STATUS OF FISHERIES AND AQUACULTURE DEVELOPMENT

¹A. A. Adewumi & ²V.F. Olaleye ¹Department of Pure sciences, The University of Education, Ikere Ekiti ²Department of Zoology, Obafemi Awolowo University, Ile Ife

ABSTRACT

Ekiti State has limited water surface area but blessed with some rivers and seven big reservoirs on which some artisanal fishery is being carried out by the over 400 fisher folks on. Fish farming in Ekiti state is largely dominated by catfish, Clarias gariepinus culture. Interest in fish farming is on the increase as farmers construct concrete fish tanks as small as $1.5m^2$ as well as series of contour earthen ponds or tanks as big as $30m^2$. The total number of ponds has grown numerically from 96 at the inception of the state in 1996 to about 2000 in 2008. The move towards private/public partnership in aquaculture development will improve the economic and nutritional status of the region.

INTRODUCTION

Fish constitutes an important component of many Nigerian dishes with a projection of an annual consumption rate of about 2.35 million metric tons (Okpanefe, 1982). Fish is a preferred protein source as it supplies essential nutrients which are lacking in other diets and its consumption is not forbidden within religious groups, unlike the eating of dog and pork forbidden in Islam (Agbelege and Ipinjolu, 2001). As the human population in Nigeria is ever increasing, less fish will be available per caput annually. It is therefore imperative that production of fish be stepped up in all states of Nigeria, including Ekiti State. Ekiti State was carved out of the old Ondo state of Nigeria in 1996 with 16 local government areas (Fig. 1). It is located between longitudes 4⁰ 45' to 5⁰ 45' East of the Greenwich Meridian and latitudes 7⁰ 15' to 8⁰ 5' North of the Equator. The state is bounded in the east by Edo state and in the south by Ondo state. It lies south of Kwara and Kogi states as well as east of Osun state. This makes the state landlocked and the water surface area limited.

METHODOLOGY

The data for this review were gathered from primary and secondary sources. The primary data were collected through the use of structured questionnaires distributed to representative fish farmers/ fishermen in all the three geopolitical zones in Ekiti State. The fish production data represent fish landing of the commercial fishermen collected by the Ekiti State Fisheries Division of the Ministry of Agriculture and Natural Resources. The number of fish ponds available was an update of the record by the same establishment as part of the nation-wide fisheries census survey organised by the Federal Department of Fisheries in the year 2007.

RESULTS AND DISCUSSION

Artisanal fishery is practiced by a few fisher folks while fish farming is undertaken mostly by serving and retired civil servants. The fish demand is estimated at about 26,325 MT year⁻¹ (FDF, 2001). Total fish production from both artisanal and aquaculture is estimated at 249.17 MT thus creating a shortfall of 26,076.73 MT year⁻¹. This shortage has necessitated the need to intensify more on aquaculture practices while encouragement is being given to the artisanal fishermen. The state has many rivers such as River Ogbese, Oni, Ele, Ose, Ero, Ureje and Omi Kurudu etc. There are eight large reservoirs; Ogbese, Ureje, Ooni, Egbe (little Ose); Ogbese 2, Itapaji, Ero, Ayede. These reservoirs constructed mainly for domestic water supply, are being used for fishing as a secondary advantage with over 400 fisher folks (Fig. 2). The production from artisanal fishery stands at 170.50 MT year⁻¹ while average aquaculture production stands at about 78.67 MT year⁻¹. Sometimes, a far lower production level is recorded (Table 1). This shortage has necessitated the need to intensify efforts on the aquaculture practices. Consequently, the focus of the government and people is therefore geared towards aquaculture development to increase fish protein supply.

Name Reservoir	Surface area (ha)/ No of fishermen	Local Government Area	Fish production
Ogbese/Ureje	8.8/55	Ado Ekiti	6.3
Ogbese 2		Gboyin	2.5
Ido Ajinare	2.5/22	Ekiti West	0.32
Ooni	3.0/ 28	Efon Alaaye	2.1
Egbe	275.2/114	Ise/Orun	10.1
Itapaji	21.5/65	Ikole	1.6
Ero	450,000/102	Moba	8.5
Ayede	6.0/23	Oye	0.02
Total			31.44

Table 1: Estimated artisanal fish production (MT) from reservoirs in Ekiti state in 2006

Source: Ekiti State Fisheries Department

Fish farming in Ekiti state is still at its infancy. Fish farming in Ekiti state is largely dominated by *Clarias gariepinus* culture. Interest in fish farming is on the increase as farmers construct concrete fish tanks as small as $1.5m^2$ as well as series of contour earthen ponds or tanks as big as $30m^2$. According to the state Ministry of Agriculture record, the total number of ponds in Ekiti State has grown numerically from 96 at the inception of the state in 1996 to about 2000 in 2008 (Fig. 3).Many of these ponds have become moribound due to the various challenges confronting aquaculture in Ekiti state, the most important of which is the issue of lack of finance. However, many big time fish farming entrepreneurs have established small scale fish farms in the state such as FEDAK in Ado-Ekiti, Consecrated Fish Farm, Usi-Ekiti, Asac Farms, Ikere-Ekiti etc. The federal government has a pilot pond located in Igede-Ekiti while the state owns a number of demonstration fish farms in 5 local government headquarters. Trained extension officers in the Ministry of Agriculture and Natural Resources and the Agricultural Development Project cover the state. The effect of such service is manifesting in gradual increase in the number of fish pond establishment in the state (Fig. 2).



Fig. 1: The map of Ekiti state showing the local government headquarters and major towns



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Fig. 3: Fisher folks on fishing trip (African Renewal, 2008)



Fig. 2: A histogram of the number of ponds in Ekiti State (1996-2008)

To solve the problem of seed scarcity, it is hoped that the standard hatchery, currently being constructed by the state government, with capacity to produce at least 1.2 million fingerlings per year, will make fish seed readily available. However, the government is encouraging public/private–partnership in solving this problem. The prospect of feed development for fish farming enterprise is bright in view of the ready availability of local feedstuffs, such as soybean, maize, bloodmeal, groundnut, rice/wheat bran, poultry offals etc in the markets. The readily available floating pelleted feeds have given a boost to aquaculture in the state. The high cost of these floating feeds is however, prohibiting. The government and other stakeholders regularly organize and finance aquaculture training workshops for the fisheries officers/extension agents/farmers. In the bid to empower the youth, create job opportunities and eradicate poverty in the state, the state government in collaboration with an agro-based company, FEDAK recently sponsored a youth empowerment aquaculture training program for 50 youths in the state.

To remove a major bottleneck and fast track fisheries development in the state, the government and various Microfinance Banks have made microfinance available to many fish farmers in the state.

Fish demands currently outstrip supply in Ekiti state. The spate of fishing and aquaculture development in the state has not in anyway, caught up with the growing human population and fish demand. There is however, a growing interest in fish farming.

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