

The Wadden Academy, managing multi-disciplinary knowledge of the Wadden Sea on a national scale - NL

1. Policy Objective & Theme

- ADAPTATION TO RISK: Managing impacts of climate change and safeguarding resilience of coasts/coastal systems
- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

2. Key Approaches

- Knowledge-based

3. Experiences that can be exchanged

The founding of the Wadden Academy has allowed the management, on a national scale, of scientific knowledge concerning sustainable development in all its inter-sectoral dimensions of the Dutch Wadden Sea.

4. Overview of the case

The Wadden Academy plays an agenda-setting, programmatic and information role for research in the Wadden Sea. The five areas of research are climate science, ecology, geology, economy and socio-cultural aspects. It is a compact, facilitating organisation with scientific authority.

5. Context and Objectives

a) Context

The Wadden Sea (Netherlands, Germany and Denmark) is the largest unbroken system of intertidal sand and mud-flats in the world, with natural processes undisturbed throughout most of the area. It encompasses a multitude of transitional zones between land, sea and freshwater environments and is rich in species especially adapted to the demanding environmental conditions. It is considered one of the most important global areas for migratory birds and is connected to a network of other key sites for migratory birds. Its importance is not only in the context of the East Atlantic Flyway but also in the critical role it plays in the conservation of African-Eurasian migratory waterbirds. In the Wadden Sea, up to 6.1 million birds can be present at the same time and an average of 10-12 million pass through it each year. Since 1978, The Netherlands, Denmark and Germany have been working together on the protection and conservation of the Wadden Sea covering management, monitoring and research, as well as political matters. In 2009, over 66% of the whole Wadden Sea was designated as a World Heritage Site. Alongside this ecological importance, the Wadden sea also has significant economic functions such as energy (gas and oil), minerals, recreation and fisheries.

The Dutch government, in cooperation with the Province of Friesland, agreed in 2004 to found a single body, the Wadden Academy which would coordinate national research efforts in the Wadden Sea. It was founded and began its work in 2008.

b) Objectives

The goals of the Academy are threefold; identifying knowledge gaps with respect to sustainable development of the Wadden

Sea and articulate responsive research questions; promoting integrated, regional, national and international research programmes; promoting information and knowledge exchange in, and between, government, the private sector and other societal organisations.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The Wadden Academy falls under the Royal Dutch Academy of Sciences (KNAW). It has five Board members named in 2008 which are supported both by a Bureau and Advisory Council. The Advisory Council is responsible for the social and scientific relevance of the activities of the Academy.

b) ICZM tools

The Wadden Academy came into being as a result of a government decision to set aside part of the Wadden Fund – a special fund to direct extra investments to the Wadden Sea region through projects - for the improvement of knowledge exchange about the area. The then Coastal Zone Management Centre was requested how this could best be done. In 2004, a report was published which showed that, although the accessibility of knowledge and information was very good, its utilisation could be greatly improved. This meant that the possibilities for human use were not being optimised, that many problems would start to arise as a result of the effects of climate change as well as through eutrophication and pollution and invasive, exotic species. Of particular concern was the lack of any co-ordination in the various research projects being conducted and the lack of any integration of the research projects being conducted. The conclusion was that an Academy would be the best way to solve these problems. Certain conditions were applied such as it should not itself conduct research nor duplicate work done elsewhere but fill in information and research programme gaps. It should also have a major role in involving societal organisations and stakeholders in discussions of the required research programme. It should also have an international dimension by involving non-Dutch researchers.

In November 2004, a number of Dutch academic institutes i.a. Groningen and Wageningen Universities took on initial responsibility for the development of the Academy. During the next three and a half years, there were intensive discussions held with relevant stakeholders and organisations about the most effective form of organisation for the Academy. A number of variants were put forward varying from a large research institute with an annual budget of at least €10m to a fully virtual institute. Eventually, the current model of a small, compact, knowledge-oriented organisation operating as a network and as part of the Royal Dutch Academy of Sciences was agreed.

The Academy has the ambition to develop into a centre of excellence with a broadly applicable, integrated, knowledge base concerning sustainable development of the coastal area where nature values are central and contributing to the local and region economy. It should be seen as a focal point for national and international scientists, managers, policy-makers and government administrators. Together, they are expected to come forward with sustainable and innovative solutions such that, in 2020, the Wadden Sea will be the best monitored and most understood coastal system in the world.

A phased implementation plan has been drawn up and now implemented. Initially, there will be a period of consultation with, and feedback from, stakeholders e.g. a digital discussion platform via the website. Based upon the ideas put forward, an implementation plan of the various projects and programmes will be established. This will be done by multi-disciplinary teams facilitated and coordinated by the Academy. The third phase will be to seek financing for the agreed activities and the Academy hopes to secure more private funds than has hitherto been the case. The fourth phase, with the second half of 2010 as a goal, is to internationalise the work bringing together German and Danish scientific expertise as well as finances, also from the EU. From 2014, the fifth phase will begin which is an independent evaluation of the Academy.

7. Cost and resources

The Academy is financed by the Wadden Fund and the province Fryslân. The government has ear-marked €800m in a twenty year period for this fund. In 2009, €5m for a period of five years was granted by the Wadden Fund for the Academy out of €28m that was granted for projects in the Wadden Sea as a whole. The province Fryslân donated € 500.000 for the subsequent five years.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

It is too soon to draw any conclusions. However, the Wadden Academy potentially offers a Wadden Expertise Centre. It has the possibility and the ambition of functioning as an international scientific knowledge centre oriented to providing public information on sustainability and nature conservation in the Wadden area as an international habitat. It should guarantee making an inventory of, and updating, relevant international knowledge and insights, safeguarding independent research and making the results available.

9. Success and Fail factors

The involvement of a broad, multi-disciplinary group of scientists which were requested to draw up a series of position papers which were used to set the agenda of the Academy was important.

10. Unforeseen outcomes

As with many new ventures, the realisation of the Academy met with some initial opposition. Arguments were that research in the Wadden was already being done by various universities already; and that it would hinder, rather than help, research by introducing bureaucracy. The lack of Board members from the two Wadden provinces was a further criticism. It no longer plays a role.

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13. Sources

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Kennis voor een duurzame toekomst (16.1 MB) 



Uitvoeringsplan Waddenacademie (217.51 KB) 