

Institute of Marine Sciences and Mariculture



University of Dar es Salaam
Institute of Marine Sciences
The Tanzania National Oceanographic Data Centre



Margareth S. Kyewalyanga
Director, IMS

Outline

- About IMS
- The three phases of mariculture
- Partnerships in mariculture
- The future

IMS Vision and Mission

VISION

❖ To become an international Centre of Excellence in Research and Development, Training and Provision of scientific services in Marine Sciences and Technology for better exploration, exploitation and management of coastal and marine living and non-living resources.

MISSION

- ❖ To engage in the creation, transmission and application of knowledge in marine sciences and technology through research, training and provision of advisory and public services for the exploration and sustainable exploitation of marine living and non-living resources.
- ❖ To build capacity of sector organisations, knowledge centres and other institutions active in various fields

Objectives

The Institute of Marine Sciences was established on 17 October, 1978 with the following aims and objectives:

- a) To undertake research in all aspects of Marine Sciences.
- b) To provide postgraduate studies in Marine Affairs
- c) To provide advisory and consultancy services in Marine Affairs.
- d) In future, and accordance with the country's manpower demand, the Institute shall establish undergraduate studies in Marine Affairs.
- e) The Institute shall be engaged in exploitation of Marine Resources as part of merging theory and practice.

IMS Sections

- ❖ Marine Biology and Resources Management
- ❖ Physical and Environmental Marine Sciences
- ❖ Information and Communication Technology

History of Mariculture at IMS

- ✓ IMS has been involved in mariculture all the time
- ✓ Mshigeni worked with IMS on seaweed farming in the 1980s
- ✓ Bwathondi experiments on cage culture of rabbit fish in the mid 1980s
- ✓ Msuya and others on Environmental and economic importance of seaweed farming in Zanzibar in the mid 1990s
- ✓ Introduction of seaweed farming to Kilwa, Lindi and Mtwara in the mid 1990s
- ✓ In the late 1990s however IMS decided to establish its own field laboratory at Makoba which integrated finfish, shellfish and seaweed, to work systematically on mariculture.

Integrated Mariculture Pond System (MASMA Project)

- ❖ This is where our expertise in mariculture was developed
- ❖ Most of the developments we are now seeing in Tanzania especially in finfish, and shell fish farming are a directly related to this project
- ❖ The effect of the multi-disciplinary IMS working on one study in Makoba is the root to the success
- ❖ The development of the seaweed floating line system, very promising in sustainable seaweed farming is also a product of the Makoba experiments

Pilots, Demonstrations and Farming

From 2004 to date there has been a lot of very successful pilots and demonstrations including:

1. Shell fish farming in Menai Bay

2. Pearl farming in Bweleo and Nyamanzi on Zanzibar and Tawalani in Tanga, but also Mafia island with demonstrateable economic credibility

3. Milkfish farming in Bagamoyo, Mtwara and Pemba again with demonstrateable economic credibility

4. In some areas especially Pemba, Mtwara, Rufiji Kilwa and Mafia, there are already a number of successful farmers earning up to 3 tons/ha equivalent to 8000 USD/ per 7 months

Future Perspective

❖ Through time mariculture has immerged as one of the leading contribution of IMS to public service which is one of the 4 key aspects of the mission. Accordingly, IMS in its 5 years rolling strategic plan starting 2009 is gearing at:

- ❑ Continue direct interventions on mariculture at all levels
- ❑ Develop hatcheries for selected species of finfish
- ❑ Develop hatcheries for selected species of bivalves
- ❑ Renovate and use Pangani Fishermen Training Centre for fisheries and mariculture activities in Tanga
- ❑ Study and develop cage culture technology and demonstration

Grateful to:

- ✓ Sida SAREC
- ✓ WIOMSA
- ✓ IFS
- ✓ USAID
- ✓ All our partner institutions
- ✓ All the colleagues working for mariculture related programs
- ✓ Counterparts working on similar courses
- ✓ The farmers