

# SURVEY ON TOTAL YIELD OF LATE CROPS, FRUIT AND GRAPES

## LEGAL BASIS

The survey is regulated by the Regulation on Carrying out Certain Statistical Surveys ("Official Gazette" No 110/2009) in line with the Law on Official Statistics ("Official Statistics of RS", No 104/2009), as well as according to the Strategy for Official Statistics of the Republic of Serbia over 2009-2012.

## METHODOLOGICAL BASIS

**The survey aims to** collect data on realized yields of late crops (all major crops, interplanting crops and stubble crops), late fruit, grapes, as well as on fruit and grape processing. Information to be provided about crops refers to harvested areas, average yield and total realized yields. As for fruit it relates to the number of productive trees, average yield per tree and total yield. Regarding grapes, the number of productive vines, average yield per vine and total yield are to be recorded. The survey is carried out at the end of harvest.

**Reporting units** are agricultural legal units, farm cooperatives, units of other agricultural legal units, and estimation areas for family holdings (in principle, one estimation area is one or more cadastre municipalities, which depends on the share of plant farming, size of the cadastre municipality, etc.).

Data of this survey cover harvested areas and realized yield of late crops, the number of productive trees (trees of continuous type, individual trees, trees alongside roads, near houses, etc.) and the realized yield of late fruit. They also refer the number of productive vines, realized yield of grapes and fruit processed for the purpose of making brandy (strong and soft), marmalade and prunes, as well as to grapes processed in order to make wine and grappa of all agricultural legal units, farm cooperatives, units of other agricultural legal units and family holdings.

Data for legal units and farm cooperatives are collected by means of regular annual surveys on the basis of accounting and other records.

Regarding family holdings, data on harvested areas and realized yields of late crops are estimates based on the questionnaire about sown areas in spring (PO-22b). Estimators are requested to establish, the best they can, the average yield of crops per unit of area, average yield of fruit per productive tree and the average yield of grapes per productive vine. Yields are estimated by direct observation of crops, fruit trees and vineyards, the appraisers making her/his opinion based on plant form, age, size of ears, fruit, etc., as well as on plant density for which she/he takes into account the quality and fertility of the land, applied agricultural method, influence of plant diseases and pests, weather in vegetation period (frost, wind, flood, etc.). She/he adds to her/his remarks the opinions of agricultural specialists and other assistants in order to have the estimates closest to reality. Doing so the estimator should take into account all yields from all plots in the estimation area, i.e. both high and low yields. She/he first establishes the average yield per unit of area and then she/he determines the total yield on the basis of the average yield and harvested areas. To estimate early fruit one has to estimate the quantities of mature fruit per productive tree. Fallen off mature fruit, if used for human or animal consumption, or even for processing, are counted in the yield. All productive fruit trees, whether having yielded or not, are taken into account so to have the average yield estimated. To estimate grapes one has to estimate the quantity of mature grapes per productive vine. All productive vines, whether having yielded or not, are taken into account so to have the average yield estimated. For that purpose, a network of approximately 1250 statistical estimators, who provide data for about 4000 appraising areas, being in principle one or more cadastre municipalities. Agricultural specialists or advanced and trained farmers – well acquainted with local conditions, are selected to be statistical appraisers. Statistical bodies keep constant contact with them. This survey is meant to present harvested areas and yields of late crops, the number of productive fruit trees and yield of late fruit as of 10 November.

Aggregated data are published for the levels of municipalities, districts, Vojvodina, Central Serbia and the Republic of Serbia. Personal data are protected by the law.

## Definitions of main concepts:

*Harvested areas* – areas on which crops have been harvested.

*Yield per unit of area (average yield)* – it is calculated by dividing the total production of a crop with the harvested area.

*Total yield* – it is the quantity of crops available at the end of the harvest, i.e. it is the yield of crops shown as yield held in barn of normal humidity minus all losses that have occurred during harvest, and transport.

*Productive trees* – fruit trees which, depending on their maturity, can bear fruit in normal vegetation conditions, whether they have bore fruit or not in the reference year.

*Yield per productive tree (average yield)* – it is calculated by dividing the total yield with the number of productive trees.

*Total yield of fruit* – it is shown as the yield of mature fruit, taking into account fallen off trees is they are used for human and animal consumption or for processing.

*Productive vines* – vines which, depending on their maturity, can bear grapes in normal vegetation conditions, whether they have bore grapes or not in the reference year.

*Yield per productive vine (average yield)* – it is calculated by dividing the total yield with the number of productive vines.

*Total yield of grapes* – it is shown as the yield of mature grapes of all productive vines.

The survey will be harmonized with EU standards after the Census of Agriculture, which is in the course of preparation.

## DESCRIPTION OF THE SURVEY MANAGEMENT

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The Statistical Office of the Republic of Serbia is the producer of the mentioned data.

Data are collected and entered in regional offices, processed, edited and presented in tables in the Division of Agriculture and Forestry.

Data are collected by means of questionnaires, which are sent by the Statistical Office of the Republic of Serbia, via its regional offices, to agricultural legal units, farm cooperatives and units of other agricultural legal units (PO-33a) and to statistical estimators (PO-33b). Short explanatory notes as to how to fill in the questionnaire are given in the questionnaire (PO-33a), while statistical estimators use short methodological notes of the statistics of plant farming to fill in PO-33b.

Data are to be sent to the Office not later than 20 November for preliminary results, which are published on 25 November in the statistical release PO-17, and for final results not later than 5 December, which processing is to be finalized up to 15 December.

Data are published in publications „Statistical Yearbook of Serbia“, „Municipalities in Serbia“, bulleting „Agriculture“, and on the Internet site of the Office ([www.stat.gov.rs](http://www.stat.gov.rs)).

## SURVEY TOOLS

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**Questionnaire** – annexed

**Methodological notes**

The nomenclature complies with the “Classification of Activities” (CA) and the nomenclature „Products and Services in Agriculture, Hunting, Forestry and Fishing“.