Mylius
A SDG tool
powered by ORBICON

Mussel farming as nutrient-mitigation in the Baltic

Analyzed by Per Dolmer and Maren M. Lyngsgaard, Orbicon, Denmark

Mylius
A SDG tool
powered by ORBICON

Contribution to the UN Sustainable Development Goals

SDGs sorted by highest contribution

Nutrient-catch by mussel farming recycles nutrients from land and produce marine proteins for food or feed by a low consumption of energy. The production of mussel meat has a significantly lower climate impact than the production of other animal proteins. Additionally, the climate impact can be further reduced if the mussels are produced locally.

A policy for implementation of nutrient-catch cultures of mussels in the Baltic may significantly support the target to integrate climate change measures.

Mussel farming in the Baltic reduces nutrient concentration, by removing nutrient rich phytoplankton and recycle the nutrients to new biomass of mussels.

The mussels are filter feeders and improve the water quality by increasing transparency to the goods of marine macroalgae and plants. The mussel farming then concentrate pelagic organic material in relatively small restricted areas to the benefit of marine life in large areas which supports the formation of healthy marine habitats with a high biodiversity.

Mussel farms has a function of a floating reef, supporting high density of invertebrates, fish and birds.

Nutrient-catch by mussel farming recycle nutrient from land and produce marine proteins for food or feed.

Today the production of fish for food in the Baltic is collapsed, due to low stocks of cod in the eastern Baltic, and there is a need for new marine resources for food.

Mussel farming has the advantage of not having to add any nutrients during production and mussel

Mussel farming is a source to proteins and fatty acids that has very low climate impact and a high nutritious value. Implementation of locally produced mussels will support sustainable consumption with a low rate of food-waste.

Additionally, the mussels come with their own packing being the strong shell, and the end-product being the mussels and their packing is therefore very climate- and environment friendly.

farming can therefore be a source to proteins and fatty acids in all marine areas with high nutrient load and a natural population of mussels.

Nutrient-catch cultures of mussels in the Baltic will create new jobs in remote places outside the towns, and then replace jobs that have disappeared in the fishery.

Development of large-scale mussel production needs the development of new national and transnational infrastructure and an important scientific focus on developing sustainable production and processing methods.

Nutrient-catch cultures of mussels will create new jobs and income for people living outside urban areas, and fight poverty in these areas.

Locally produced mussels allow sustainable food source to cities and communities.

Nutrient-catch cultures of mussels recycles nutrients from land back to land as marine proteins, which will reduce the press on protein production on land.

The development and implementation og nutrient-catch cultures in the Baltic need a close partnership between private enterprises, academia and governmental managers in order to be effect full.