

# From traditional resource use to industrial production: Challenges for sustainable management of the west coast of Norway

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## Traditional adaptation

- Coastal areas with marginal arable land
- Small farms dependent on marine resources
- A combination of small-scale fisheries and heathland farming
- Natural forests removed by the use of fire to create open heathlands
- Coastal areas transformed to heathlands as far back as 6000 BP
- Open heathlands served as extensive all-year-round grazing grounds for sheep, goats and cattle
- Transport of nutrients from outfields (heathlands) to infields (cropped land)
- After World War II this management system fell out of use
- This natural resource management regime proved sustainable over the past 5000 years, facilitating a relatively high human population density along the coast



The proposed MAB will constitute 10 municipalities on the west coast of Norway

## Challenge for the future

*The present way of living, heavily based on fish harvesting, oil production and related industries, but with low locally based food production, is not a sustainable way forward.*

*To meet this challenge a UNESCO Man and the Biosphere (MAB) project is proposed in search of better ways to sustainably manage the natural resources of the coastal areas for the future.*

*The proposed MAB aims to:*

- 1) Conserve natural and cultural diversity
- 2) Promote economic development based on sustainable principles
- 3) Create infrastructure for environmental monitoring, research, education and dissemination of sustainable development

## Modern adaptation

- With agricultural modernization, heathland farming was marginalized
- Today, even modern farming is no longer economically viable
- Consequently, most of the open coastal heathlands have disappeared resulting in loss of diversity at all scales
- Encroachment of woody vegetation and forest plantations
- Contrastingly, the specialization of fisheries, with bigger boats and improved technology, intensified the harvesting of marine resources
- Hydropower in the same region has created the grounds for energy demanding industry
- The oil industry in the North Sea has created more lucrative job opportunities
- Today, the coast of Western Norway is regarded as the most resource rich part of the country, with a large economic productivity related to hydro power electricity, fisheries and the oil industry



## The Man and the Biosphere (MAB) Programme

- An Intergovernmental Scientific Programme
- 564 MAB areas in 109 countries globally, none in Norway yet
- Aims to set a scientific basis for the improvement of relationships between people and their environment
- Combines natural and social sciences, economics and education to improve human livelihoods and to safeguard natural ecosystems
- Promotes innovative approaches to economic development that is socially and culturally appropriate and environmentally sustainable

