

## A Review of the Status and Potential of the Coastal and Marine Fisheries Resources in Kenya

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**Abstract** The fishery sector is critically important especially in the developing world where millions of people depend on fish for their livelihood. In Kenya, fish is a very important source of food and in some communities, more than half of animal protein is derived from fish. The fisheries sector is made up of three sub-sectors: inland capture fisheries, aquaculture, and coastal and marine capture fisheries with overall contribution to total production of 85%, 9% and 6% respectively. The bulk of the total annual catch is landed along the shores of Lake Victoria. The main aquaculture species are *Oreochromis niloticus* (Nile tilapia) and *Salmo trutta* (trout). An average of 8,000 metric tons of coastal and marine capture fisheries valued at USD 4.1 Million is landed annually. This is mostly landed by the artisanal fishers whose fishing activities are restricted within the 0 – 3 nautical mile territorial waters, as these fishers are not sufficiently equipped to venture into the offshore fishing grounds. However, there is small fleet of semi-industrial bottom shrimp trawlers restricted to the only trawlable fishing grounds of the Malindi-Ungwana Bay. Kenya has an Exclusive Economic Zone (EEZ) which extends up to 200 nautical miles (nm) with a recent additional 150 nm. The EEZ remains under-exploited by the artisanal fishers and continue to be illegally exploited by the Distant Water Fishing Nations (DWFN). This study was carried out to establish the current status of fisheries resources along the Kenyan coast and to evaluate the challenges facing the sub-sector. Shore-based catch assessment was used to determine species composition of catches and fisheries frame surveys (2004, 2008, and 2012) were used to determine the fishing effort (number of fishers and fishing vessels). Results of this study reveal that demersal group such as scavengers, rabbit fish, snappers and parrotfish dominate the marine catch, constituting 50 % of the total marine and coastal fish landings. Pelagic group including mullets, bonito, cavalla jacks, mackerel, king fish and sail fish accounted for 28%, and elasmobranchs, crustaceans and mollusks constituted the remaining 22%.

**Keywords** Artisanal fisheries; potential; Exclusive Economic Zone; fisheries management

### Introduction

Globally, coastal and marine fisheries are very important to the economy and well-being of coastal communities. Marine fisheries provide food security, job opportunities, income and livelihoods as well as traditional cultural identity. Maintaining the long term prosperity and sustainability of coastal and marine fisheries is not only of political and social significance but also of economic and ecological importance (FAO, 2011). The United Nations Convention on the Law of the Sea (UNCLOS), the United Nations Fish Stocks Agreement (UNFSA, UN 1995) and the FAO Code of Conduct for Responsible Fisheries (FAO, 1995) all require maintaining or restoring fish stocks at levels that are capable of producing their Maximum

Sustainable Yield (MSY). To fulfill the objectives of these international treaties as well as meet the high demand for fish, fishery management authorities need to undertake assessment of the state of fish stocks and develop effective policies and management strategies. The regional fish landing statistics indicate that the Northwest Pacific is the largest contributor (25%) to the global catch, followed by the Southeast Pacific (16%), Western Central Pacific (14%), Northeast Atlantic (11%) and Eastern Indian Ocean (7%). All other FAO areas contribute less than 5% of the global total catch.

Artisanal or small scale fisheries are important socially, nutritionally and economically especially in