

# IMPROVING EFFICIENCY OF THE SAMPLE DESIGN IN THE FINNISH HORTICULTURAL SURVEY

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The Finnish horticultural survey has been conducted annually as a total survey with a threshold on standard economic output (SO) of the horticultural enterprises. The standard output of an agricultural product (SO), is defined as the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock. Traditionally the threshold has been relatively low in the horticultural survey in comparison to the average wages of the household for example. Therefore, the impact of the small horticultural enterprises for the final survey estimates is studied including their impact on the survey costs and on the quality of the survey data.

In this paper, we investigate the impact of increasing the threshold both on the quality and coverage of the final estimates as well as the impacts on the survey cost component. With the sensitivity analysis using previous survey data, we can present the detection of the optimal threshold on the standard economic output to balance the survey costs and the quality criteria of the survey defined in the EU regulation survey for permanent crops. We also present the method of deriving and monitoring the development of the standard economic output for the horticultural enterprises in the sampling frame.

The horticultural survey uses both the auxiliary data from statistical farm and horticultural register and collects directly information about the production of horticultural products, as well as on the production and the use of energy at the horticultural enterprises. To reduce the survey costs, and to improve the quality of the survey data, the sampling design of the survey is reviewed in detail. The data collection of the horticultural survey uses mixed-mode approach; using register data, web-survey, telephone interviews and accepts also paper questionnaires. With the increase of the thresholds we can also analyse the increase in the web-survey response rate. Thus it is expected that larger horticultural enterprises tend to respond through the web-survey more likely; while those who are interviewed tend to be on average smaller enterprises. Therefore, we will also present the impact of the efficient sample design on the expected improvement on the timeliness of the survey data.

## References

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