# CHALLENGES OF DEVELOPING THE FISHERIES RESOURCES IN BAYELSA STATE, NIGERIA <br> Alfred-Ockiya, J.F, Adeyemo, A.O, and Kingdom, T. <br> Department of Fisheries Technology, <br> Niger Delta University, <br> P.M.B. 071, Wilberforce Island. <br> Bayelsa State. 

## Abstract

The oil boom that almost spelt doom for agricultural development also affected the development of fisheries projects in many parts of the country including the growing Bayelsa State. The National Fisheries Development Policies adopted by the state, geared towards increased fish production are attended with several challenges. Bayelsa State has great potentials in fisheries activities with more than three quarters of the land area occupied by a network of several natural lakes, rivers, creeks, swamps and marshy land stretching into the Atlantic Ocean. The challenge to develop this vast expanse of fisheries resource is the focus of this paper. It carefully reviewed the planning of the development efforts, the evaluation of the resources, the development of necessary management and technical personnel, introduction of appropriate technology and identification of priorities and needs of the fisheries industry in the state. It recommended the active participation of private investors in the developmental efforts.

Keywords: - Bayelsa State, Fisheries, Development.

## Introduction

Before the oil boom of the 1970s and early 1980s in Nigeria, agriculture was the most important sector of the economy. The economic changes brought about by the rapid growth of the petroleum sector seriously revamp agricultural production in 1970's, the overall performance of the sector
deteriorated visibly between 1970 and 1985 (Satia 1990). Currently, Nigeria spends N50 Billion naira on fish import annually with the demand of 1.5 Million metric tonnes while the production is 700, 000 metric tonnes (Isiaka 2006). The deficit is a challenge to the fishery industry in the country including Bayelsa State. The problems of fisheries development are identical in nature in the states, but Bayelsarı's is aggravated by the fact that it is a growing state with vast oil exploration and exploitation activities and low political value on fisheries activities. This suggest that, the extension of solutions carried out in other fisheries can be applied with the conscious effort directed towards environmental protection and increased political will. Moreover, fisheries of the coastal waters off the Niger Delta had almost been unexploited for several reasons as detailed by Scott (1966) and these challenges remained largely unattended to, for instance the natural hazards of heavy surf on the beaches, few navigable channels from the sheltered estuaries to the open sea, annual inundation of the fresh water flood plains to mention a few. Studies on the fisheries potentials and suggestions on development portrayed the long term nature of the development which requires a reliable data base and planning (Pillay, 1965; Wokoma and Otobo 1988; Otobo and Alagoa, 1990).

## Planning The Developmental Efforts

Several National Development plans were put in place before the creation of Bayelsa State; the achievements of these plans were not visible in the state (Eradiri, per com). The current National Economic Empowerment and Development Strategy (NEEDS) outlined plans for agricultural development but not specific about fisheries development. The planning therefore becomes the responsibilities of the state. The planning efforts according to Mabawonku (1986) should involve:
(1). Exploratory fishing and intensive survey to chart productive fishing grounds and fish species; (2). Plans to redirect investment into areas which currently look unattractive to investors but which have high potentials for example, shrimping and shrimp farming; (3). Identification of bottlenecks hindering development; (4). Determine level of government intervention such as infrastructures which require huge investments not within reach of private sector; (5). Establishing proper mechanism for consultation between the government agencies and research institutions; (6) Highlighting the place of other professionals apart from fisheries scientists in the planning process for instance the Engineers and Economists; and (7) Training and career guidance for the youth to embrace fisheries as a profession.

## Evaluation Of The Resources

There are several reports on the fisheries resources of the Niger Delta (Longhurst 1961; Pillay, 1965; Scott, 1966; Alagoa, 1985; Dada and Gnanadoss, 1982; Ajayi, 1979; Wokoma and Otobo 1988). The law of the sea endowed many coastal states with abundant resources, but the legislation remained the responsibility of individual states (Tobor, 1985). Bayelsa has 13 major rivers draining into the Atlantic Ocean namely San Bartholomco, St. Barbara, St. Nicholas, Brass, Nun, Sangana, Fishtown, Koluama, Middleton, Peninnton, Digatoro, Dodo and Ramos. The three quarters of the state amount to about 21, 110km is occupied by water with 174 lakes, 11 major creeks and several other 259 burrow pits and 170 fish ponds but with poor fish stocks (MARD, 2004). The map of Bayelsa State is as shown in fig. 1a. This area is the centre of the Niger Delta as shown in fig. 1b, and serves as sanctuary and breeding grounds for several fish species exploited in the adjacent coastal waters (Wokoma and Otobo 1988). There are three distinct zones which are all of great potentials for fish production, the freshwater flood plains, the brackish water swamps and the estuaries. The Brass and Nun rivers have been described as potential areas for fisheries development because of the extensive estuaries, creeks and long established settlements, supporting prawn and fin fish resources. Fish town, Koluama, Middleton and Penninton rivers are areas of large stocks of good quality fin-fish but these areas are remote with scattered fishing settlements and nearly all catches are smoked (Scott, 1966).

The brackish mangrove forest is essentially a fishery zone with artisanal fishery as its principal industry. Fin-fish and shell fishes are exploited in large quantities by migrant fishers; Longhurst (1961) and Ajayi 1979, Longhurst 1961) have shown evidence of profitable trawling across the Niger Delta from Lagos to Forcados. There is also vast potentials for aquaculture in local government areas of Yenagoa, Ogbia, Kolokuma Opokuma, Southern Ijaw and Ekeremor, while mari-culture can be developed in Brass and Nembe local government areas. Manpower development in the area of fisheries which is low in the state can be achieved through the available institutions in the state and neighbouring states viz Niger Delta University, Bayelsa State, University of Port-Harcourt, Rivers State University of Science and Technology, Delta State University, Abraka; Nautical School Onne; African Regional Aquaculture Centre (ARAC); but interest in fisheries as a profession is still strange to the youths in the area since they are familiar with the indigenous fisheries practices.

## Development Of Necessary Management And Technical Personnel

One of the principles of NEEDS is to strengthen research, revitalize training and streamline extension services. Although, in 1953 the constitution made fisheries development research a regional responsibility, research efforts by Federal and the regions are oftentimes duplicated (Tobor, 1985). In Bayelsa state, the government has announced the partnership initiatives that will encourage private investors into inshore fishing and aquaculture, but there is dearth of manpower. Training and re-training of human resources for the fisheries industry is the backbone of development. Training is needed in the areas of extension workers, maritime/coxswain, seamanship navigation, engine instructors, equipment maintenance engineers and boat builders. The managerial cadre can be trained in the institutions in and around Bayelsa State, while there is a need as suggested by Scott (1966) to establish a Fishers Training Centre in the heart of the state for the technical personnel.

## Introduction Of Appropriate Technology

As varied as the challenges in the Bayelsan fisheries are, suitable technology must be introduced to address the problems. The difficulties may not be as much of technical problems but more of economic will power. The construction of mangrove ponds are possible (Wokoma and Ezenwa, 1982) but costly, estuarine trawling is possible but costly (Scott, 1966) processing and preservation of fish is possible and the techniques depend on the availability and continuous supplies of quality and cheap fish stocks (Scott, 1966). Adoption of hydraulic engineering as suggested by (Alagoa 1985) is yet to be employed to develop the numerous estuaries, creeks and wet lands into vast pens and ponds for fish production. Construction of effective and economically viable ponds is as important as developing the techniques of producing culturable fish species. Presently, Clarias species and Heterobranchus species have gained acceptance for culture, however, there is need to study the biology and ecological requirements of other local fish species for feasibility of breeding in captivity, culture and maturity within a short time for table. The introduction of latest communication gadgets and improved fishing gears, preservation and processing technology are also based on conscious investments. The current surge of capital projects in the state by the government, Niger Delta Development Commission (NDDC) Local Empowerment and Environment Management Programme (LEEMP), like road network into the productive fishing areas is giving hope that very soon fisheries that is the livelihood of the people shall be given the due consideration.

## Identification Of Priorities And Needs Of The Fisheries Industry

The priorities of the fisheries industry in Bayelsa State can be highlighted as;

1. Protecting the breeding grounds against pollution and degradation.
2. Extending the development programme in Agriculture to fisheries i.e. fishing and fish farming, especially an effective extension programmes on commercial aquaculture.
3. Introduction of a fisher-base/training centre in a central place that will be easily accessible to all concerned in the state.
4. Intervention of government in providing fishery based infrastructure to support private investors in getting catch or produce to wholesales either locally or for export in good condition, i.e. Creating a lasting solution to preservation, processing and marketing.
5. Employing concise engineering programme to effectively control annual flooding in the fresh water zone and canalization and land reclamation in the creeks and estuaries.
6. Encouraging youth to take up fisheries as profession by providing attractive incentive.

## Conclusion

Bayelsa State, with her immense water resources, offers tremendous possibilities for fishing and fish culture in all ramifications. Therefore, a well articulated fisheries development plan must be used to change the direction of government policies and budgetary allocations to favour the industry. This calls for establishment of a fisheries board in the state which will comprise all stakeholders including local fishing communities. Creating an enabling environment for private a participation in the industry is paramount, considering the state government policy of partnership initiatives on agricultural development. The low political cost and problem of the benefits of national policies meant for small scale fishers flowing to unintended beneficiaries should be addressed. Necessity to impress the need for self-help and long term development on the people and provision of responsible, trained officers to supervise and implement drawn up programmes is paramount.

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Fig. 1A: MAP OF BAYELSA STATE SHOWING THE LOCAL GOVERNMENT AREA
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