## Non-response in the Survey of Agriculture and Forestry Income in Finland

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## Abstract

The agricultural enterprise and income statistics describe farm incomes subject to taxation, and the expenditure, assets and debts of farms, as well as changes in the fixed assets of farms. People co-operate in surveys more willingly in the countryside than in cities, so non-response is smaller in the domain of farmers than in the whole population, especially in mail surveys. An exceptional feature here was large item non-response because large farms seemed to have difficulties in filling in the questionnaire with detailed data on their sales of agricultural products or expenditure. As can be seen from the table below the item non-response group had the highest incomes.

	Distribution %		Total income 1000 €	
	2004	2005	2004	2005
Respondents	43	41	92	93
Item non-response	36	35	107	115
Non-response	21	24	65	70

The age group of 53 to 67-year-olds had the highest response rates, 45% in 2004 and 42% in 2005, while the oldest age group had the highest non-response rates, 28-30%.

Income data were collected from the Tax Register and production lines were received form the Farm Register, which made it possible to use imputation to complete partially filled in questionnaires. In most cases, simple ratio imputation was used but for farmers with several different products multiple imputation was applied, and this enabled us to include the farmers in the item non-response group as respondents in the final data. Response behaviour was studied for the panel part in which half of the sample remained the same in successive years. The farmers in the response, item non-response or non-response groups were likely to belong to the same group in the subsequent year. The farmers who belonged to the item nonresponse group in both years had the highest incomes. The data collection will be automated by building the questionnaire into farm accounting programs, which will decrease the farmers' response burden in future, and automation of the questionnaire sending via the Internet is expected to enhance the number of respondents.