

## Project information

### Keywords

Ocean acidification, economic effects, bayesian belief networks, fisheries, management

### Project title

ECOAN WP IV Socio-economic consequences and management options

### Year

2015

### Project leader

Eirik Mikkelsen

### Participants

Dr Eirik Mikkelsen (Norut) [Eirik.Mikkelsen@norut.no](mailto:Eirik.Mikkelsen@norut.no)

Prof. Claire Armstrong (University of Tromsø, UiT)

Dr Isabel Seifert (NIVA)

Dr Jannike Falk-Andersson (Norut)

Dr Russell Richards (University of Queensland)

### Flagship

Ocean Acidification

### Funding Source

Fram centre, Ocean acidification flagship

## Summary of Results

As the project has started this year, and is planned for 2015-17, there are no scientific results yet. We present here the work we have performed so far and the status on progress.

The work has started in 2015 with the following tasks:

Task 1) BNM: Develop a Bayesian network model through a literature review and input from natural scientists in the ECOAN project.

Task 2) BEM: Choose and fit a bio-economic model suitable to assess socio-economic effects.

The project group has explored the possibility to integrate our approach with Bayesian network and bio-economic modelling into the comprehensive Atlantis-type ecosystem model for the Nordic and Barents Sea (NoBa) that IMR has established and is now refining. We have also discussed the possibility to collaborate close with the recently financed strategic institute project on ocean acidification at NIVA. This to avoid duplication of work and to utilise Norwegian research infrastructure and resources most efficiently. We have had several skype and physical meetings and workshops for this, including with people responsible for the NoBa model and the NIVA strategic institute project, and we have also worked on alternative approaches and designs on the Bayesian network model. We are now getting ready to conclude on how to proceed with our work and how to collaborate with the other scientists outside of the core project group.

We have also participated in a workshop arranged in Tromsø in June by the BioAcid project: *Ocean acidification and warming in the Norwegian and Barents Seas: ecosystem changes and socio-economic impacts*. Stakeholder workshop. 11<sup>th</sup> & 12<sup>th</sup> June 2015, Tromsø. Hosts: Prof. Dr. Stefan Goessling-Reisemann & Dipl.-Biol. Stefan Koenigstein, University of Bremen/Germany, Sustainability Research Center (artec).

## Published Results/Planned Publications

Not yet.

## Communicated Results

At the workshop in June (see above) Eirik Mikkelsen gave a presentation titled: *Ocean acidification and its socio-economic impacts in Norway*.

## Interdisciplinary Cooperation

The project group has competence in environmental and natural resource economics and management, bioeconomic modeling, ecology, fisheries management, identification and valuation of ecosystem services, environmental sciences, risk, ecological/environmental and Bayesian network modelling.

## Budget in accordance to results

Funding from Fram centre.

Could results from the project be subject for any commercial utilization

No

## Conclusions

It is too early for conclusions.