

# Executive summary

The Faroe Islands are situated on a shelf in the North Atlantic Ocean and surrounded by a number of important fishing grounds. The climate is strongly affected by the North Atlantic Current and frequent passage of cyclones. For a subarctic region, the Faroes enjoy fairly high winter temperature, seldom remaining below zero for any prolonged length of time.

All islands are small with very small rivers, and only the surrounding marine waters are of international significance. In the surface, the area is covered by the warm, saline Atlantic waters that flow past the Faroes into the Norwegian Sea. Only in the Northernmost part do one find cold, less saline water masses.

The waters around Faroe Islands are important nursery areas for larvae of many commercially important fish stocks. The productivity of the Faroese waters was very low in the late 1980s and early 1990s. From 1992 onwards the conditions have returned to more normal values. A very clear relationship, from primary production to the higher trophic levels (including fish and seabirds) has been observed in the Faroe shelf ecosystem, and all trophic levels seem to respond quickly to variability in primary production in the marine waters.

The Faroe human population of a little less than 50,000 is highly dependent on the marine resources. The standard of living is comparable to the Scandinavian countries, but the economy is strongly correlated to the fishery sector, including aquaculture. Tourism is an increasingly important source of income, and there are possibilities of a future oil and gas production, similar to the oil finds in UK.

The experts have identified pollution with toxic chemical as the presently most serious international water concern. Due to bio-accumulation in the tissue of marine species, impacts on public health may be significant, due to the high reliance on traditional indigenous food

sources like fish, whales and seabirds. Also, traces in the commercially important fish stocks may jeopardize this important source of income to the Faroe economy. The toxic substances are carried over far distances by water and air from the industrial areas in Europe, North America and Asia. There is an urgent need to continue to address these pollution problems in the appropriate international fora.

Another important concern is the unsustainable exploitation of fish. The severe depletion – and subsequent recovery – has been a combination of climatic/oceanographic variability, but overexploitation of an ecosystem under stress has exaggerated the problem. Due to the economic significance, there is consensus on the importance of sustainable management of marine resources, and the Faroes have introduced strict regulations to ensure sustainable fisheries.

However, basic scientific understanding of the complex interaction between climatic variability and recommended catch quotas is not complete. This problem is further compounded by the potential impacts of global warming. There is a need for the international community to promote more research focus on the Atlantic ecosystems, in order to understand, predict and adapt to the potential future changes.

This report is funded by the Danish Environmental Protection Agency and is joint effort by almost 20 experts from the Faroe universities and research institutes. The contents and views do not necessarily reflect the views and policies of the contributory organizations or the United Nations Environment Programme (UNEP)