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Climate effects on biodiversity, abundance and distribution of marine organisms

A PROJECT FUNDED BY NORAD
A joint project between

With a close link to:

NansClim
Climate effects on biodiversity, abundance and distribution of marine organisms
A project funded by NORAD

Benguela Current Commission
Objective

- Identify and describe possible trends in ocean climate and corresponding changes in marine biodiversity and fisheries in the Benguela current system.
Outcome of the project

• a better understanding of the effects of climate change and variability on the marine ecosystem in the Benguela region
• future scenarios of climate effects on marine resources
• strengthened regional cooperation
• regional competence building on ecosystem effects of climate change
• increased public awareness of climate change in relation to fisheries and marine environment
• possible implications of climate change on fisheries and other marine activities
# Activity Plan

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Activities in 2012

• Two writing workshops
  – River Crossing Lodge in March
  – Okahandja Lodge in October
• 15-20 participants
• Intention has been to work on scientific papers
Said yesterday:

- Minister of Fisheries and Marine Resources pointed out the role of changing climate and the impact on the marine ecosystem.
- Nadine suggested to link distribution and abundance with environmental data.
- Both statements fit with the idea of the NansClim project.
NansClim publications

- There are 5 publications ready

- 15 – 20 papers are under preparation

- Special issue of Fisheries Oceanography is planned
  - Deadline for submission: 1 February 2012
  - 88 pages (8-10 articles)

- Total of 25-30 NansClim related publications
Challenges in cooperation

• Difficulties in planning of different meetings because of
  – Permission to travel
  – Last minutes cancellation

• Determination of meeting venue – wrong choices??
What about the future?

• There will be NansClim in 2013
  – Workshops for writing synthesis papers
  – Identifying gaps of knowledge

• Will there be a next phase of NansClim?
  – Depends on local interest and Norad approval
  – Need good reasons for continuation
  – Depend on gap analyses
Some points to note

• NansClim is focusing on climate variability and not climate change since the time-series are not long enough for the latter.

• Have to be careful not to over interpret a narrow temperature range of deep water species as it might only reflect that temperature has low variability at such depths.

• It is important to have oceanographers to support the other groups.
What you will see today

**Pelagic**

- The effects of climate variability on lower trophic levels are sometimes obscured by impacts from higher trophic levels

**Dermersal**

- A new methodology for selecting potential demersal indicator species in climate context is ready
- Both spatial and temporal trends are observed in relation to temperature conditions
So please enjoy the presentations and the results summarized so far