

GREPPA NÄRINGEN - FOCUS ON NUTRIENTS

Presenter

Federation of Swedish Farmers (LRF)

Description

Main effects of climate change consist of more extreme weather, storms, droughts, flooding and high temperatures. Winter crops are moving north in Sweden. There is a higher impact from fungus and insects.

Big, harsh debate on farmers responsibility for climate change, while there is a big lack of proportion towards other emissions. The meat sector is especially in focus and accused of emissions. The debate affects the belief in the future for farming and will to invest.

"Greppa näringen" or "Focus on Nutrients" is the largest single commitment in Sweden to reduce losses of nutrients to air and water from livestock and crop production. The project also focuses on the safe use of crop protection products. Focus on Nutrients is a joint venture between The Swedish Board of Agriculture, The County Administration Boards, The Federation of Swedish Farmers and a number of companies in the farming business.

The purpose of the project is to:

- Reduce losses of the greenhouse gases: nitrous oxide, methane and carbon dioxide;
- Reduce losses of nitrate from farmland;
- Reduce ammonia emissions from manure;
- Reduce losses of phosphorus from farmland;
- Avoid losses of pesticides into surface and groundwater;
- Increase energy efficiency on farms.

In order to fulfil these objectives, the project focuses on increasing nutrient management efficiency by increasing awareness and knowledge. The farmer is in focus and therefore the core of the project is education and individual on-farm advisory visits.



Photo credits: Mårten Svensson (from website of the project <http://greppa.nu/om-greppa/om-projektet/in-english.html>)

Results

- Soil compaction results:
 - Awareness of soil compaction has increased;
 - The proportion of farmers who customize tire pressure and tires has doubled from 40% to 80%.
- Results of feed adaptation:
 - In the dairy farms, the proportion of farmers who take into account their forage analysis has increased from 62% to 92%;
 - Farmers who are actively working to reduce feed losses have increased from 49% to 92% .
- Wetland Advisory:
 - Over the years, Greppa Näringen advisers have made over 3500 wetland advisory services in Sweden;
 - Greppa Näringen has supported the construction of around 500 wetlands.
- Reduce nitrogen losses:
 - Plantation farms reduced by 7.5 kilos of nitrogen per hectare (-17%);
 - Pig farms reduced by 13.5 kg of nitrogen per hectare (-13%) ;
 - Dairy farms reduced by 8.6 kg of nitrogen per hectare (-6%).
- Reduced phosphorus losses:
 - Farm with plant production;
 - Phosphorus deficit has increased from -1.4 to -4 kg of phosphorus per hectare.
- Pig farms:
 - The surplus of phosphorus has decreased from about 8 kg of phosphorus per hectare to just over 1 kg.
- Dairy farms:
 - The surplus of phosphorus has decreased from about 5 kg of phosphorus per hectare to 3 kg.

Climate smartness

GREPPA NÄRINGEN initiative is highly focused on reducing GHG emissions, that is, mitigation pillar of climate-smart agriculture. As per the figures shown, it has resulted in outstanding benefits. Adaptation is also being addressed through the nutrient perspective of soils and forages themselves. Capacity building component is also highlighted in this initiative, which is an essential practice for farmers to create awareness, understanding the implications of management practices in the environment and in their overall productivity. Knowledge exchanges may be a good way to scale the lessons learned through this experience.

It would be important to consider the feasibility of including silvo-pastoral systems that may reduce animal stress during summer season.