

20 years of marine science

Department of Agriculture, Forestry and Fisheries



BP SEMOLI
BRANCH FISHERIES MANAGEMENT
DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES



Background

Sea Fisheries Institute

- Sea Fisheries Research Institute

Marine and Coastal Management - 1999

- Fisheries Research

Fisheries Management - 2009

- Two departments
 - DEA Oceans and Coasts
 - DAFF Fisheries Management and Aquaculture Development
 - Fisheries Research and Development
 - mandate included freshwater fisheries and aquaculture
 - value chain development
 - sustainable utilization
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DAFF's mandate

International instruments

- United Nations Law of the Sea (UNCLOS)
- Code of Conduct for Responsible Fisheries - FAO
- SADC Protocol on Fisheries
- SADC strategy for aquaculture development

White Paper: A Marine Fisheries Policy for South Africa – 1997

- Transformation and allocation of fishing rights

Marine Living Resource Act 1998

- To provide for the conservation of the marine ecosystem
 - Long-term sustainable utilization of marine living resources
 - Orderly access to exploitation
 - Utilization and protection of certain marine living resources
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DAFF's mandate

Policy for the Small Scale Fisheries Sector in South Africa - 2012

MLRA Amendment bill 2013

- Recognition of Small scale fishers, communities and groups

Aquaculture Policy for South Africa

- Approved by cabinet in 2013
 - Framework for the development of a competitive and sustainable development of aquaculture in SA
- Aquaculture Research and Technology Development Programme 2012

National Development Plan – Vision 2030

National priorities and & foreign policy

- **National Priorities**

- Job Creation
- Food Security
- Rural Development
- Sustainable development

- **SA Foreign Policy**

- African Agenda
- Strengthening relations with the North
- Multilateralism
- South – South Cooperation
- Global GovernancE



Participation at regional and international activities

- Benguela Current Commission (BCC)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)
- Commission for the Conservation of the Southern Bluefin Tuna (CCSBT)
- Indian Ocean Tuna Commission (IOTC)
- South East Atlantic Fisheries Organisation (SEAFO)
- South West Indian Ocean Fisheries Commission (SWIOFC)
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- Agulhas Somali Current Large Marine Ecosystem programme (ASCLME/SAPPHIRE)

Fisheries research focus areas within DAFF

Vision

“Leading marine science in the service of our people”

Mission

“To advise on, promote and develop the sustainable utilization of living marine resources and the conservation of marine ecosystems and biodiversity, by conducting and supporting high-quality monitoring and research, both fundamental and applied”

Aquaculture research

- Newly established section within DAFF – 2010
- Responsibility of the aquaculture research division is to conduct research in support of a competitive and sustainable development of aquaculture in South Africa. More specifically to:
 - research production systems and develop culture technology
 - aquatic animal health and disease for promoting a healthy culture environment
 - understanding of the interactions between environment, economics and aquaculture



Resources research

- Purpose of this division is to provide science-based management advice on 22 fishery sectors, covering more than 100 different resources:
 - Collecting the relevant information:
 - Analyzing the information
 - Generating scientific advice for management
- **Inshore Resources Research:** Seaweed, Abalone, Linefish (~90 species), Netfish, Oysters, Sharks, South Coast rock lobster, White mussel, West Coast rock lobster, Prawns, Tunas, Swordfish.
- **New fisheries** – currently active include Eastern Cape Abalone, False Bay abalone, Livebait for tuna pole fishing, Octopus, KZN Redeye (purse-seine, kayak, boat-based), Redbait (Saldanha, Struisbaai), Hagfish, Whelks & crabs.
- **Offshore Resources Research:**
- Small pelagics (sardine, anchovy, redeye round herring), Patagonian toothfish (Prince Edward Islands), Hake, Horse mackerel, Agulhas sole, Squid, Monkfish, Kingklip.

Research support

Management of the research support functions within the Department including:

- Research vessel planning and operation
- Electronic and mechanical workshops
- Research gear store
- Editing and publication of the African Journal of Marine Science



African Journal of Marine Science

- 1983 – South African Journal of Marine Science first published. Initially a departmental in-house journal of local interest
 - 2003 – name changed to African Journal of Marine Science, broadening the scope and attracting contributions from further afield
 - 2009 – Taylor & Francis, a large UK-based publishing house, come on board, further increasing online presence but also introducing Scholar One Manuscripts online submission system, further reducing turnaround time from submission to publication
 - 2012 – publication frequency four issues per volume
 - 2012 - Impact Factor: 0.932; 5-year Impact Factor: 1.202
 - AJMS now one of the leading natural science journals in Africa, and one of the leading marine science journals published in the Southern Hemisphere
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Our Fisheries Research Vessels



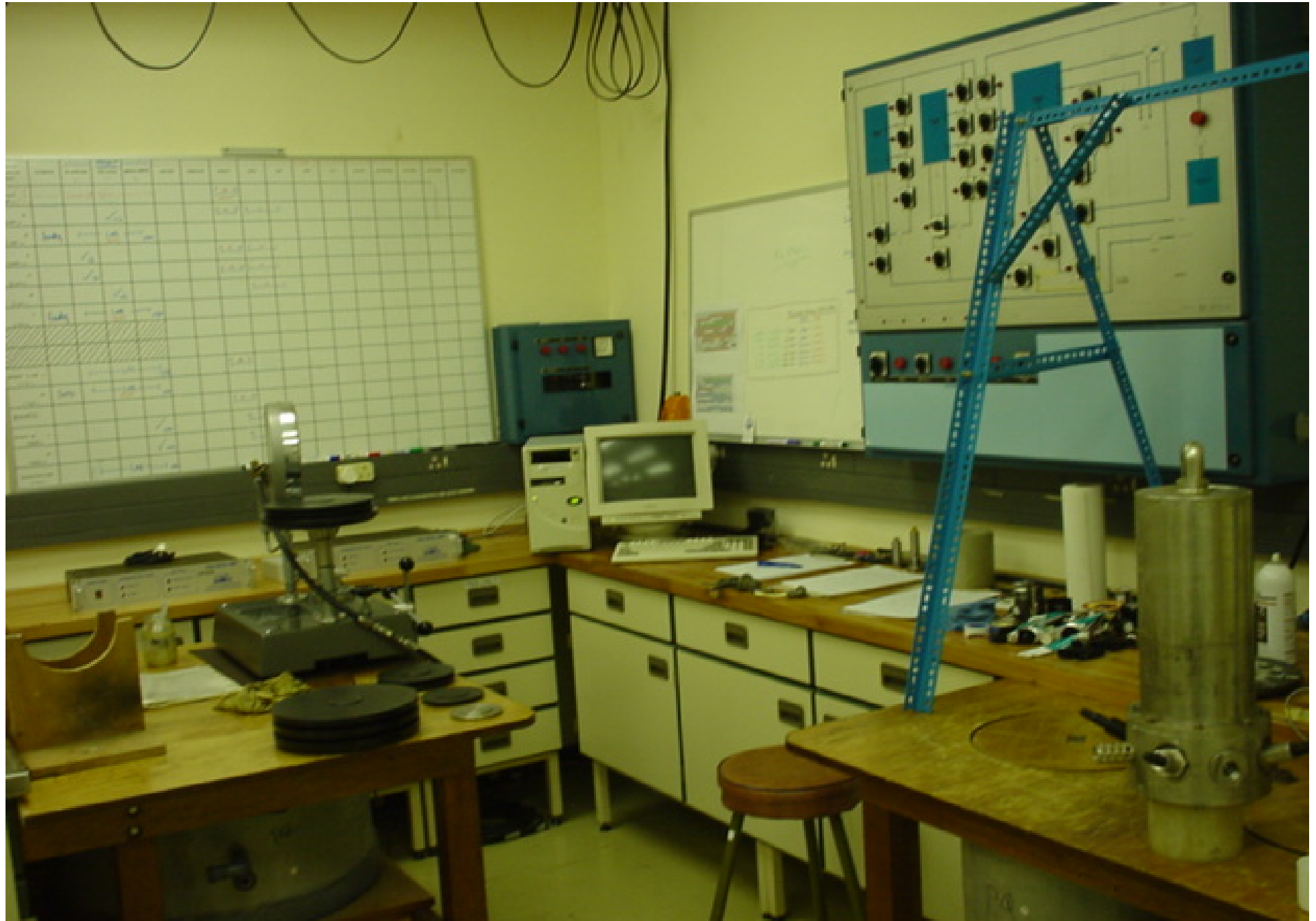
Mechanical workshop



Diving workshop



Calibration lab



Scientific Working Groups

- Demersal
- Pelagic
- Rock Lobster
- Squid
- Aquaculture
- Abalone
- Chondrichyans
- Linefish



Partnerships

The DAFF research has aligned and collaborated with different organizations

- Government Departments eg DEA, DST, DTI
- Universities – MoUs
- Research institutions eg ORI, EKZNW, SANBI, SANPARKS, NRF
- Provincial bodies and museums
- Fishing and aquaculture industry
- International organizations



Policies and strategies going forward

The following policies and strategies will be finalized and implemented in the near future

- DAFF research policy
 - Research agenda for fisheries, agriculture and forestry sectors
 - DAFF Fisheries Research Strategy
 - National Marine Research Strategy

 - **The National Development plan – vision 2030**
 - conducting research on critical issues affecting long-term development
 - investment in research and development, better use of existing resources
 - wider system of innovation that links universities, science councils and other research and development role players with priority areas of the economy
 - Government should partner with the private sector to raise the level of R&D, with resources targeted towards building the research infrastructure required by a modern economy
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The future

Possibilities

- Status quo maintained
 - Fisheries become an entity
 - Fisheries research becomes an entity
 - Fisheries management is integrated into another government Department
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Thank you