

Topic: Projecting risks and opportunities for farming and food production in regional case studies

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How to achieve higher yield levels in North Savo – means and challenges indicated by farmers.

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Sustainable intensification of Nordic farming systems is seen as an effective adaptation and mitigation strategy. Two stakeholder workshops targeting sustainable farming under changing climate were arranged in North Savo, Finland in 2014 and 2016 with farmers and other regional agricultural stakeholder participants. Workshop outcomes are presented and discussed.

The most important changes in the operational environment of farms in North Savo during past decades, identified by the participants, were related to agricultural policies and subsidy systems. They were seen strongly supporting extensification and undermining motivation for yield improvements. Long-term trends in weather patterns were not taken up by farmers. The most important obstacles for higher yields mentioned were soil fertility, particularly in relation to soil compaction and insufficient drainage, but also low motivation for improvements and lack of know-how.

Workshop participants identified improving soil fertility with drainage and liming, improved crop rotations, better sowing techniques including overseeding, careful selection of cultivars and forage grass mixtures as important means for higher crop yields. Suggested solutions for improving both crop yields and farm economy were to 1) increase collaboration among farmers, 2) focus only on the most productive fields and 3) actively develop farming skills.

The workshops provided important perspectives on future farming development, as well as needed developments of model-based integrated assessments which must reliably reflect the impacts of different management actions on yields, environment and farm economy. The challenge is also to correctly describe the impacts of increasing collaboration and cost sharing among farmers.