

WILLOW PLANTING CREATES MULTIPLE BENEFITS



Summary

Climate change causes increased risk for run off of nitrogen in many European areas. In the Danish Aquarius pilot - a sub catchment to Mariager Fjord - the main focus was to identify possible win-win solutions in collaboration between different stakeholders in order to improve water quality.

Willow plantations in high risk areas of nitrogen run off can be a cost effective solution. Mapping of the high risk areas is crucial.

Main Benefits

General aspects

Growing willow can lead to:

- » Improved water quality in the fjord due to less nitrogen leaching from fields
- » Reaching the Municipality's climate objectives by linking local supply and demand of energy crops for renewable energy
- » The farmers getting new business opportunities by becoming energy suppliers.

Economic/job creation

Growing willow can lead to:

- » Reduced public costs for reaching the WFD goals on good water quality for the fjord.
- » New business opportunities for farmers as an alternative to taking arable land out of production or to restricting production conditions on arable land in general.

Innovative aspects

- » By involving all primary stakeholders optimum legal, economic and production conditions can be made for supplying energy willow as a new product to a new local market, while meeting water quality and climate objectives.

Boosters for Implementation

- » An improved mapping identifying the areas where the run off of nitrogen is high.
- » A catchment stakeholder group where different perspectives on win-opportunities are represented.

Barriers for Further Implementation

- » Lack of acceptance of using mapping identifying specific high risk areas due to a potential clash with the national implementation of the WFD where focus is on general regulation
- » Lack of opportunities for implementing locally generated solutions due to nationally approved methods for granting allowances
- » Lack of market-driven financing opportunities
- » Lack of innovative capacity for changing extension procedures
- » Finding solutions in collaboration requires reliability and trust between all stakeholders

How to Get Over Barriers

Make test areas in which

- » Improved mapping methods are used to identify future opportunities for WFD implementation
- » Existing regulation is made responsive to locally generated win-win solutions
- » Innovative collaboration with banks on finding new products for private financing is tried out
- » Where catchment stakeholders get time and real responsibility for reaching the goal

Policy Recommendations

- » Policy should support and accept the use of locally generated solutions and the fact that such solutions differ due to different bio-physical and production conditions.
- » Policy should actively support the creation of catchment stakeholder groups

More Information

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