

Possible future activities for the reduction of non-point source pollution from agriculture

The commenced national implementation of the Water Framework Directive in HELCOM Contracting Parties being EU member states as well as EU accession countries is expected to include nutrient loads from draining rivers of the catchment area to the Baltic Sea.

When implementing the Water Framework Directive appropriate national measures could, *e.g.*, cover:

- determination of "critical areas" along the rivers with high impact on the nutrient loads and decrease these charges through the appropriate measures;
- reconsidering of regional drainage problems;
- elaboration of programmes appropriating agricultural land to re-establish natural water courses and wetlands in order to intensify the general denitrification within the streams of the catchment area to the Baltic Sea.

The river basin approach within the Water Framework Directive, other relevant directives, Annex III, the Baltic Sea Regional Project (GEF project), the WGA report on "Assessment of the Status of the Implementation of the Environmental regulations of Agriculture in the Baltic and partly the North Sea Areas" and the revised CAP as well as national programmes will be the main tools to reduce the environmental problems from the agricultural sector.

In order to reduce non-point source pollution from agriculture the following main areas should be addressed:

- Identification of technologies to reduce discharges to the marine environment

There is a wide range of different technologies available at the market with different impacts (negative or positive) on the environment. These technologies focused on the specific situation of the Baltic countries and the Baltic marine environment should be studied and results disseminated.

- Contribution of Agri-Environmental Schemes to marine environment protection

There is a wide range of different measures and GAP-Codes implemented in EU Countries, Accession Countries and Countries in Transition. There is a need of collecting all existing data (success/failure) of these measures as well as an assessment of its relevance for the Baltic Sea catchment area/Baltic Sea Countries. The aim could be to elaborate a recommendation for priority measures.

- Implementation of balanced fertilization in the Baltic Sea catchment area

Balanced fertilization is one of the key measures (of Annex III) to control nutrient discharges from arable farming. In order to avoid excess fertilizer use with the expected intensification of agriculture in the coming years.

- Contribution of Organic Farming to marine environment protection

Organic Farming can contribute to marine environment protection. Therefore the promotion of Organic Farming in addition to the contribution of agro-environmental measures can help to reduce negative impacts from agricultural sources. The aim is to elaborate information documents and/or recommendation on how to promote Organic Farming taking into account the specific situation in the Baltic Sea Region.

- Mid-Term Review/Agenda 2007: Possible Impacts/Environmental Effects based on the Mid-Term-Review proposal and the EU enlargement

Within the near future the EU will discuss and decide on the Mid-Term-Review/Agenda 2007 process. Taking into account the outcome of this discussion an assessment of the possible impacts/environmental effects for the Baltic marine environment could be helpful to be able to take action if needed.

- Implementation of Annex III: Assessment of the final report focused on which future activities are needed to ensure implementation in agricultural practice

The Project Report concludes that on paper the Annex III and HELCOM Recommendations are more or less already implemented in the counties, but the assessment of how actual measures have been implemented in practice at farm level is very difficult to carry out. The outcome of the project should be utilized when considering future activities with regard to agriculture.

- Implementation of appropriate systems to monitor the effectivity of implemented measures.

Examples of possible measures for the reduction of pollution from agriculture include

- implementation and analysis of nutrient balances on the farm level,
- site and season specific planning of fertilisation,
- determination of maximum amounts of nitrogen applications (manure and artificial fertiliser),
- limitation of the animal density per hectare to sustainable numbers,
- site specific determination of fertilizer demand,
- temporary limitation of fertiliser application,
- introduction of best available technique with regard to manure application,
- strengthening inter-farm co-operation for the application of manure,
- promotion of conservation soil tillage techniques,
- determination of sustainable nitrogen loads for individual habitats,
- improvement of the nutrient-efficiency in animal husbandry (e.g. phase feeding strategies, fodder, etc.),
- improvement of information regarding new technical progress and scientific results.