

Landsbygdsavdelningen

New methods to curb the eutrophication of the Baltic Sea – a seminar at the Strategyforum Nov 8-9. 2016

As Policy Area Coordinator for Fishing and Aquaculture within the EU Strategy for the Baltic Sea Region, the Swedish Board of Agriculture arranged a seminar at the 7:th strategy forum for the EUSBSR in Stockholm in November. With 1400 participants and more than 40 parallel seminars and lots of back-to-back meetings and spontaneous mingle meetings the forum gave a lot of opportunities for contacts and strengthened cooperation.

The theme for the seminar arranged by the SE Board of Agriculture was “Innovative methods to stop or curb the eutrophication in the Baltic Sea, by extracting nutrients directly from the sea water”.

After several presentations and a panel discussion, moderated by Ms Angela Schultz-Mehden from Submariner, the Swedish Minister of rural affairs and regional growth, Mr Sven-Erik Bucht gave a final speech. With his roots at the side of the Torne river in northern Sweden he gave a personal message to award also our grandchildren the chance to dip their toes, swim and fish in a clean Baltic Sea.

Levels of nutrients in the sea are too high

The main problem is the large amount of nutrients which has been leaking, and still is leaking, into the Baltic Sea (external load) and contributes to the algae blooming. Though the levels of nutrients in the Baltic Sea have started to decrease and the trend is positive, due to measures to stop the leaking in many countries, the levels of nutrients in the sea are still too high. Furthermore, there is a chemical process from the oxygen free sea beds which is releasing phosphorus that have been deposited through ages of leaking (internal load). Research suggests that up to 2/3 of the phosphorus fuelling the algae blooming comes from this internal load. As a complimentary measure to the actions on land (or up stream) the seminar discussed possible measures in the sea to curb the eutrophication. Methods presented were different forms of aquaculture as algae and mussel farming and also harvest of algae beach cast. These methods have an advantage since they create a basis for manufacturing of other products. Other methods on the agenda were different ways to bind the phosphorus chemically harder in the sediment and also a way to extract top layers of the sediment to recirculate the phosphorus to the farm land.

Speakers

Fredrik Gröndahl from The Royal Institute of Technology, KTH, in Stockholm and Susan Løvstad Holdt from The Technical University of Denmark are both researchers in the fields of algae farming and mussel farming. According to their results the prospects of large scale mussel and algae farming is not so big in the Baltic Sea, due to the low salinity. Promising figures was shown of the amount of nutrients that can be retrieved from the beach cast of algae.

Bengt Simonsson from The Baltic Works Commission and Gunno Renman, professor at The Royal Institute of Technology, KTH, did present more technical methods not the least the promising results from the tests made to retrieve sediment layers and recirculate the phosphorus to the farmland.

Ottilia Thoresson from WWF expressed the concerns from the environmental protection side regarding large scale methods to retrieve sediments from sea beds deep down in the Baltic Sea. She also pointed out the needs for more knowledge and the large importance of continuing with land based measures up stream. A close cooperation with farmers is the key for this.

In the panel there was also participation from Anna Thore, representing the Kalmar Sound Commission and Angelė Plančiūnaitė from the Panevėžys Regional Environment Protection Department of Lithuania. The panel discussion lifted among other things the possibility of payments for environmental services when nutrients are extracted from the sea. In the same way as there are payments in the Rural Development Program for wetlands capturing nitrogen and phosphorus there could be similar measures for “blue wetlands”.