

# SPOT-CHECK ON IKWUANO'S RIVER SYSTEMS AND FISH FAUNA

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## ABSTRACT

Contrary to initial presumption that Ikwuano being effectively drained by numerous streams and water courses would be resonant with fish production the reverse is the case. Ikwuano is certainly not synonymous with fish production. The river systems found in Ikwuano are predicated by two natural phenomena (a distended natural crater and an expansive floodplain fadama) occurring side by side along a West-East axis within the northern half of the study area.

Majority of the water courses being less than 7m wide and 2m deep present Ikwuano's river systems as degenerate, infantile, rudimentary and vestigial. The floodplain fisheries in Ibere land-the only area where wide open water surface exists, is the hub of fish production in Ikwuano. Unfortunately, this floodplain fisheries is unimodal (wet season) with supply thinning out into insignificance before the yawning demand of the entire study area. A preliminary checklist of fish species identified through indirect sampling method has also been presented.

### KEY WORDS:

Infantile river system, floodplain fishery, preliminary checklist.

## INTRODUCTION

Abia State has 17 administrative Local Government Areas (L.G.A.) One of which is Ikwuano whose headquarters is located at Isiala-Oboro. The coming of the Federal University of Agriculture, Umudike in Ikwuano Local Government Area barely six (6) years ago opened the floodgates of research in the locality. The present write-up is the result of preliminary findings of an on-going research into a comprehensive documentation of the fish and fisheries of the entire Ikwuano catchments area.

## STUDY AREA

The study area synchronizes with the administrative boundary of Ikwuano Local Government (Fig. 1).

The general topography of the area is rocky, mountainous and situated at 122m above sea level (N R C RI 1973). The area lies in the rain forest belt usually with sandy loam soil at surface and sandy clay loam underneath (F D A L R 1990). Two peculiarities dog the study area:-

- (i) Presence of a natural crater situated just north of Umudike
- (ii) Presence of a vast area of lowland located adjacent to the eastern fringe of this crater. This lowland is seasonally flooded with water from the over-spill of river Inyang-Itu during the rains.

## MATERIALS AND METHOD

For quick spot-check data on fish and fisheries of the area to serve as baseline information for a more comprehensive study the entire area was indirectly sampled between February and April 1995. Responses

of local fishermen to prepared Questionnaire were evaluated. Fishes which seemed likely to be caught for 5-7 days in a week were rated "very common" while those that could be caught for 3-4 days, 2 days and less than 2 days were respectively rated "common", "rare" and "very rare".

## RESULTS AND DISCUSSION

The natural crater and the vast floodplain/fadama determine to a large extent the configuration and drainage pattern of the river systems in Ikwuano. Majority of the water courses investigated are degenerate, infantile, rudimentary and vestigial being no more than 5-7m wide and less than 2m deep. These river systems in circumventing the crater-fadama axis produce two visible modes quite distinct in pattern but yet both converging South-East beyond the crater-fadama axis at the confluence town of Nte Edinaw in Akwa-Ibom State. The northern sector is a network of anastomosing channels and rivulets presenting a "diffused" configuration while the southern sector consists of one prominent horizontal stream intersected at a few points by feeder tributaries.

Table 1 gives a preliminary checklist of fishes so far identified in Ikwuano. They can be broadly grouped into two:-

- (a) Those species prevalent in the regions to the north of the crater-fadama axis.
- (b) Those species south of this axis.

The cichlids represented by the genera - Ctenopoma, Hemichromis and Tilapia; the Mormyrids (Mormyrops and Gnathonemus) and the catfish (Synodontis SP) seem to be most prevalent in the

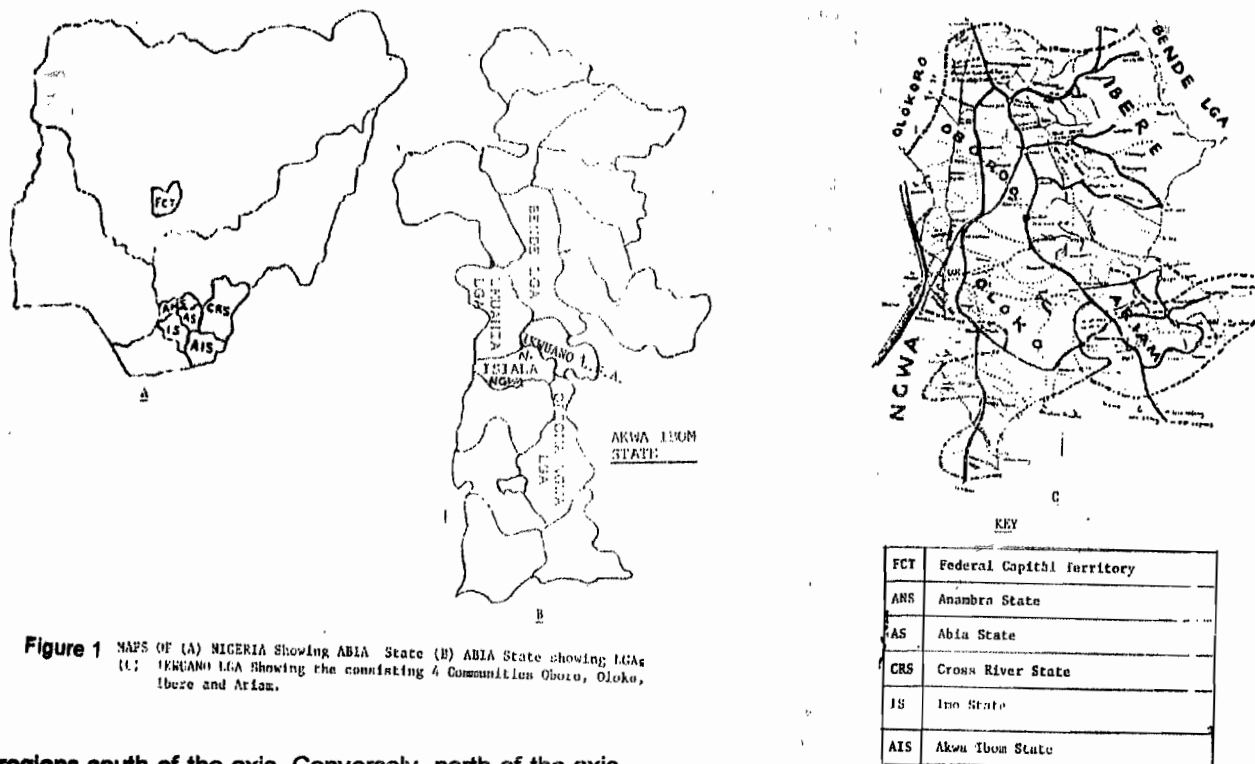


Figure 1 MAPS OF (A) NIGERIA Showing ABIA State (B) ABIA State showing LGAs (C) IKWUANO LGA Showing the constituting 4 Communities Oboro, Oloko, Ibere and Ariam.

regions south of the axis. Conversely, north of the axis, the presence of the characins represented by *Hepsetus* and *Alestes* is noticeable in spite of the vast number of the ubiquitous cichlids and catfishes. From responses to Questionnaire, indications of abundance seem to show that the Fadama/floodplain to the north sustain more and bigger sized fish than their southern counterparts. The most plausible explanation is the interplay of three factors acting in concert in the northern flood plain/fadama sector wide open water surface, greater water depth and abundant food. These factors are known to transform fadama/floodplains into veritable food troughs cum breeding grounds during the floods.

Four communities comprise the Ikwuano Local Government Area – Oboro, Oloko, Ibere and Ariam. While Ariam is known throughout Abia State for alcoholic palmwine production, Ibere is easily and undoubtedly the biggest fish producer in Ikwuano. Except in Ibere, fishing in Ikwuano has not risen much above the leisure-hobby level. Consequently the fishing industry has not attained the work level in which fishermen in the strict artisanal sense can be said to indulge. The only fishing gears in vogue are traps and hook and line. Two types of traps

TABLE 1: PRELIMINARY CHECKLIST OF FISHES IDENTIFIED IN IKWUANO					
	FISH FAMILY	REPRESENTED GENERA	DISTRIBUTION	ABUNDANCE	REMARKS: (SEASONALITY FACTOR)
1.	Cichlidae	Ctenopoma sp ) Hemichromis sp ) Tilapia sp )	NCT/SCT )	V.Common )	Dry & Wet Seasons
2.	Heterobranchidae	Heterobranchus sp)	SCT/NCT )	Common )	Dry Season
3.	Mastacembelidae	Mastacembelus sp	SCT )	Rare )	Dry & Wet Season
4.	Malapteruridae	Malapterurus sp	SCT )	Rare )	Dry Season
5.	Clariidae	Clarias sp	SCT/NCT )	Rare )	Dry Season
6.	Mockochidae	Synodontis sp	SCT/NCT )	V. Common )	Dry Season
7.	Ophiocephalidae	Channa sp	NCT )	Common )	Dry & Wet Seasons
8.	Mormyridae	Mormyrops sp ) Gnathonemus sp )	SCT )	V. Common )	Dry & Wet Seasons
9.	Cyprinidae	Labeo sp	NCT )	Rare )	Wet & Dry Seasons
10.	Characin	Hepsetus sp ) Alestes sp )	NCT )	V. Common )	We & Dry Seasons

N.C.T. = Northern Collecting Tributaries

S.C.T. = Southern Collecting Tributaries

are commonly used:-

- (i) non-return valve trap ("Ikpaku")
- (ii) current trap ("Nkwo")

Nets (gillnets and cast nets) are only used in Ibere land where the fadama/floodplain with much open areas allow the use of these gears. In Ibere, especially around Ibere-Nta village, cropping the fadama/floodplain is a seasonal event akin to the "Argungu" festival prevalent in the northern parts of Nigeria.

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