Stockholm University

March 12th 2020

Recipient: DG SANTE

Stockholm University Baltic Sea Centre's reply to the roadmap for the Farm to Fork Strategy (F2F)

Stockholm University Baltic Sea Centre welcomes the initiative and agrees that the transition to more sustainable food systems need to accelerate.

Given an increasing population, increasing incomes and the resulting increases in environmental pressures, we need an accelerating eco-efficiency in our production and consumption of food. Eco-efficiency should be the overarching objective of the strategy.

Agriculture

An aspect of eco-efficiency is the necessity to improve the eco-efficiency of our nutrient cycles, as concluded in the UNEP report Our Nutrient World.

Agriculture is the single largest source of new nutrients to the Baltic Sea (see here). Most of mineral fertiliser and livestock feed which is imported to the catchment area is transformed into manure; however, the nutrients in manure are often not used efficiently in crop production, increasing the risk of losses to the waters. These nutrient losses can be reduced by improving manure management and substituting imported mineral fertilisers with manure, as well as by reducing the import of livestock feed and the number of animals in regions with high livestock. More information on farm structure can be found here .

Whether or not reduced consumption of animal products leads to less eutrophication of waters depends on which animal products, how and where they are produced and the alternative production/action at farm level. For a full fact sheet read here.

Marine biodiversity

F2F must link strongly to the Biodiversity Strategy and both clearly and consistently include the marine dimension.

Healthy marine habitats are a precondition for long-term sustainability of fisheries – and thus sustainable primary production of seafood. At the same time, fisheries can impact on marine biodiversity beyond direct effects on commercially fished stocks. The F2F strategy should ensure that decisions taken under the CFP actively contribute to the realisation of ecosystem-

Baltic Sea Centre

Stockholm University
Website: www.su.se/ostersjocentrum/english/
Telephone: +46 8 16 45 24
E-mail: gun.rudquist@su.se

Stockholm University

based fisheries management and the achievement of the objectives of the Nature Directives and the MSFD.

Fisheries

Current inefficiencies in nutrient management contribute to the oxygen depletion that is one cause of the negative situation for the Baltic cod.

Given uncertainties in data and modelling and changing conditions in nature, short term attempts to maximize sustainable yield (fish at MSY) risk continuing to lead to overshoot and long-term depleted fish stocks. Fishing pressure needs to be kept considerably below FMSY.

Aquaculture can only be sustainable if due consideration is given to factors such as the available sustainably produced resource base, local impacts of nutrient emissions and the use of antibiotics.

Research suggests that fish has a lower environmental and climate impact if it goes to direct human consumption instead of aquaculture via fishmeal. Fishing for human consumption should be promotes rather than fishing for fishmeal.

Hazardous substances

Pesticides are commonly found in levels exceeding thresholds set for single compounds in some marine waters. Overall, marine organisms are exposed to a mixture of chemicals that accumulate and transfer through the marine food chain resulting in higher levels in top predators. And there is growing concern that declines in wildlife populations and loss of species are linked to chemicals interfering with the endocrine system.

Reduced emissions of hazardous substances is necessary for sustainable consumption of seafood since residues may contaminate fish and make it unsuitable for direct human consumption.

A study[1] from Stockholm University shows that 87% of all measurements of chemicals in fish target just 20% of all monitored substances. These chemical analyses may be biased towards known past problems. This may lead to society failing in identifying risks posed by yet unknown hazardous chemicals. Strong links need to be made between the F2F and the Chemical Strategy, incentivising ways to identify priority chemicals for environmental analysis.

---

[1] *The dilemma in prioritizing chemicals for environmental analysis: known* versus *unknown hazards*

https://pubs.rsc.org/en/content/articlelanding/2016/em/c6em00163g#!divAbstract