and managing water, emerged in the late 19th and 20th centuries. This was further boosted by technological advancement in dam construction. Hence, multipurpose development of river basins focused primarily on the construction of large dams for hydro power generation, flood control and water storage for irrigation.

River Basin Development Planning and Management (RBDPM), according to Barrow (1998), encompasses activities which although within the drainage basin can be distant from the river channels and may involve resources other than or in addition to river water. It involves planning, management and conflict resolution in relation to river basins. In other words, it supports integration of watershed groundwater, land use, river regulations, welfare improvement, healthcare and most aspects of development. The bodies empowered to ensure the orderly marshaling of water resources of river basins to promote development and human welfare in Nigeria are the River Basin Development Authorities (RBDAs).

## **River Basin Development Authorities (RBDAs) in Nigeria**

### ***Chronicle, Locations and Responsibilities***

The first two RBDAs in Nigeria are the Chad Basin and Sokoto-Rima Basin Development Authorities that were established in 1973. The RBDAs in the country became eleven in 1976 when General Olusegun Obasanjo regime added another nine to cover the whole country (Ayoade, 1988). During the General Muhammad Buhari regime, the basin authorities were splited to eighteen in 1984 and renamed as the River Basin and Rural Development Authorities. However, in 1986 during Gen Babangida regime, the new nomenclature was

invalidated and the status quo of eleven RBDAs maintained. Today, there are twelve RBDAs in Nigeria as a result of the splitting of the Niger basin development authority into upper and lower Niger as shown in Table 1.

**Table 1: River Basin Development Authorities (RBDAs) in Nigeria**

<b>S/N</b>	<b>RBDAs</b>	<b>Location</b>
1.	Sokoto-Rima	Sokoto
2.	Hadejia-Jamaera	Kano
3.	Upper Benue	Yola
4.	Lower Benue	Markudi
5.	Cross river	Calabar
6.	Anambra-Imo	Owerri
7.	Upper Niger	Minna
8.	Lower Niger	Ilorin
9.	The Niger Delta	Port Harcourt
10.	The Benin-Owena	Benin City
11.	Ogun-Oshun	Abeokuta
12.	The Lake Chad	Maiduguri

**Adapted from Ayoade, (1988)**

According to Akindele and Adebo (2004), the RBDAs were charged with the following responsibilities/ mandate:

- To undertake comprehensive development of both surface and underground water resources for multi-purpose use;
- To provide water from reservoirs and lakes under the control of the authority for irrigation purposes to farmers and recognised association as well as for urban water supply authority concerned;
- The control of pollution in rivers, lakes, lagoons and creeks in authority's area in accordance with national laid standards;
- To resettle persons affected by the works and schemes specified under special resettlement schemes;
- To develop fishes and improve navigation on the rivers, lakes, reservoirs, lagoons and creeks in the authority's area;
- To undertake the mechanical clearing and cultivation of land for the production of crops and livestock etc;
- To undertake large scale multiplication of improved seeds, livestock and tree seedlings

for distribution to farmers and for afforestation schemes;

- To process crops, livestock products and fish produced by farmers in the authority's area in partnership with state agencies and other person;
- To assist the state and local governments in the implementation of rural development works (construction of small dams, provision of power for rural electrification schemes, establishment of grazing reserves, training of staff) in the authority areas;

### ***Activities and Challenges***

The range of responsibilities given to the River Basin Development Authorities was overwhelmingly cumbersome. Notwithstanding, attempts were made by the authorities to carry out these tasks by harnessing the country's water resources to optimise Nigeria's agricultural resources for food self-sufficiency. This was made possible through the construction of roads to open up the rural communities, tractor hiring services, rural electrification, supply of improved seeds and other farm inputs. Similarly too, construction of small scale dams for irrigation purposes, fisheries projects, sinking of boreholes and mono pumps were embarked upon.

However, these activities are yet to impact significantly on the attainment of the objectives for which the authorities were created. The country still depends on rainfed agriculture because the authorities are yet to live up to the expectation of using modern irrigation technology to ensure all year round farming through two or more cropping seasons. This would have improved the present instability in crop and livestock productions. Instead, the basin development authorities have shown unintended bias for large scale dams' construction with heavy capital intensity which affected their finances. In most cases, the beneficiaries of this policy are mainly the companies (foreign) which are involved in the construction and maintenance of the dams and reservoirs as well as the government officials who collect kickbacks from the contractors. Akindele and Adebo (2004) further observed that such corrupt practices hindered the Owena RBDA to positively contribute to the agricultural and rural development of the nation. The large dams to which the RBDA's have shifted their attention pose serious environmental problems; they altered the flow of most large rivers (Ayoade, 1988). In some places, these developments have undermined or destroyed elaborate human uses of ecosystem at the cost of overall economic losses, thus causing declined food security, environmental degradation and loss of ecosystem services. Example is the case of the Hadejia-Jamaere river (Barbier and Thompson, 1998). It also poses unmitigated negative impacts on fisheries as the case of Kainji dam.

Furthermore, factors such as climate change which are of wider range increased the hydrologic variability and the frequency of extreme events. These seemingly extraneous factors are sometimes so crucial that the causes of some basin's problems and their solutions may lie well outside the basins or even the water sector (Allan, 2004). For instance, in the last thirty years, over 90% of the Lake Chad has receded significantly due to climatic variability, and thus affecting water availability in the Lake Chad region (Odjugo, 2010). The incidence of invasive weeds most especially water hyacinth have been a concern to river basin development. These weeds obstruct hydrology, increase sediment deposition in the rivers and lead to formation of spits over time (Ezenweani, 2007).

Politics also have direct and indirect impacts on water resource development in Nigeria river basins. Ayoade (1988) observed that Nigeria efforts at developing her water resources through the creation of RBDAs can be more successful if political factors are de-emphasised in the implementation of the concept of the river basin development. Over the years, RBDAs and other social intervention programmes of the government have been adopted by politicians to control the institutions of the state which is prerequisite for personal accumulation of wealth (Akindele and Adebo, 2004). Substantial amount of money allocated for basin development and management was mismanaged directly through diversion into private pockets or through kickbacks from contractors who eventually supplied substandard facilities or outrightly abandoned the projects. Also, inadequate supervision during construction hinders the RBDAs to significantly influence economic development. Similarly, order from the above syndrome whereby developmental plans are imposed on the people by the government affect the RBDAs. Local population who are mainly the end users and the bearers of the heavy social costs of the developmental projects such as loss of homes, fertile farm lands and fishing grounds are not usually consulted in any of the critical decision-making phases of project planning, implementation management and education.

Policy discontinuity was also a bane of economic development through the activities of RBDAs. Successive governments in Nigeria tend to abandon the policies and programmes of their predecessors. During the General Buhari regime, the RBDAs were splited into eighteen and re-christened but Gen Banbangida reverted the RBDAs to eleven when he took over. The civilian governments are even worst in this regards. Instead of the succeeding government to continue with the ongoing projects of their predecessors, they would rather abandon them and start their own. All these lead to wastage of national resources and encourage corruption.

Inability of the RBDAs to focus on their core mandates also affects their contributions to the development of the nation. For instance, the authorities focus mainly on construction of large dams which dwindle the budget allocated to them, even when other smaller projects are included they are improperly conceived, politically motivated, poorly executed and finally abandoned (Akindele and Adebo, 2004).

Dwindling in the government revenue, especially during slump in the price of crude oil in the world market, extremely affects the fund allocation to RBDAs and other government programmes. This, with diversion of the meager available fund to other functions that are unrelated to their mandate, prevents them from achieving the objectives for which they were set up.

### **Prospects of River Basin Development as Tool for Development of the Nation**

It is a well known fact that natural factors seriously inhibit efficient utilisation of river basins as tools for the nation's economic development. However, a critical analysis of the challenges facing the basins and their management shows that they are mainly induced or escalated by human factors. The implication of the above observation is that the RBDAs' potential as tools for development lies in the ability of all stakeholders to effectively tackle the challenges inhibiting their operations. Hence, steps should be directed towards solving the problems facing them. Barrow (1998) posited that River Basin Development Planning and Management runs into problem because it is a complex body whose challenges cannot be easily overcome through only a practical framework that integrate environmental, socio-economic and policy issues at a regional scale. Solocombe (1993) therefore suggested that there is a need for a synthesis of ecosystem science and ecosystem approaches to provide a transdisciplinary framework that links biophysical and socio-economic research and practice in a region through an holistic, ecological and participatory methodology. Based on this, Adams (1985) suggested, that Nigeria should adopt a state wide approach rather than basin approach.

According to Barrow (1998), this is similar to what is obtained in UK where water resources planning and management are the responsibilities of Ten Regional Water Authorities (Water Service Companies) regulated by a National River Authority. RBDAs, therefore, in their present management outfits require international supervision. Supervision can be undertaken by an independent body like United Nation agency, a World Water Council or a professional planning body. This, no doubt, will reduce to the barest minimum the political interference on the management of RBDAs in the country.

Furthermore, River Basin Development Planning and Management should involve the local populace in which domain the activities of the authorities are located. Faniran (1981) opined that local involvement, self-reliance and mutual cooperation rather than control government intervention and funding can ensure the success of RBDAs. Ekpo and Akanmu (2006) noted that it is of great importance that local participation in planning, operating and maintaining the irrigation facilities and water works to supply water and sanitation increases the strong likelihood that these may be well maintained and would contribute to the communities' cohesion and empowerment in such a way that can spread to other development activities. Involving more than a single body to supervise the RBDAs and at the same time including the locals in their management will reduce bias and improve scrutiny of development activities, as well as reduction in corruption.

On how the challenges of the RBDAs can be tackled, Barrow (1998) submitted:

*"RBDPM could be refocused to emphasise its coordination and oversight role, this should help ensure a transdisciplinary approach, experts could be employed without becoming 'generalists'....To support a holistic and participatory approach, try to involve the public and other strategy. RBDPM could make use of Strategic Environmental Assessment (SEA), eco-audit and environmental assessment. 'Policing' by an independent body is important to reduce poor implementation and management. Oversight management planning would probably be better if more than one body forms the RBDPM authorities"*

There is no doubt that if the above suggestions are religiously followed, the challenges facing the RBDAs could be effectively reduced and the results can manifest in the following ways or more to ensure the nation's sustainable development;

Rivers and their tributaries can be controlled through multipurpose small scale dams. This would not only control erosion and flood, but generation of hydroelectricity from the dams would ensure improvement in the power generation of the country especially at the grassroots. This will reduce rural urban migration since industries would be encouraged to be sited very close to sources of raw materials and power.

Apart from this, the rivers could be made navigable, thus, minerals and other resources within the basin would be easily explored and transported; same applies to finished goods and perishable agro products. Agriculture would be easily restructured; strip cropping can check erosion and depleted area rejuvenated. Through users' participation, farmers could be

encouraged to make check dams in gullies and cultivate perennial vegetal cover on slopes. With proper watershed management, sediment discharges would be considerably reduced and run off checked so that the risk of sedimentation and flooding minimised. All this land management practices would lead to increased agricultural productivity and food sufficiency while the various dams and reservoirs would promote a thriving recreation industries and all year farming. Above all, employment opportunities would increase so also is revenue generation for individuals and the governments. This would lead to better standard of living, development in social, physical, economic, cultural and institutions of the nation.

### **Conclusion**

There is the need to review and restructure the RBDAs to make them perform reasonably towards the economic development of the nation. This could be achieved through serious managerial reorientation of the authorities without political interference. Once this leads to the accommodation of fragmented water and water users in an integrated planning, allocation and management framework, the attainment of the objectives of the RBDAs for national development is assured.

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