REPUBLIC OF SERBIA
Statistical Office of the Republic of Serbia

Questionnaire VOD-4

Law on Official Statistics,"Official Gazette" ,No 104/2009

Code of the survey: 11040

SURVEY
on irrigation in 2015

The obligation for provide data is laid down in Article 26, and penalty provisions in Article 52 of the Law on Official Statistics ("Official Gazette of RS", No 104/2009).
Data will be used for statistical purposes only and will not be published in form of individual data. All data are subject to confidentiality.

DATA ON THE REPORTING UNIT:

1. Company name _____

_____
(name of the part of the legal person – local incorporated unit)

2. Registration number _____ | | | | | | | | |

Sequence number of the part of the legal person - local incorporated unit _____ | | | | |

3. Tax identification number _____ | | | | | | | | | |

4. Activity _____ | | | | |

5. Municipality _____ | | | | | |

Settlement (locality) _____ Telephone number _____ | | | | | | |

Address _____ number _____

6. Type of irrigation system

stationary 1

Semi-stationary 2

mobile 3
(tick the number of the corresponding irrigation system)

7. Number of system users _____ | |

Sequence number of the regional office *(To be filled in by statistics)* | |

Sequence number (of the form) from the address book *(To be filled in by statistics)* | | |

LIST OF BASINS FOR THE TERRITORY OF THE REPUBLIC OF SERBIA

Dunav	001	Velika Morava	138	Pek	073
Tisa	695	Juzna Morava	345	Timok	002
Sava	504	Nisava	365	Drim	801
Drina	592	Zapadna Morava	190	Aegean sea	900
Lim	619	Ibar	221		
Kolulbara	517	Mlava	117		

Remarks:

on _____ 2015

Filled in by: Head:

_____ (Seal) _____
(first and last name) (first and last name)

Telephone number: | | | | / | | | | | | | | |
(Call sign compulsory)

e – mail _____

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www.stat.gov.rs

Irrigation in 2015 – Questionnaire VOD – 4 / 2015

Table 1. Water sources for irrigation

Code and name of the water source:				
To be filled in by statistics	Code and name of the basin:			
Water abstraction		Abstraction capacity, ℓ/s		Abstracted water, thous. m^3
		Gravity	With pumps	
		1	2	3
1.	Total			
2.	From underground waters			
3.	From rivers			
4.	From lakes			
5.	From accumulations			
6.	From water supply systems	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	

Table 2 Facilities and devices for irrigation

Irrigation network		Length in km	
		Principal	Distribution
		1	2
1.	Canals		
2.	Pipelines		
	Pumping stations for irrigation		
3.	Number of pumping stations (buildings)		
4.	Number of pumping aggregates (including mobile ones)		
5.	Total power capacity, in kW (1KS = 0,7355 kW)		
6.	Total capacity of all pumps, ℓ/s		
	Sprinkler aggregates		
7.	Number of sprinklers		
8.	Total capacity of all sprinklers, ℓ/s		
9.	Total length of sprinkler spraying wings, m		
10.	Utilized length of sprinkler spraying wings, m		

Table 3 Area covered by irrigation system

1.	Total utilized agricultural area covered by irrigation system, ha	
2.	Of which: irrigated area, ha	

Table 4 Irrigated areas and water consumption

Types of crops / plantation		Total utilized agricultural area covered by irrigation system, ha	Total irrigated area, ha		Irrigated area by type of irrigation applied by enterprises and farm cooperatives, ha			Total annual water consumption[5]	Total water losses
			total	Of which: stubble sowing	surface	sprinkling	drop-by-drop	m^3	m^3
		1	2	3	4	5	6	7	8
1.	**TOTAL**								
2.	Cereals for grain production, except corn [1]								
3.	Corn[1]								
4.	Pulses[1]								
5.	Sugar beet								
6.	Sunflower [1]								
7.	Soy[1]								
8.	Rapeseed [1]								
9.	Other industrial crops								
10.	Corn for silage								
11.	Fodder beet								
12.	Temporary grass								
13.	Other fodder crops								
14.	Potatoes (including early)[1]								
15.	Fresh vegetables, melons and strawberries (in open field)								
16.	Fresh vegetables, melons and strawberries under protective cover[4]								
17.	Other crops on arable land and gardens [2]								
18.	Meadows and pastures								
19.	Orchards								
20.	Vineyards								
21.	Other permanent crops[3] [5] in the open field								
22.	Other permanent crops [3] under protective cover[4]								

[1] Including areas for the production of seed for sale.
[2] Other crops on arable land and gardens include flowers, seeds and seedlings for sale, etc.
[3] Other permanent crops consists nurseries, willow groves, etc.
[4] By protected area means the greenhouses made of glass or rigid or flexible plastic.
[5] If it is not possible to estimate the volume of water for irrigation, there is a table below with data on possible number of irrigations and amounts of irrigation water per hectare depending on the type of crops within one average farm year. Due to different growing conditions for other permanent crops in the open fields, there is no estimate of the average amount of water for irrigation. If otherwise impossible to determine the amount of water used for irrigation of permanent crops in the open fields, it is recommended to use an estimate relating to the orchards.

Types of crops / plantation	**Averige number of irrigation**	**Averige amount of irrigation, m^3/ha**
Corn	2-3	300-500
Other cereals	1-2	300-500
Pulses	1	250-300
Potato	2-5	350-600
Shugar beet	2-3	250-400
Sunflower	2-3	250-400
Vegetable, melons and strawberries	2-7	250-500
Meadows, pastures and и plants harvested green	2-6	250-500
Other crops on arable land and gardens	2-6	250-500
Orchards	1-5	400-500
Vineyards	1-3	350-500

(Source: Pilot Census of Agriculture 2011.)

EXPLANATORY NOTES
on how to fill in the annual questionnaire on irrigation

The Survey on Irrigation serves the purpose of collecting data on irrigation water abstraction, facilities and devices for irrigation, area capable for irrigation, as well as on irrigated areas and realized yields thereof.

The survey covers all enterprises according to the *Law on Waters* („Official Gazette of RS", No 30/10) managing the irrigation systems and devices. In order to ensure conditions for various types of water use (irrigation systems, etc.), interested persons on the part of the river basin district or the drainage area or part, may establish water users associations by a special law. Report submitted by enterprises and activities are carried out according to the Classification of Activities from the sector 01 - Agricultural production, fishing and services, whose activity is exploitation of water for agriculture.

Available records are used to fill in the questionnaire. If there is any documentation lack, the competent service in the enterprise/farm cooperative makes estimation.

Question 5: Type of the irrigation system – tick the code of the corresponding type of the irrigation system: stationary (fixed), semi-stationary (semi-fixed) or mobile. Fixed systems are rare. With semi-fixed systems the pumping aggregates are fixed. With mobile systems pumping aggregates are moveable.

Table 1: Sources of irrigation water – indicate the installed abstraction capacity ℓ/s (gravity and by means of pumps) and total water quantities in thous. m^3 being abstracted during the year from underground and/or surface waters: rivers (springs and irrigation canals), lakes, accumulations and water supply systems. Methods of water abstraction may be: gravity abstraction where water is removed from other sources, combined, so-called gravity-thrust water abstraction. Water is abstracted from one, several same or different sources by type and is conveyed to the place where it is transformed into soil moisture.

Name of the source - basin – indicate the name of the river, accumulation or lake from which irrigation water is abstracted, as well as the name and code of the pertaining basin from the list of basins provided on the first page of the questionnaire.

River basin is a river with all its tributaries if they are not counted as a separate basin. Otherwise only the direct tributary of the corresponding river is shown.

Table 2: Facilities and devices for irrigation - for the irrigation network the length in kilometers of principal and distribution canals and pipelines is to be indicated.

For **pumping stations** for irrigation the number of pumping stations, aggregates, pumps capacity in ℓ/s and power capacity in kW are to be indicated.

The number of pumping aggregates, pumps – the total number of pumps in stations, including mobile irrigation aggregates, is to be indicated.

Total power capacity – it is to be recorded in kW for all pumps in stations including the power capacity of mobile aggregates. If the power of an engine is expressed in HP, the data should be multiplied by 0.7355 to have it in kW.

Total capacity of all pumps – indicates the installed capacity of all pumps in stations in ℓ/s.

For **sprinklers** indicate data on the total number of sprinklers, their capacity in ℓ/s and the length of spraying wings in m.

Table 3: Area under irrigation system - for the total arable area indicate the area where there are irrigation systems (canals with pertaining facilities and pumping installations) and which can be irrigated with on-the-spot devices, whether it has been irrigated or not. Of the total expressed area, that being irrigated in the reference year is to be indicated separately.

Table 4: Irrigated areas and water consumption - shows data on irrigated land by type of irrigation, the total annual consumption of water for irrigation (for enterprises and farm cooperatives, and / or private holdings), and the total water losses. Data are presented for the total irrigated area by type of crop / plantation. If an area has been irrigated several times in the year, it should be counted only once. The total realized yield on irrigated land should show whether irrigation irrigation has been done with own system or has been sub-contracted.

E-form of the questionnaire with instructions and methodological explanation are available on the website of the Statistical Office: www.stat.gov.rs.