

CLIMATE SMART AGRICULTURE CALCULATIONS

Presenter

Norwegian Farmers' Union

Description

Farmers experience more rain and more intensive rain, with avalanches. They experience more of the same type of weather for longer periods of time.

The weather is also "wilder" and more extreme weather events occur, including droughts. For example, during the Summer of 2018 farmers in many parts of Norway experienced extreme drought. Changes in the ecosystems also affects the farmer. Norwegian farmers' Union is about to start a program called climate smart agriculture, where farmers get help to calculate climate emissions on his/her farm and how they can be reduced. The program calculates emissions, benchmarks towards other productions and simulates which measures are most efficient. The aim is to adopt better systems for documentation and calculation of potential for reduced climate footprint for each farm for better sharing of knowledge. In 2017, a hunt for 100 climate solutions in agriculture started as part of the project. Use of biodiesel in tractors, breeding more climate friendly cows and climate smart trenching are some of the solutions identified.

Training of climate counsellors has also been run all through the country. The project is owned by a coop called Landbrukets Klimaselskap AS (Agriculture's climate company). The coop is owned by 15 Norwegian agricultural companies, organisations and coops. It is financed by the owners and government funds.

Norwegian farmers are already seeing the challenges with a changing climate. They have to cope with the change in weather conditions. Farmers need to improve the soil quality and preserve ecosystems. They need to get more control on the inputs on the farm, and to build up necessary capacity to sow and harvest in a shorter period of good weather. There are huge differences from farm to farm about which climate measures will be most efficient. Through the climate smart project, farmers will get help to measure his emissions and find out how to run the farm more climate efficiently.

Results

The expected outcome of the climate smart agriculture project is lower climate gas emissions from the farm by getting a better overview of where the emissions come from and how emissions can be cut in the agricultural sector. The farmer will get tools to run the farm more climate friendly through the project.

Climate smartness

It is worth highlighting that this initiative is led by a national producers' association, which may enable its scaling up and out, and ensures benefits to a larger group of farmers. As described in the project profile, the approach focuses on reducing GHG emissions, which constitutes one of the main pillars of CSA. Moreover, practices promoted within the project have also a significant contribution to adaptation to climate change of agricultural systems, which makes the project even more climate-smart.

Building capacity of climate advisors is a very important aspect of the project as farmers can refer to them to assess their climate behaviour. Methodologies are available in order to share climate information to farmers, so they can understand the linkages between climate and crops, which will allow farmers a better-informed decision-making processes on their agricultural activities. It might also be useful to monitor the impact of the practices implemented in terms of income generation; therefore, the project could also determine if it is also contributing to the CSA pillar on productivity.