Changes in species composition and abundance of commercially important fish population in Kigoma Area, Lake Tanganyika, Tanzania.

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Abstract

The pelagic fishery of Lake Tanganyika provides employment to about 1 million consumers and protein to many more people living around the lake. It is mainly based on three commercially important fish species namely two clupeids Stolothrissa tanganicae and Limnothrissa miodon commonly known as “dagaa” and a perch Lates stappersii. A declining trend of the perch both in its composition and abundance in the pelagic fish landings is partly tied to local over-fishing and climate change. There are three important periods in the exploitation process identified as: (1) a traditional fishery period, the pre-1975 period marked by low catches of Lates spp. and a dominance of clupeids; (2) an industrial fishery period (1975–1978) marked by high catches of Lates stappersii and high total landings; and (3) an artisanal fishery period (post 1984) with relatively low catches and high dominanc e of clupeids especially Stolothrissa tanganicae. Population growth and refugee influx from the politically volatile Burundi and Democratic Republic of Congo both caused high fish protein demand, particularly for dried clupeids. Also changes in the rural economy caused by drought in the area are resulting into high exploitation pressure on the pelagic resources. Concerted efforts to prevent/reduce exploitation pressure on the pelagic fish resources should take into action a lake wide management strategy where by management issues in all the riparian countries should be harmonized. More effort should be geared towards preventing the use of beach seines and small meshed nets subsequently ensuring a sustainable utilization of the pelagic fish resources.