

# Synopses related to eutrophication





### Agriculture – farm level

- Annual field-level fertilization planning and farm-gate nutrient balancing for nitrogen (N) and phosphorus (P) should be a requirement for all farms in the Baltic Sea Region
- Nutrient-balanced fertilization to control nutrient surplus on farmland
- Prohibition of post harvest application of manure and other organic fertilizers
- Use of gypsum to reduce phosphorus loads from agricultural land
- Recycling of nutrients and carbon in agricultural residues by use of anaerobic digestion

# Agriculture – system level and technology

- Reducing livestock densities and coupling livestock to the area of available farmland
- Increase organic farming to reduce the inputs of nutrients and hazardous substances to the Baltic Sea
- Develop Best Available Techniques (BAT) lists for reducing ammonia and GHG emissions from livestock housing, manure storage and spreading



## Agriculture – reporting, strategies

- Reporting estimates on the effects of agri-environmental measures on the main phosphorus (P) fractions
- Facilitating the selection of cost-effective measures by creating national catalogues of abatement measures and their unit abatement costs.
- Develop national strategy and consequent measures to secure sustainable use of recyclable nutrients with potential inclusion of simultaneous bio-fuel production
- Develop recommendations to support national strategies for manure management in the BSR specifically from horses, sheep, goats, and fur farming



### Agriculture – financial aspects

- Levy on mineral phosphorus in animal fodder and on mineral fertilizer
- Levy on nitrogen in mineral fertilizer
- Incentives to support the use and the production of manure based recycled nutrients
- Allow coordination of abatement measures among HELCOM countries to ensure cost-effective nutrient abatement at the basin and Baltic scales
- Cost effectiveness should be the guiding principle for designing nutrient abatement plans



### Agriculture – knowledge sharing

- Improve knowledge transfer between farmers, authorities and decision makers
- Mutual learning among farmers on best practices and innovative technologies



#### Sea-based

- Removal of nutrients from the coastal zone by the use of mussel mitigation cultures
- Reducing nutrient loading by farming and harvesting blue mussels
- Rehabilitation of hypoxic areas by oxygen pumping
- Reducing internal phosphorus loads by metal bounding



#### Policies and hot spots

- Improved integration of BSAP targets with WFD targets
- National implementation plans to meet HELCOM's Nutrient Input Ceilings (NIC)
- Definition of "New Hot Spots" of nutrient input into the Baltic and subsequent targeted measures to reduce the source



#### Point sources

 Strengthening of HELCOM Recommendation 28E/5 on MUNICIPAL WASTEWATER TREATMENT