

Aquaculture research and development in Kenya: an overview

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Aquaculture is a key contributor to Kenya's fisheries sector. The fisheries sector on the other hand is recognized as having a pivotal role in both the economic and social pillars of Kenya's development. The aquaculture subsector as such plays a critical role in unlocking the potential for social and economic development of Kenya's people.

Despite being endowed with substantial water resources including inland lakes, rivers and a 640km coastline, Kenya's aquaculture potential has remained largely unexploited. A recent government intervention moved aquaculture production within the inland division from 4,000MT to 48,000MT representing a rise from 4% to 25% of fisheries production between the years 2009 and 2013. The marine sector with the 640km coastline and 200nm EEZ has not benefitted from any major intervention so far and the potential remains generally untapped.

The strategic research and development issues identified for Kenya to exploit her largely unutilized aquaculture potential include amongst others, inadequacy of production systems and species, insufficient quality inputs such as fish seed and feeds, capital and implements and weak provision of extension, advisory and outreach services. Kenya endeavours to pursue a science-based aquaculture development. Efforts in research are therefore demand driven, focused on addressing the needs of the farmers and the industry as well as gaps and weaknesses impeding production. The Kenya Marine and Fisheries Research Institute (KMFRI) and several universities have endeavoured to address some of the issues through its research efforts in genetic characterization and improvement of aquaculture species, formulation of inexpensive and quality feeds; live feed research; mariculture of seaweeds, mud-crab, oysters, finfish amongst other species and community based aquaculture project initiatives. KMFRI works closely with the State Department of Fisheries and other stakeholders in the effort to address the needs of the aquaculture fraternity.

Increased aquaculture production and productivity for sustainable food security, increased income and wealth creation will depend on a focused research support. Research strategic issues include diversification of aquaculture species base, improved culture systems, improvement of bio-security and fish disease surveillance as well as environmental research. These issues present opportunities for research collaboration, creation of synergies, avoidance of inefficiencies and duplication and sustainable growth of the sector.

Keywords:

Aquaculture research, development, strategic issues, collaboration, sustainable growth.