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IMPLEMENTATION OF DANISH ACTION PLANS TO REDUCE NUTRIENT LOSSES TO THE AQUATIC ENVIRONMENT

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ABSTRACT

The first Action Plan in Denmark was adopted in 1987, the aim being a 50% reduction in nitrate leaching from agriculture. This Plan included obligations to build slurry tanks and a policy for Good Agricultural Practice. However, at the beginning of the 1990's it was clear that these measures did not reduce nitrogen losses as expected. Therefore, further action plans were launched in 1994 (Action Plan for Sustainable Agriculture) and in 1998 (Action Plan II). These action plans involved mandatory measures in terms of nitrogen standards for crops, required utilization of nitrogen in organic manure, and obligations to grow catch crops.

The Danish experience showed that it was very difficult to set measures which allowed some freedom for the farmers and still had the expected effect on nitrate leaching. Therefore, the action plans were evaluated regularly in order to adjust measures or to decide on new initiatives. Scientists carried out the evaluations, and worked out scenario analysis as the background for the politicians to decide on future measures. Furthermore, stakeholders were heard in this process. The experience also showed the necessity of controlling that farmers followed the regulations.

Although the national goal of a 50% reduction of nitrate leaching was attained in 2004, the marine waters had not reached a good ecological status. In the second Water Basin Plan for 2005-2021, a further reduction of 7,800 tons in the nitrogen load is still needed to reach a good ecological status in the coastal areas. This implies further scientific challenges as measures will be targeted to critical areas. There is also a political challenge as farmers will now be regulated according to the vulnerability of their land requiring farmers to meet individual requirements. This topic still needs to be addressed.



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