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## THE IMPACT OF AGRICULTURAL SUBSIDIES ON THE ECONOMIC SUSTAINABILITY OF ESTONIAN FARMS

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#### Background

- With the 2014-2020 CAP reform some important changes have been introduced. The most important of these is probably the new system of direct payments which replaced the SPS (and the SAPS in new Member States). The new system of direct payments responds to different goals of the CAP: the basic component of the CAP represents a support to the farmers' income and the other component is 'green payment'.
- The new CAP would be directed toward improving the economic viability and sustainability performance of all farms, irrespective of size or farming production type, through development and implementation of specific environmental and social sustainability-focused practices.
- This presentation will provide an overview of the economic results of Estonian farms with special reference to sustainability using latest available data from national FADN database.

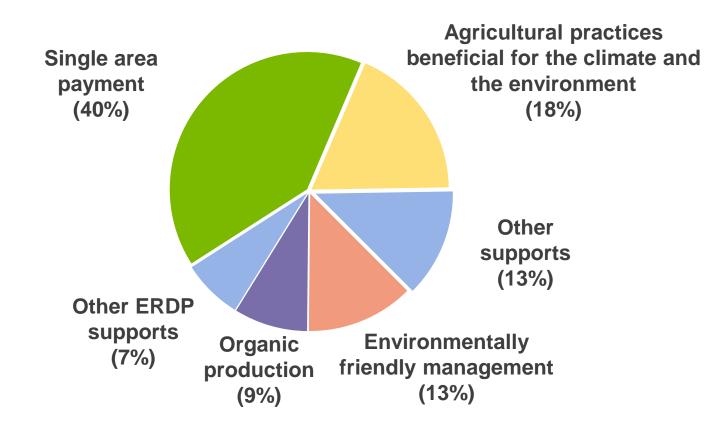
#### Objective

- The scope of this evaluation is to examine the effects of the direct supports and RDP measures (excl subsidies on investments) on the share of economically sustainable farms in Estonia during the period 2010-2015.
- This presentation will provide an overview of the effect of a change in the direct supports (single area payment and payment for agricultural practices beneficial for the climate and the environment (hereinafter greening payment)) on the share of economically sustainable farms in field crops type of farming by land use and in dairy type of farming by herd size in year 2015.
- This presentation will provide an overview of the effect of a change in the total output (in the price of agricultural products) on the share of economically sustainable farms in field crops type of farming by land use and in dairy type of farming by herd size in year 2015.

#### Approach

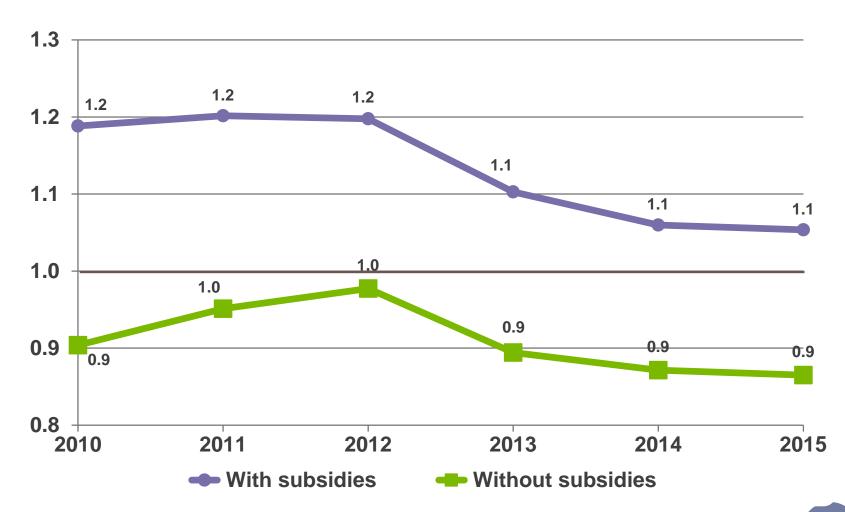
- Sustainable farms defined on the bases of the Farm Net Value Added (FNVA) produced on the farm per AWU.
- FNVA=Total Output Total intermediate consumption + Balance current subsidies & taxes – Depreciation
- To be noted that FNVA does not take into account off-farm income, as the relevant data are not collected in FADN.
- A farm is classified as economically sustainable if the FNVA per AWU is at least 90% of average labour cost per year in a particular county and provides a 5 per cent return on the capital invested in non-land assets, i.e. buildings, machinery and breeding livestock.
- This analysis provides a greater understanding of the factors affecting cross-country evaluation of viability and sustainability, and the policy instruments that could improve viability levels.

#### Structure of subsidies (excl. on investments), 2015



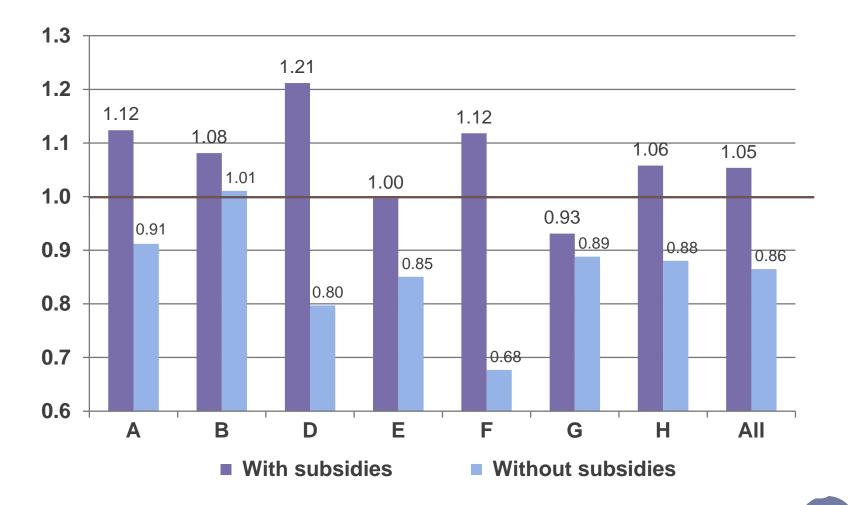
ERDP – Estonian Rural Development Plan

#### Output-Input ratio, 2010-2015



The ratio of total output to total inputs shows total output in euros produced per euro spent on inputs. The ratio of total output to total inputs below one shows that total output does not cover the cost of total inputs.

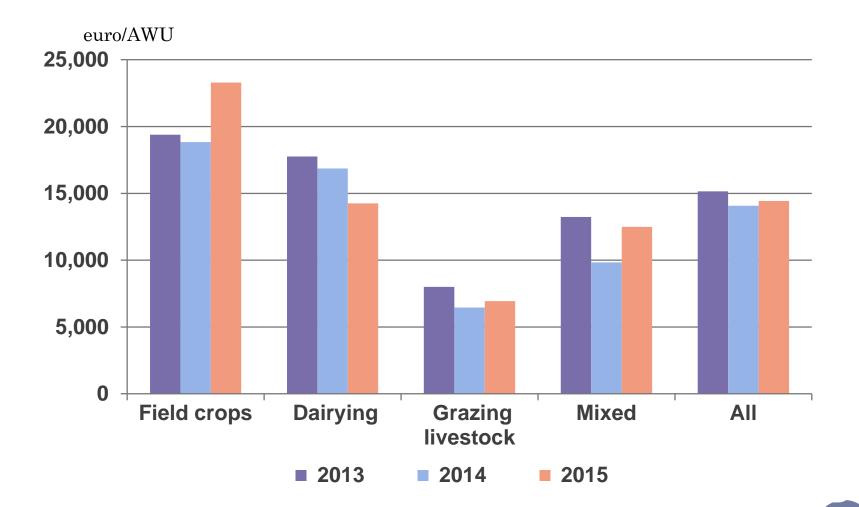
#### **Output-Input ratio by type of farming, 2015**



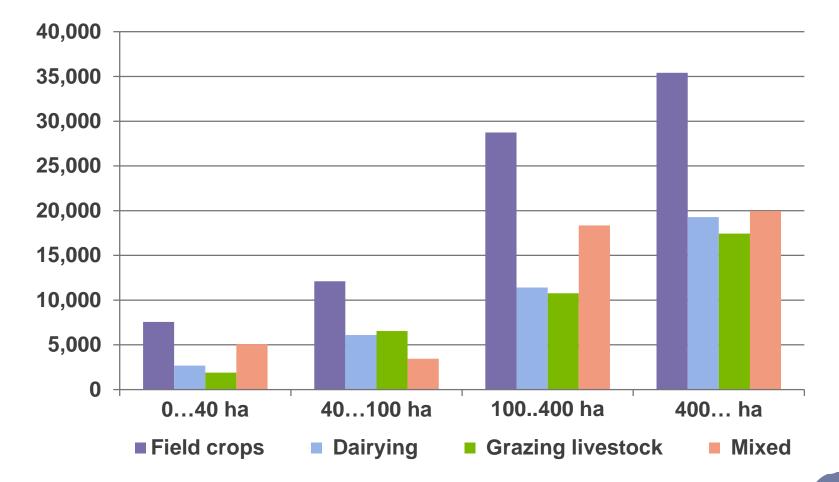
A - Field crops; B – Horticulture; D - Permanent crops; E – Dairying;

F - Grazing livestock; G – Granivores; H – Mixed

#### FNVA per AWU by main types of farming, 2013-2015

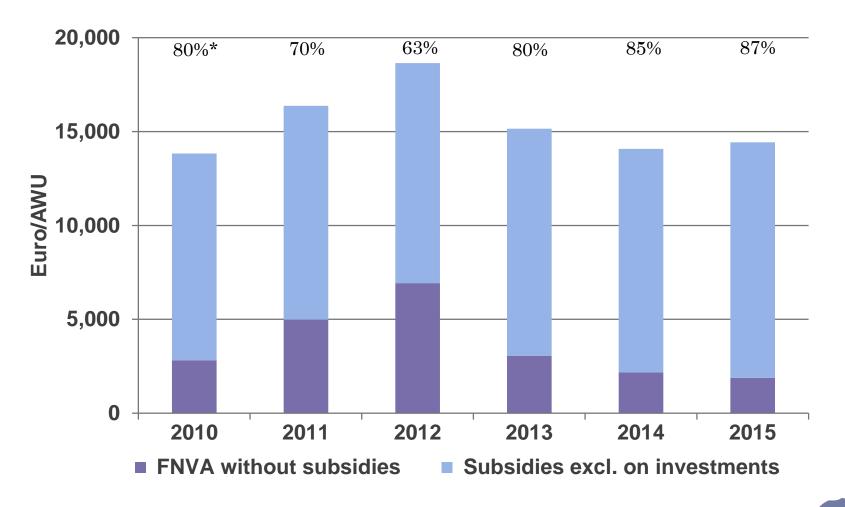


# FNVA per AWU by main types of farming and land use, 2015



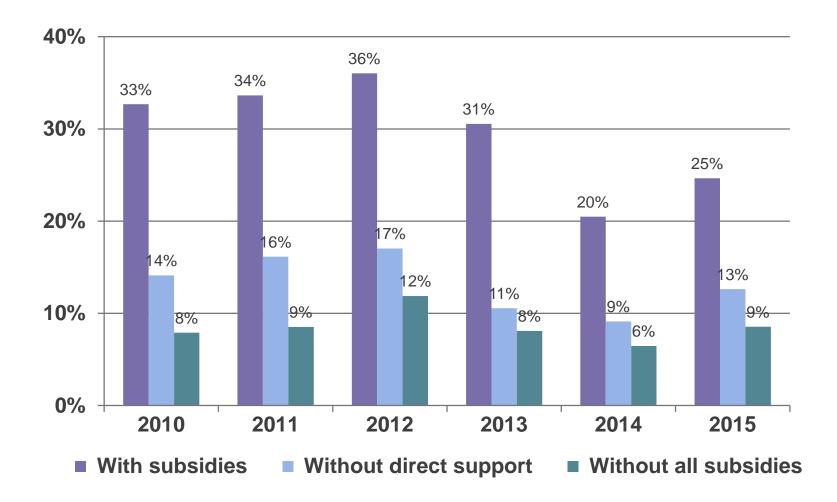
Farm net value added (FNVA) is obtained by deducting total intermediate consumption (farmspecific costs and overheads) and depreciation from total output and public support. When expressed per annual work unit (AWU) it takes into account differences in the labour force to be remunerated per holding.

#### FNVA per AWU, 2010-2015



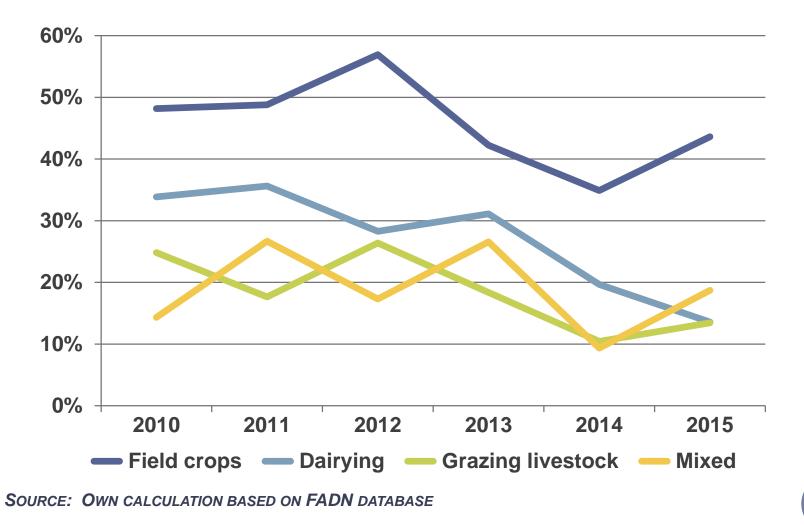
<sup>\*</sup> The share of subsidies in FNVA

#### Share of economically sustainable farms, 2010-2015

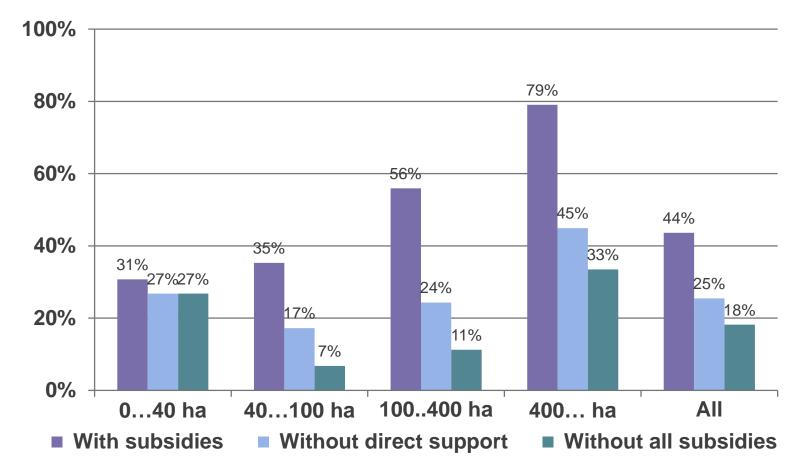


SOURCE: OWN CALCULATION BASED ON FADN DATABASE

## Share of economically sustainable farms by main types of farming, 2011-2015

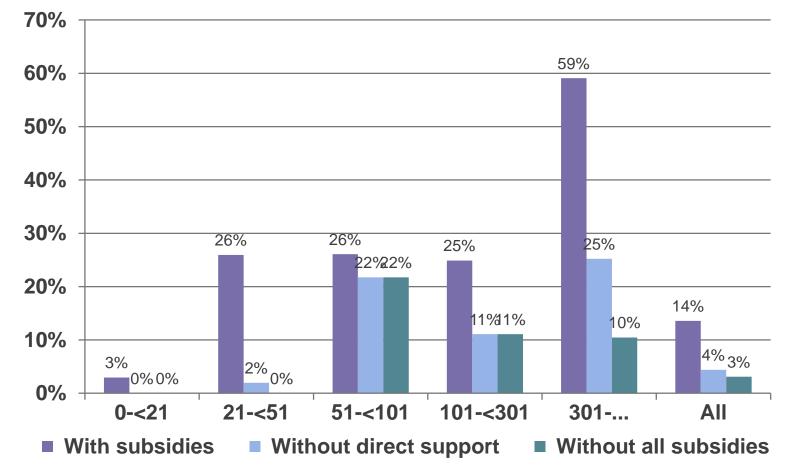


# Share of economically sustainable farms in field crops type of farming by land use, 2015



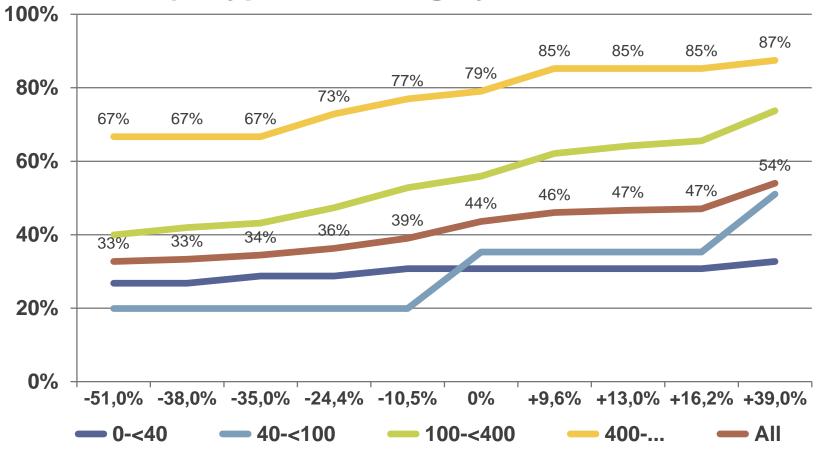
SOURCE: OWN CALCULATION BASED ON FADN DATABASE

# Share of economically sustainable farms in dairy type of farming by herd size, 2015



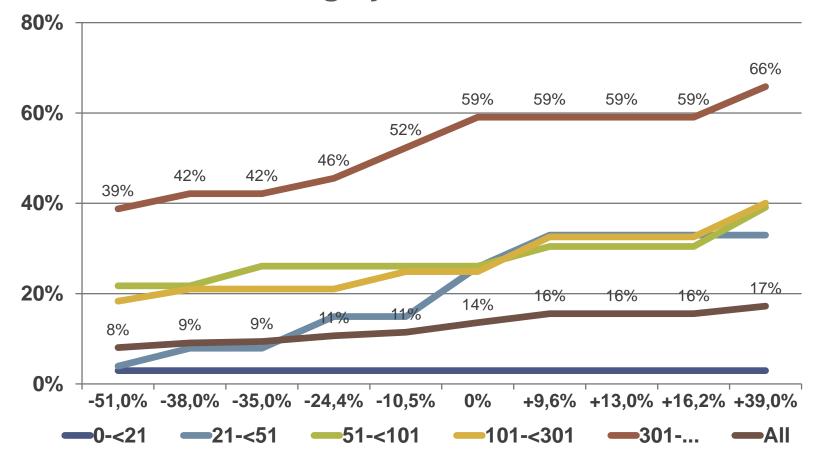
SOURCE: OWN CALCULATION BASED ON FADN DATABASE

#### The effect of a change in the direct supports on the share of economically sustainable farms in field crops type of farming by land use, 2015



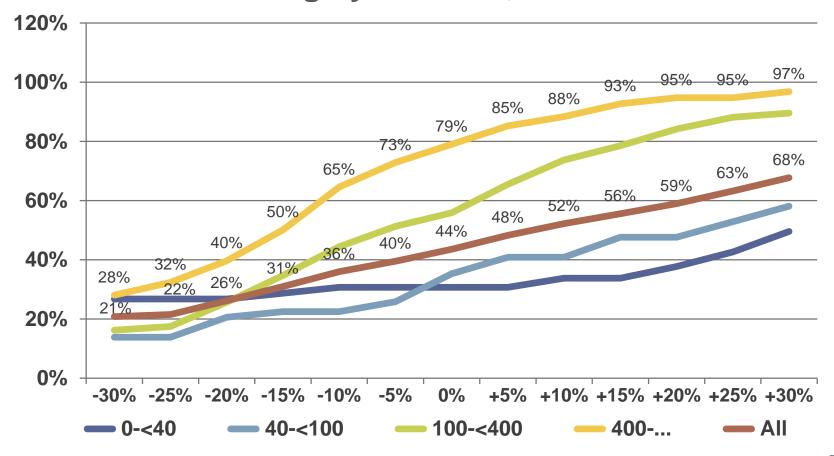
SOURCE: OWN CALCULATION BASED ON FADN DATABASE

# The effect of a change in the direct supports on the share of economically sustainable farms in dairy type of farming by herd size, 2015



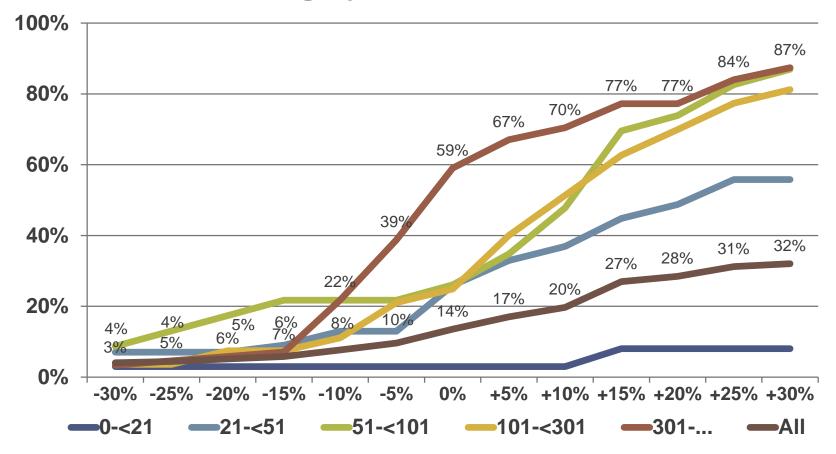
SOURCE: OWN CALCULATION BASED ON FADN DATABASE

#### The effect of a change in the total output on the share of economically sustainable farms in field crops type of farming by land use, 2015



SOURCE: OWN CALCULATION BASED ON FADN DATABASE

#### The effect of a change in the total output on the share of economically sustainable farms in dairy type of farming by herd size, 2015



SOURCE: OWN CALCULATION BASED ON FADN DATABASE

## **Conclusions (1)**

- In larger size groups, the share of economically sustainable farms is higher if compared to smaller ones.
- The increase or decrease in the level of direct payments would have a relatively higher positive or negative impact on farms in the middle size groups.
- Reducing direct payments would not significantly reduce the economic sustainability of farms in the higher size groups. Changes in the price of agricultural products would have a significantly higher impact on the economic sustainability of farms in the higher size groups.
- Increasing direct payments would not significantly improve the economic sustainability of smaller farms. Also, the increase in production prices does not have a significant effect on their economic sustainability.

### **Conclusions (2)**

- Therefore, in the long run, economically unsustainable producers must either leave the sector or restructure their activities in such a way that their economic sustainability will improve.
- The maintenance of economically unsustainable producers may result from other household income e.g. income from another source of employment, social security benefits, rental income, interest or dividend income etc. Therefore, further information on household income would enable analysis of the relative impact of other incomes on the economic viability.
- In the long term, in order to ensure the economic sustainability of Estonian farmers, more attention should be paid to policies that help achieve higher producer prices and reduce their high volatility (joint activities, food industry development, innovation, product development, marketing and distribution, supply chain transparency, risk management measures).