

8th International Conference on

FISHERIES & AQUACULTURE

October 02-04, 2017 Toronto, Canada

Impact of spear fishing on fish community in south coast of Kenya

Sonia K Mumbah¹ and Bernard Fulanda²¹University of Eldoret, Kenya²Pwani University, Kenya

In recent years, additional but potentially harmful fishing gears have penetrated into the artisanal fisheries in Kenya, posing great management challenges. The continued use of spears in fishing, despite their discouraged use due to perceived environmental and societal negative impact, has raised a lot of concern and debate in the Kenyan artisanal marine and coastal fisheries sub-sector. The impacts of spearfishing in terms of catch composition, diversity and size-frequency in Vanga and Msambweni, South Coast of Kenya were obtained in this study. Both in Vanga and Msambweni spearfishing is highly done especially by young fishermen during low tides. Two months data collection (October and December) in 2012 on fish catch composition reveals significant differences between fish captured by spear gun and other most used gears in both sites. The difference in fish composition was attributed to more abundant families and species captured by spear gun compared to Malema, Hook and line and Gillnet. Diversity by species richness for fish was significantly higher under the usage of a spear gun. In addition, significant higher Shannon-Wiener diversity index lower dominance was observed for the fish captured by the spear gun than for those captured by the other gears. The size distribution of fish captured by spear gun was large; all sizes all fish were captured by the spear gun regardless of the species (11 cm to 30 cm). The impact of spear fishing resulted in higher abundance of *Lutjanus fulviflamma* in Vanga and *Octopus macropus* in Msambweni.

Biography

Sonia K Mumbah has experience in monitoring of fisheries resources, through BMU management issues, in inspecting fish and fish handling facilities at fish landing site and markets and experience in fish identification, data collection and interpretation. Her expertise in fisheries management and passion in improving the status on the marine resources and the stakeholder has increased the knowledge and understand of a healthy ocean to the community.

sonnygadhi@gmail.com

Notes: