WHAT’S THE DEAL?

- Eutrophication indicates a disruption of the ecosystem caused by high loads of nutrients. It is evident as. E.g. excessive algal blooms and dead areas of sea bottom.
- The loads of nutrients may be natural background losses from the soil or the result of human activities and losses from agriculture, wastewater, industry and forestry.
- 85 million people live in the area around the Baltic Sea. They all affect the water eco-system by living, eating, working and travelling.
- It will take a long time to restore the Baltic Sea to its natural state.
- Achievements today will be measurable in 30-50 years, i.e. around 2050.
- Further improvements in agricultural practices can reduce nutrient losses significantly.
SOURCES OF FUNDING AND SCHEDULE

Finance sources:
• Baltic Sea Region Programme 2007 - 2013
• NEFCO/NIB Baltic Sea Action Program Trust Fund

The project duration:
START: october 2010
End: september 2013
Main project partners

**START:** october 2010  
**End:** september 2013

- The Federation of Swedish Farmers (LRF), Sweden
- Central Union of Agricultural Producers and Forest Owners (MTK), Finland
- Lithuanian Agricultural Advisory Service (LAAS), Lithuania
- Agricultural Advisory Centre in Brwinow Branch Office in Radom (CDR), Poland
- Rural Development Foundation (MES), Estonia
- The Knowledge Centre for Agriculture (VFL), Denmark
- Latvian Rural Advisory and Training Centre (LRATC), Latvia
Actors involved in the BD project in Poland: Agric. Institutes, advisors, farmers

Agriculture Advisory Centre in Radom

16 agriculture advisory centres

Local advisors

48 demofarms

1394 trained person (890 farmers)

4 Agricultural Institutes

Ministry of Agriculture & Rural Development
National Council of Water Management
Main Inspectorate for Environmental Protection

KZGW
Krajowy Zarząd Gospodarki Wodnej

Baltic Deal
Cooperation results

WHAT HAVE RECEIVED...

Researcher
- Good contact with farmers
- Crop rotation data
- Crop yield
- Animal production
- Total output
- Total input
- Technology data
- Soil content
- Water pollution
- Manure handling
- Feedback

Advisor
- Production data
- Advisory tools
- Agri-environmental measures
- Total output
- Place for workshops
- Guides
- Manuals
- Web page
- Information and news from abroad

Farmer
- Free of charge soil analyze
- Fertilization recomendation
- Agri-environmental measures advisory
- Nutrient balances
- On-farm water contamination info
- Free of charge advice
- Manuals
- Contacts and news from other farmers and abroad

Innovation Platform?
Supporting farmers to reduce nutrient losses from their farms, while maintaining high production and competitiveness.
AIM

DESCRIPTION

PROVEN EFFECT

THE ECONOMIC IMPORTANCE
Storage and use of slurry
Catch crops

Spring  Summer  Autumn  Winter

Nitrate in the plant rhizosphere
Nitrate from fertiliser and plant residues
Plants use nitrate
Nitrate released from plant residues
Leaching

without catch crop
with catch crop
Leaching of nitrate
Tillage techniques
Maintaining good soil structure

Primary purpose

Soil structure strongly affects crop growth, but also the risk of nutrient leaching and erosion. If the structure is poor plants do not grow well, which decreases nutrient uptake. Moreover, poor soil structure increases the risk of surface run-off and erosion. Besides the environmental risks, poor soil structure also affects farm finances, e.g. in the form of yield losses.

Description

Forming of soil structure

Individual soil particles, the way they are assembled as aggregates and soil pores between them define the soil structure. Clay particles and some humus substances play an important role in the formation of granular structure and electric charges also play a role. Single-grain structure, where the individual soil particles do not bind together, is typical for coarse soils, e.g. sandy soils. The structure of fine soils can be massive, i.e. single particles form a cohesive mass.

I

1. Single-grain

II

2. Granular

3. Massive
Tillage

Category: Soil structure and tillage
Tags: Soil structure | Tillage

Purpose

The main objective of tillage is to prepare a good seedbed and ensure good subsequent plant growth. Tillage is also needed when different substances like lime, manure or crop residues are to be mixed into the topsoil.

Various practices are used from no-tillage to conventional tillage with plough. There is no method that is best in all situations, so tillage method should be selected based on e.g. soil properties, crop type and environmental effects of different methods.

Description

Different tillage practices

There are many tillage practices in addition to conventional ploughing and they can be classified and defined in many ways. The main point is the volume of soil treated during tillage.

Conservation tillage can be defined as e.g. “a system of crop production with little, if any, tillage that maintains at least 30% of the soil surface covered by residues after planting”.

No-till and direct drilling systems are forms of conservation tillage. In these systems...
Composting
Guidelines for agri-environmental practices for farmers and advisors
http://www.balticdeal.eu/measures/selection_measures/

Recommendations for the introduction of new agri-environmental practices

Guidelines for the farming on the catchment area
WHAT HAS BEEN ACHIEVED?

Creation of a strong co-operative platform between researchers, farmers’ organizations and advisory organizations around the Baltic Sea.

Development of a common strategy for the Baltic Sea region to strengthen the agricultural advisory services.

Establishment of a demonstration farm network of more than 100 farms surrounding the Baltic Sea.

Demonstration of cost-effective and sustainable measures for farmers.

A significant increase in the speed of innovation and technology diffusion across national boundaries.
## HOW MUCH – HOW MANY

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>2500</td>
<td>FARMERS REACHED</td>
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<tr>
<td>1800</td>
<td>MEASURES AND INVESTMENTS MADE OR PLANNED</td>
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<tr>
<td>300</td>
<td>EVENTS</td>
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<td>300</td>
<td>ADVISORS</td>
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<td>117</td>
<td>DEMONSTRATION FARMS</td>
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<td>50</td>
<td>AGRI-ENVIRONMENTAL MEASURES IN A TOOLBOX</td>
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<td>7</td>
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<td>ADVISORY ORGANIZATIONS</td>
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<tr>
<td>4</td>
<td>MILLION EUROS</td>
</tr>
<tr>
<td>3</td>
<td>YEARS: 2010–2013</td>
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<tr>
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<td>FARMERS’ ORGANIZATIONS</td>
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1 MISSION: LESS NUTRIENTS FROM FARMS INTO THE BALTIC SEA
Website

• For example
http://www.balticdeal.eu/measure/maintaining-good-soil-structure/
Thank You