

## **Abstract**

Kenya has 13,600 square kilometers of inland lakes and 640 km of coastline. Ninety five percent of the fish landings are from fresh water lakes, 3% from marine sources, and 1 % from aquaculture. Ninety two percent of fish landings from inland lakes are from Lake Victoria, while 6% comes from Lake Turkana. Other lakes and Rivers contribute 2%. The main species in the wild catch from fresh water lakes include *Lates niloticus* (Nile perch), *Rastrineobola argentea* (Omena), *Oreochromis niloticus* (Nile tilapia), *Cyprinus carpio* (Common carp) and *Micropterus salmoides* (black bass). Until the discovery of the Nile perch as an export commodity in the early 1990's, fishing in Kenya was a subsistence occupation for lake and coastal communities. Currently, capture fisheries earn fishermen approximately Ksh 7 billion, while fish exports earn the country about Ksh five (5) billion in foreign exchange annually. Lake Victoria fisheries have recently been a subject of study by many researchers. Nile perch was deliberately introduced into the Lake in the late 1950's and the ecology of the Lake has never been the same. As catches of Nile perch increased, smaller species such as the haplocromines which were previously dominant disappeared from landings. Lake Victoria is experiencing a myriad of challenges. The water quality has declined due eutrophication arising from inflow of nutrients into the lake, massive blooms of algae have developed causing hypoxia in the deep waters of the lake, overfishing and oxygen depletion threaten artisanal fisheries and biodiversity.

Kenya marine waters have not been sufficiently exploited, mainly due to lack of technology. Marine fish of commercial value include finfish, both pelagic (king fish, barracuda, mullets) and demersal (rabbit fish, snapper, rock cod, scavenger, etc.), crustaceans (prawns, lobsters, crabs, etc.), and molluscs (squids and octopus). These are commercially exploited and support the economy and livelihoods of the coastal residents. Fishing by local fishers is restricted to inshore areas within the reef ecosystem because they lack vessels to venture offshore to exploit other resources in the EEZ. Fish farming in Kenya is fairly recent, dating back to 1910 when European settlers imported trout, black bass and common carp and stocked them in various rivers and lakes for sport fishing. Currently, aquaculture is practiced as part of other farming activities and production is low and erratic. There are many challenges facing inland lakes, particularly Lake Victoria which has been the backbone of Kenya's fish industry. Lake Turkana has also experienced a downward trend in capture fisheries since 1976, due to over-fishing. Marine fisheries are under-exploited and production from aquaculture is low. Despite the challenges above, opportunities for increased fish production through improved production systems, increased investment in processing, value addition, efficient distribution systems and expanded market access to regional and international markets.