

## **Effect of some socio-economic activities on fish diversity of lagoon systems in Ogun waterside Local Government of Ogun State, Nigeria**

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### **Abstract**

A study was conducted to investigate the effects of some socio-economic activities such as beach seining, brush park fisheries and laundry activities on fish diversity, distribution and abundance over two years (dry and wet seasons) in lagoon systems of Ogun waterside Local Government Area, Ogun State, Nigeria. Structured questionnaire was used to obtain information on various activities in the study locations. Fish sampling from the catches from selected fishermen using assorted gears, physical and chemical characteristics of the lagoon systems were carried out in four selected stations based on activity. The study revealed that beach seine and laundry activities as socio-economic activities impacted negatively on fish diversity in Iwopin study location. Bagridae represented by *Chrysichthys nigrodigitatus* contributed the highest number of fish in the two seasons. Fish species were evenly distributed in the wet seasons than dry seasons. Simpson index (D) computed for the 4 sites are 0.15, 0.11, 0.62 and 0.12 respectively for Makun-omi, Idaleketa, Iwopin and Ebute-Ilamo in the dry season and 0.37, 0.10, 0.42 and 0.10 for wet season. There are positive correlations between fish number, phosphate ( $r = 0.79$ ) and Nitrate ( $r = 0.6$ ). There are variations among physico-chemical parameters of water samples. Information gathered from this study is a useful tool for fisheries resource management of the lagoon systems of Ogun state.

### **Key words:**

Fish resources, lagoon, season, socio-economic, Ogun waterside.