
MONTENEGRO CENSUS OF AGRICULTURE 2010

**METHODOLOGICAL GUIDELINE
FOR ENUMERATION OF FAMILY AGRICULTURE
HOLDINGS**

(Instruction for participants of the census)

Podgorica, 2010

**METHODOLOGICAL GUIDELINE
FOR ENUMERATION OF FAMILY AGRICULTURAL HOLDINGS**

CORRECTIONS:

p. 10

Point 9, the first row, **it should be put:**
From 22. 06. until..

p.14

Point 7., the fourth row, **it should be put:**
To Contractor (instead of state instructor)

p. 21

In the subtitle "**Cereals** ", the second paragraph, row 3 instead 19, **it should be put 20.**

p. 26, in the explanation of the question:

11. TOTAL UTILISED AGRICULTURAL LAND

In the fourth row from up to the bottom **it should be put:**

Total utilised agricultural land represents the sum of agricultural land areas in the kitchen garden (question 5, row 5); arable land (question 6, row 29); vineyard area (question 7, row 4, column 6); orchards (question 8, row 18, column 7; question 8, row 19; question 8, row 22, column 7; question 8, row 23; question 8, row 28, column 7 and question 8, row 29); nurseries (question 9. row 5.), perennial meadows and pastures (question 10, row 3. column 1; question 10, row 3 column 2 and question 10, row 3, column 3.

p. 28, in the last paragraph **it should be put:**

The sum of areas from 1 to 13 is entered in the row 14, column 1, 2 i 3 (total vegetable in the in the kitchen garden, in the open or under protective cover).

p. 45., in the subtitle:

Work on other useful (profitable) activities not directly connected with the holding of entrepreneur (column 10), erase the word: entrepreneur

Preface

The main concept of the Census of Agriculture (hereinafter referred to as the 'Census'), organisation and methodology is based on the experiences of countries in the region that have carried out the census of agriculture, and own experiences from the previously carried out censuses, as well as on the methodology and recommendations of FAO World Programme for the Census of Agriculture 2010, taking into considerations specific characteristics of Montenegro.

The Guideline for Enumeration of Family Agricultural Holdings published by Statistical Office of Montenegro (hereinafter referred to as the 'Monstat') under the collection "Methodological Material" with the Guideline for Enumeration of Business Subjects Engaged in the Agricultural Production forms altogether a methodology for the Census.

The draft of instruments for carrying out of the Census was sent to the working groups (consisted of representatives from the institutions important for creation and management of agricultural policy) and based on their suggestions and recommendations, as well as on the basis of new EU legal frameworks and FAO recommendations 2010 a final set of instruments has been finished. New legal frameworks related to the Census of Agriculture 2010 have been used as a basis for harmonisation with EU standards:

- Regulation (EC) No 1166/2008 of the European Parliament and of the Council of 19 November 2008 on farm structure surveys and the survey on agricultural production methods and repealing Council Regulation (EEC) No 571/88.*
- Handbook on implementing the FSS and SAPM definitions*
- Handbook for typology.*

This Guideline is intended first of all for enumerators, but also for organisers, instructors, and participants in the preparation and carrying out the Census, and they are obliged to use this as a guide in the work and in the activities of the Census they are responsible for, so that the qualitative statistical data can be obtained.

Podgorica, 2010

D I R E C T O R
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Pursuant to Article 14 of the Law on the Implementation of Agricultural Census of Montenegro 2010 (Official Gazette of Montenegro 54/09, 14/10), Statistical Office of Montenegro publishes Methodology for Census of Agriculture.

METHODOLOGICAL GUIDELINE FOR ENUMERATION OF FAMILY AGRICULTURAL HOLDINGS

I GENERAL PART

1. Objective of the Census

Objective of the census of agriculture is to collect the data on:

1. Land resources
2. Livestock resources
3. Agricultural production
4. Agro-technical measures
5. Facilities within holding
6. Organic agriculture
7. Agricultural machinery and equipment
8. Persons engaged in agricultural production
9. Other useful activities linked with holding.

The main objective of the Census is to provide accurate, comprehensive and internationally comparable data on number of family agricultural holdings, area of total land used for agriculture, livestock by type and categories, agro-technical measures, agricultural machinery, etc.

2. Characteristics of the census of agriculture in Montenegro 2010

Universality – census covers total territory of the country, addresses of all households are recorded and all enumeration units at the territory of Montenegro only are covered.

Individual enumeration – all enumeration units defined as the subject of the Census are to be enumerated individually, i.e. individual census forms defined as the content of the Census with all characteristics are to be filled for them.

Simultaneity – all enumeration units shall be enumerated in exactly defined period, defined as the reference moment/reference period.

Single methodology based Census, i.e. it is based on Single definitions and classifications of units and their characteristics, as well as on single program data processing and publishing of results.

Data protection – legal obligation of every participant is to protect the confidentiality of collected data in accordance with the Law on the Implementation of Agricultural Census 2010 and Law on Statistics and Statistical System of Montenegro.

3. Meaning of certain items used in this Guideline

1. **“Household”** is any family or other community of persons living together and spending their income together in covering their elementary life necessities (housing, food, etc.) regardless all members of household are in place of household or some are in another place or abroad for longer period for purposes of work, education or other reasons. Household also means a one-member household, i.e. a single household, as well as a collective household, i.e. a household comprising persons living in apartments for lasting care for children and adults, in monasteries-convents and in hospitals for accommodation of incurable patients.

2. **“Family agricultural holding”** means a single unit, technically and economically, which has a single management and which produces agricultural products.

3. **“Forest”** is any area larger than 500 m² covered with forest shrubs and serves for production of forest trees of different kinds or has protective or special purpose.

4. **“Fishpond”** is limited, enclosed area where fish is cultivated and optionally it can be empty or filled with water. An integral part of fishpond is also ditches.

5. **“Agricultural production”** means *cultivation of crops* (cereals, potatoes, dried pulses for grain, tobacco, forage plants, vegetables, flowers, ornamental plants, seeds, seedlings, fruits, grape vines and mushrooms); *breeding of cattle, poultry, and other animals* (bovines, pigs, sheep, goats, equidae - horses, asses, mules, poultry, bees, rabbits, etc.), production of vine from own grape and olive oil from own olives.

Agricultural production excludes riding, and racehorses, gallops (i.e. land used for exerting racehorses), processing of agricultural products (excluding production of vine from own produced grape and olive oil from own produced olives), forestry, hunting, fishery or fish farming and carrying out agricultural services for other holding with own machinery.

6. **“Land resources”** means total agricultural area divided by utilisation category into: agricultural land in kitchen garden, arable land, vineyard, orchards, nurseries, meadows and pastures.

7. **“Livestock resources”** means number of livestock by types and categories.

8. **“Agro-technical measures”** means measures applied in the agricultural production with aim to provide optimal conditions for plant growing.

9. **“Facilities in holding”** means construction structure built from solid material and serving for housing of cattle, poultry, organic fertilisers, agricultural products, machinery, equipment, etc.

10. **“Fishery”** means use, management and protection of fish fund.

11. **“Forestry”** means growing, use and protection of forests and forest trees in the area under forest, as well as planting of forest trees and nursery production.

12. **“Labour force taking part in agricultural production”** includes all persons employed on a regular or non-regular basis in the agricultural production activities, and can be either household members or not.

13. **“Agricultural machinery and equipment”** means all machinery and tools used for application of agro-technical measures.

14. **“Enumeration area”** means a part of territory defined for purposes of the Census covering in most cases 20 to 100 households.

4. Units that are enumerated – subject of the Census

The following enumeration units are covered by the Census:

- Family agricultural holdings no matter of occupation of their household members (farmers or non-farmers) and location where they are placed (city or village);
4.1. Family agricultural holding is unit that is enumerated using in the time of enumeration at least 1,000 m² of agricultural land or less than 1,000 m² of agricultural land, possessing:
 - 1 cow and 1 calf or 1 cow and 1 heifer, or
 - 1 cow and 2 adult heads of small stock, or
 - 5 adult sheep or goats, or
 - 3 adult pigs, or
 - 4 adult heads of sheep or goats or pigs together, or
 - 50 heads of adult poultry, or
 - 20 beehives.
- Exception is households not fulfilling the conditions under item 4.1, if agricultural production is the only source of income, as well as households engaged only in the cultivation of mushrooms in special buildings (cellars, tunnels).

5. Units that are not enumerated

Households not fulfilling criteria defined by the item 4.1 of this Guideline shall not be covered by the Census. Also, households possessing land but not using it or they rented all of it to other households shall not be either enumerated.

6. Day of enumeration

The data should be entered in the census forms according to the situation on 31 May 2010 at 0.00 p.m., i.e. on 1 June 2010 at 0.00 a.m. This time frame is called "day of enumeration".

As a reply to certain questions, the census form P-2 will be entered with the data for the period of one year before the enumeration, i.e. 1 June 2009 until 31 May 2010 (questions 5, 6, 19, 20, 21, 22, 23, 24, 25, 26 column 3, 27, 37, 38, 40, 41, 42, 43, 44 and 45).

7. Time and duration of enumeration and data collection instruments

To have the Census carried out within the defined deadline, enumeration (data collection) should start on 7 June 2010 at 7.00 a.m. and it should end not later than 21 June 2010.

Enumeration is done by certified enumerators on the basis of interview and entering the data in the printed questionnaires.

Data entering is done by ball-point pen of blue colour only.

For the purposes of enumeration, i.e. data collection, the following census forms are used:

- Form **P-1** (Check list) serves for keeping record of all households, identification of holdings and preparation for the preliminary result review (number of households, holdings, land and livestock),
- Form **P-2** is entered for all family agricultural holdings defined under the point 4.

8. Place of enumeration

Enumeration units are enumerated according to the municipality they are located in. Agricultural/household holder is recorded in the check list according to the place, he/she is at the time of enumeration, and he/she is enumerated in the questionnaire according to the usual place of residence.

The agricultural holder is defined as the person who is economically responsible for the the holding and in whose name the holding is operated, i.e. the person taking the economic risks of the work in the holding. The holder can be owner of the holding, or he/she can use land for rent for shorter or longer period of time..

Identification data of the agricultural holder in the questionnaire can be the same or different from the column 3 (address) from the list of enumeration unit in the Check list.

9. Statistical control of coverage and data quality

Immediately after the end of enumeration, in the period from 22 to 6 June 2010, the post-census survey or control of coverage and data quality shall be carried out.

The control of quality data shall be carried out in enumeration areas and municipalities randomly selected, where the enumeration shall be carried out again in accordance with the specially prepared Guideline for Control of Data Quality and special questionnaires with less number of characteristics.

10. Obligations of state and municipal instructors and enumerators in the census field work

State instructors shall carry out the following tasks:

- To act in accordance with this Guideline and the Guideline for organisation and carrying out the agricultural census;
- To participate in the preparation and carrying out the training for municipal instructors and to participate in the training of enumerators;
- To perform control of municipal instructors and enumerators' work;
- To monitor regularly and directly carrying out the Census and to provide professional assistance;
- To inform daily Monstat on preparation and implementation phases of the Census;
- To prepare a detailed report on phases in carrying out the Census, observed irregularities and ambiguities related to the census methodology;
- To perform also other tasks related to the carrying out the agricultural census.

Municipal instructors shall carry out the following tasks:

- To act in accordance with this Guideline and the Guideline for organisation and carrying out the agricultural census, to inform regularly state instructor on his/her work during the enumeration and other activities linked with carrying out the Census;
- To perform training for enumerators and train them for proper enumeration;
- To carry out visit to enumeration area immediately before the enumeration with all enumerators they are responsible for, so that the coverage of all units in the enumeration area is provided;
- To draft a plan for visiting enumerators, as well as the deadline for enumerator to finish enumeration depending of enumeration area size and weather conditions;

- To monitor directly the enumeration done by enumerators; to coordinate and organise the enumerators' work by enumeration areas they are responsible for; to visit regularly enumerators and contact them for the purposes of successive review of filled up to then questionnaires;
- To control census material and coordinate the enumerators' work;
- To submit the census material put in order to the Contractor together with the necessary report; and to participate in drafting the preliminary results for enumeration area;
- To participate as census controllers, if they are appointed by the Contractor and Monstat;
- To perform also other tasks directly related to the Census.

Enumerators shall carry out the following tasks:

- To perform direct enumeration at the field and they are obliged to fill the census forms in accordance with the Guideline for Participants in the Agricultural Census.

Professional assistance in carrying out the Census can be provided to enumerators from municipal and state instructors.

11. Protection of the Census data

Personal data collected by the Census are confidential data and they are subject of special protection to be provided in all implementation phases of the Census (collection, control, processing and publishing of data) in accordance with the provisions of the Law on Carrying Out the Agricultural Census (Official Gazette of Montenegro 54/09, 14/10), Law on Statistics and Statistical System of Montenegro (Official Gazette of the Republic of Montenegro 69/05), and this Guideline.

Personal data protection is obligation of every person participating under every condition in the Census.

Before the start of enumeration, the enumerator is obliged to show the authorisation letter for enumerator (Form P-4) issued by Monstat together with the personal ID card, and he/she is obliged to inform every person about the following:

- Personal data collected by the enumeration have confidential data status protected by the law, and they are used only for the purposes of statistical surveys;
- Personal data collected by the enumeration shall not be used for making any kind of decisions related to the person they refer to;
- Publishing of census results shall be in a manner not allowing identification of person the data refer to;
- During and after the census set out organisational and technical measures shall be performed for storage and protection of census material.

II WORK OF ENUMERATORS

1. Obligations of enumerators before the start of enumeration

Enumerators shall perform enumeration in accordance with the Guideline for Enumeration of Family Agricultural Holdings.

Before the start of enumeration, the enumerator with the municipal instructor should visit borders of his/her enumeration area using the map and description of enumeration area borders.

If the enumerator discovers during the visit that he/she cannot define with preciseness the terrain where the enumeration should be carried out, he/she should inform the state instructor.

In rural areas, the enumerator shall enter changes in the description form for enumeration areas (KSK-4P) during his/her visit, i.e. the enumerator shall enter every change related to the description of enumeration areas under his/her responsibility in agreement with municipal and state instructor.

2. Type of contact with citizens during the enumeration

The enumerator **is obliged** when visiting the household:

- To present and identify himself/herself, showing Authorisation for enumerator together with the personal ID card;
- To explain the objective of his/her visit;
- To establish good communication;
- To remind citizens that they are obliged to give accurate data requested by the Census, and that he/she enumerator as well as other participants in the census are obliged to treat the collected data as the official secret and the data shall be used for the purposes of statistics only;
- Not to influence on the responses of the person providing the data;
- Not to change the order of questions in the questionnaire. If the person does not understand the question, the question should be repeated clearly and slowly. If the person does not understand question even after that, the question can be asked by the use of other words being carefully not to loose the meaning of original question;
- To read the question will all proposed modalities.

The enumerator should always bear in mind that the success of the Census depends to a great extent from how the enumerator explains certain question to citizens so that the proper responses are received.

3. Persons from who the data should be requested

Responses to questions in the census forms should be requested by the enumerator from the person who is household/ agricultural holder.

If the household/agricultural holder is absent, the data are given by the adult holding member familiar the most with the data.

If the enumerator is not able to perform the complete enumeration during his/her first visit, he/she will define time period and day to perform again the visit for the purposes of finishing the enumeration (the enumerator shall fill and leave the information about the another visit, form P-11).

If the enumerator does not find anyone in the dwelling, and receives an information from the neighbours that residents of dwelling are not in travel, the enumerator shall be obliged to visit this dwelling three times.

4. What should the enumerator define before the filling the census forms

Before the start of filling the questionnaire in the households/holding, during the conversation with the person providing the data, the enumerator should establish good communication and to be informed about the following:

- To define if the household is engaged in agriculture, i.e. to define is the household enumeration unit by the help of Check List (on land and livestock fund);
- Where is the holding located, i.e. its larger part (location of the holding can be different from the place of residence of the agricultural holder);
- Enumerator should define does one or more households live at that address. The next step is to define if these households perform jointly agricultural production (if they utilise together land, equipment, and labour force) or is the every household engaged in agriculture entirely separated from other one.

If the person providing the data states that several households live at that address and they are jointly engaged in the agricultural production, one holding is entered in the Check list. The following cases are possible:

- If only one household utilises the holding, the data on the holding are entered under this household;
- If two or more households utilise the same holding and these two households are with the same address, the data on the holding are enumerated under the household with the person who is owner of the most part of the holding (who is economically responsible for the holding);
- If two or more households utilise the same holding and these two households are with different addresses, the data on the holding are entered under the household having the same address as the utilised holding;
- If two or more households utilise the same holding and these two households are with the different addresses that is different also from the holding's address, the agreement should be done (by phone) with the agricultural holders on under which household the data on the holding are to be entered.

5. Order of filling the Census forms

The enumerator shall fill the Census forms according to the following order:

- 1. After receiving the census material** (and before the enumeration of the enumeration area the enumerator is responsible for), the enumerator shall copy the name, code of municipality and settlement, as well as ordinal number of enumeration area on the front page of Check list.
- 2. During the enumeration at the field** the enumerator shall fill first „the list of enumeration units“ in the Check list (P-1), i.e. columns 2, 3, 4 for every household in the enumeration area.

3. **The enumerator fills the columns 5-25 in the Check list in the case the household owns land or livestock.**
If the household does not own land or livestock, columns from 5-25 are left empty.
4. **Column 24** is entered for every household with less than 1000 m² of agricultural land and without livestock, **but the agricultural production is its only source of income** and the form P-2 is entered.
5. **After the enumeration unit – agricultural holding is defined** (in accordance with the definition of holdings under the point 4) the enumerator enters the ordinal number of the holding by the top-down approach.
6. Afterwards, the enumerator start with the **filling the form P-2** for identified holding.
7. When the enumerator finishes the enumeration completely in the enumeration area, he/she fills the table *"The enumeration area results"* at the back side of the *Check list*.

6. Method for compilation of census material for delivering

After the end of the enumeration in his/her enumeration area, the enumerator is obliged to return all census material, including the map and description of the enumeration area borders, authorisation for enumerator and the Guideline for Enumeration of Family Agricultural Holdings in the time period defined by the municipal instructor.

When returning the material in the cover file it should be ordered like the following:

- Map and description of the enumeration area borders
- Authorisation for enumerators (form P-4)
- Methodological guideline for enumeration of family agricultural holdings (guideline for participants in the census)
- Check list (form P-1)
- Filled valid census forms (questionnaire for family agricultural holding - form P-2)
- Empty forms
- Filled invalid (cancelled) census forms.

Census material that is returned should be consisted of forms (filled, invalid and unfilled) as much as the enumerator was received. If the enumerator does not return complete census material he/she was responsible for, he/she should submit the explanation in the written form.

7. Census material delivering

After organising the files (in accordance with the previously defined order) the enumerator delivers the census material to the municipal instructor who defines the state of and the census material quality. The municipal instructor fills the Plan for Enumerators' Visits and Receiving the Enumeration Material (form P-10) and he/she submits the organised material to the state instructor together with the prepared report.

III CHECK LIST (FORM P-1)

The check list is form for keeping records of all households, identification of holdings and preparation of preliminary results for enumeration area.

One check list is filled per one enumeration area.

If one enumerator is appointed for the enumeration of two or more enumeration areas, he/she will keep one check list per one enumeration area.

Exceptionally, when two or more enumerators are appointed for the enumeration of one enumeration area, each of them shall keep a separate check list for the part of enumeration area he/she is responsible for. In this case, the identification I part, II part, etc. shall be put next to the boxes for entering the ordinal number of enumeration area in the municipality (at the front page of the check list), and the ordinal number in the list of enumeration units starts with 201, the ordinal number of household 201, as well as the ordinal number of the holding 201.

Identification data from the cover file, the enumerator is entrusted with as described in the Chapter II (Work of enumerators), Item 5, Paragraph 1 (Order of filling the census forms) are copied at the first page of check list.

1. ENTERING THE LIST OF ENUMERATED UNITS

Ordinal number (Column 1)

Under Column 1 there are printed numbers from the number 1. The enumerator completes these numbers with necessary digits, from the left side, so that growing number are received from 1 to that number showing how many rows are filled by enumerator. If there is more than 30 households/holdings in the enumeration area, process of filling is continued at the next page of the Check list by entering growing ordinal number under Column 1.

These ordinal numbers should not be corrected even if enumerator cross out the data entered by mistake in one or more rows.

Name and surname of the household/agricultural holder (Column 2)

Name and surname of household/agricultural holder is entered for every household based on the statement of the person providing the data.

The name of business subject is entered for every business subject that is placed in the premises for dwelling.

If the dwelling is empty, "empty dwelling" is entered.

Address (Column 3)

Address of the person found during the enumeration, address of business subject or address of empty dwelling is entered in Column 3.

Ordinal number of household in the enumeration area (Column 4)

Three-digit ordinal number of household is entered in Column 4. Every new household recorded in the enumeration area shall be defined by the new higher number. If household is not recorded in Column 2 of the same row, but empty dwelling or business premises, boxes in Column 4 are left empty.

Total available land (Column 5)

The area of land (total, agricultural utilised, agricultural not utilised, wooded and infertile) is entered in ha and m² measures for every household owning the land no matter if it is utilised or not, and if this household has holding. Total available land is the sum of the area of land owned, land taken in tenure reduced for the areas rented out (given in tenure).

Total utilised agricultural land (Column 6)

Utilised agricultural area is entered (kitchen gardens, arable land – including fallow land, vineyards, orchards, nurseries, meadows and pastures). The total utilised agricultural land is sum of agricultural area owned; agricultural land rented from someone else less agricultural areas given for tenure.

Total unutilised agricultural land (Column 7)

Area previously used as an agricultural area and, during the reference year no longer worked for economic, social or other reasons and which is not used in the crop rotation system), and area overgrowing are entered under this heading.

The total unutilised agricultural land is the sum of unutilised agricultural land owned, unutilised agricultural land taken in tenure less unutilised agricultural areas given in tenure.

Forest land (Column 8)

The area under forest is entered.

Total forest land is the sum of forest land area in the ownership, forest land taken in tenure less area given in tenure.

Infertile land (Column 9)

Infertile land is defined as area not used for agricultural production, such as land occupied by buildings (houses, livestock premises and other holding facilities), farmyard, tracks, quarries, heaths, rock, ponds, marshland, and ditches and other area under water.

Total infertile land is the sum of infertile land owned, infertile land taken in tenure less areas given in tenure.

Under the question do you cultivate mushrooms, under **Column 10**, "X" is entered for the response "YES", and Column 11 is left empty.

If the answer is „NO“, under the **Column 11** it is entered "X", and **Column 11** is left empty.

To enter the total number of bovine, sheep, goats, pigs, poultry and beehives in **Columns 12, 16, 18, 20, 22 and 23 (the total number of bovine, sheep, goats, pigs, poultry and beehives)**.

Column 13 (number of cows), 14 (number of heifers), 15 (number of calves), 17 (number of adult sheep), 19 (number of adult goats), 21 (number of adult pigs) – to enter the number of the mentioned categories of bovine cattle and small stock possessed by the household. The data from these columns are used to identify if the household belongs to the agricultural holding definition.

Under Column 24 the „X“ is entered if the household does not possess holding, but it uses less than 1000 m² of land and not possessing the livestock, and agricultural production is the only source of income (defined under the point 4, page 9). The form P-2 shall be filled for this household.

Family agricultural holding (Column 25)

Under Column 25 the three-digit ordinal number is entered:

1. For every household corresponding with the family agricultural holding definition (definition can be found at the back page of the Check list or at the page number 9 of this Guideline);
2. For households not fulfilling the conditions for agricultural holding, and agricultural production is its only source of income.
3. Households cultivating mushrooms in the buildings specially adapted for cultivating mushrooms.

Every new holding that is enumerated is added up with the new, increased number. If household does not correspond to the family agricultural holding definition, boxes under Column 25 are left empty. The ordinal number of holding can be equal or different from the ordinal number of household under Column 4.

If the enumerator finds out that he/she made mistake when filling the List of Enumeration Units under the Check list, the enumerator should cross the entire row, except the ordinal number under Column 1.

2. FORMING OF COLLECTIVE ROW

After the end of enumeration of the enumeration area, the enumerator shall count (sum up) the data by columns: (columns 4, 5, 6, 7, 12, 16, 18, 20, 22, 23, 24 and 25) and he/she enters the number (sum) in the last row (the page sum). Crossed rows are not counted.

At the end, the enumerator collects results of summed up units from each page of the Enumeration Units List and he/she enters them in the table "Results for Enumeration Area".

3. GETTING FIRST RESULTS

Table 1 *Number of households and holdings*

Number of households in the enumeration area is received by summing up every last row sum at every page of the Enumeration Unit List, Column 4. The sum in Column 4 is received by counting the filled rows without crossed rows.

Number of family agricultural holdings in the enumeration area is received when the sum of last filled row from each page of Enumeration Unit List, Column 25 is summed up. The sum in Column 25 is received by counting rows filled but not crossed.

Number of households in the enumeration area under the limits for agricultural holdings with the agriculture as the main source of income, is received when the sum of the last filled row from each page of Enumeration Unit List, Column 24 is summed up. The sum in Column 24 is received by counting the rows filled but not crossed.

Table 2 *Land and livestock*

Area of total available land, area of total utilised agricultural land and total agricultural unutilised land, as well as total number of bovine, sheep, goats, pigs, poultry, beehives in the enumeration area is received by summing the last filled row sum at every page of the Enumeration Unit List, Column 5, 6, 7, 12, 16, 18, 20, 22 and 23. The sum in columns 5, 6, 7, 12, 16, 18, 20, 22 and 23 is received by summing the entered numbers in the rows filled not crossed.

The accuracy of data in the Check list is guaranteed by signature of enumerator and municipal instructor at the first page, and state instructor at the last page.

IV QUESTIONNAIRE FOR FAMILY AGRICULTURAL HOLDING (FORM P-2)

The form P-2 is filled for every row in the Check list where the enumeration unit has been recorded (Column 25 filled).

The enumerator is obliged to fill the form P-2 according to the order of questions having in mind not to skip any question.

When filling the boxes with the data on area, volume or number zero should be put in the empty boxes in front of the data (for ex. 0 4 7).

The boxes where no data exist are left empty, i.e. line or zero are not entered.

After the enumeration of one holding is finished, the enumerator should perform logical control of the form (for ex. the data on irrigated area should be equal or less than the data on agricultural land). Other data logically linked should be checked also (livestock – facilities for livestock, processing of agricultural products – facilities for storing agricultural products and similar).

The first and last page of the form P-2 should be filled with the data on interview, like date of enumeration, time of start and end of interview. The enumerator is obliged to enter them in the form, as well to sign at the end of form and to ask interviewed person to sign. The accuracy of data is guaranteed by signature of municipal instructor at the last page of the form.

1. IDENTIFICATION DATA

Municipality

enumeration area - EA

ordinal number of holding in EA
(Column 25, Check list)

Identification data of place of enumeration are entered as the following:

- **ID number of municipality and ordinal number of enumeration area** are copied from the front page of the Check list, i.e. cover file.
- **Ordinal number of holding** within enumeration area is copied from Column 25 from the Check list.

2. IDENTIFICATION DATA OF AGRICULTURAL HOLDER (31 May 2010)

- To enter surname, name of one of parents, name and Unique Citizen Identification Number of agricultural holder.
- To enter the data on address: municipality, settlement (place), street and street number, as well as phone number of agricultural holder.

These ID data relate to the place of usual residence of agricultural holder.

ID data of agricultural holder (municipality and settlement) can be the same or they can differ from the ID data at the place of enumeration (i.e. same or different from the municipality or settlement from the front page of the Check list).

If the agricultural holder does not possess phone number or do not want to give the data, "no phone number" or "do not want" is entered.

3. DATA ON LOCATION OF AGRICULTURAL HOLDING (31 May 2010)

The data on location of family agricultural holding refer to municipality and settlement the family agricultural holding is located in, i.e. larger part of it. The agricultural holding is located where main part or all agricultural production takes place.

It can be an agricultural building (for ex. the largest building used for the purposes of agriculture) or another identified part of the holding, such as the most important parcel of the holding. In the case there is no agricultural building to which a location of the building could be attributed, the most important parcel will be selected as the reference point. The same is valid for the agricultural holdings having the land area in different places.

In the case when all agricultural production takes place in one location, the data on name of settlement and municipality is entered where the entire agricultural land, livestock and buildings are placed.

If the agricultural land, livestock and buildings are placed in several settlements, individual data of agricultural holdings are defined by the agricultural holder's statement or according to where larger part of agricultural holding, livestock or buildings are placed. The significance of the agricultural parcel can be decided in the following order: intensive production on arable land, size of the parcel and permanent crops (fruit, berry or olive plantation, and vineyard). The size of the parcel could be the simplest indicator of importance as the economic value or the parcel can change from one year to another depending on the planted crop and its yield.

The holder's residence can be considered as the reference place only when it lies within 5 kilometres (in a straight line) of the place where the main part or all the holding's agricultural production takes place.

4. TOTAL AVAILABLE LAND (31.05.2010.)

The total available land is comprised of: agricultural (utilised and unutilised), forest and infertile land. The total available holding's land is a land owned by holding's members, as well as land owned by others, and used by the holding, no matter if the land is cultivated or not. The data is recorded for the land of holding's members where the right on use exist in the moment of enumeration no matter if these rights are ownership rights, contractual rights (for ex. concession, tenure) or other rights.

Land owned by the holding's members and rented to others is not recorded in the total available land but recorded under person that utilise it no matter of location of the land.

Land area is expressed in hectare (ha) and square metres (m²).

1 ha (hectare) = 100 ares = 10 000 m²

1 are = 100 m²

10 ares = 1000 m²

Local measures for area (ralo, lakat, kosa¹, etc.) used in certain regions are recalculated by the use of Table for Recalculation Local Units in Square Metres (you can find it at the end of the Guideline) and the data is entered in the defined boxes.

¹ Local measure names

4.1. Land owned

The total land area (agricultural – utilised and unutilised, forest or infertile) owned by all holding's members is entered.

4.2. Land taken in tenure

The land area utilised by the holding but owned by others is entered, and it is the sum of agricultural (utilised and unutilised), forest and infertile land. Land is taken in tenure in return for money, in kind, free of charge or similar.

4.3. Land rented out

The land area rented out by the holding to other holding for farming in return for money, in kind, free of charge or similar.

4.3.a) of which is rented out only agricultural

The agricultural land area rented out by the holding to other holding for farming is recorded here.

4.4. The total available land (4.1 + 4.2 - 4.3)

The total available land is recorded which is the property of the holding of farmed by the holding on 31 May 2010 and which is the sum of owned land area and land area taken in tenure less land area rented out (4.1 + 4.2 – 4.3).

5. UTILISED AGRICULTURAL AREAS CULTIVATING AGRICULTURAL PRODUCTS FOR THE HOLDING'S SELF-CONSUMPTION (KITCHEN GARDENS AND/OR GARDENS) (1 June 2009 – 31 May 2010)

Areas separated off from the rest of the agricultural land and usually around the house. These areas are devoted to the cultivation of agricultural products (vegetable, potato, fruit and grapevines) intended for self-consumption by the household and mainly not for sale. Only occasional surplus products from this area are sold off by the holding. The total agricultural land area in the kitchen garden is equal to the sum of areas 5.1; 5.2; 5.3 and 5.4.

Not included here are pleasure gardens (parks and lawns) and areas utilised for fodder production.

6. UTILISED ARABLE LAND (1 June 2009-31 May 2010)

The arable land is land area worked regularly with crops sowed or planted under certain sequence (crop rotation system). The crop rotation is the practice of alternating crops regularly and in a planned sequence aimed at more efficient land use.

Arable land comprises cereals, industrial crops, potato, fodder crop, fresh vegetables, flowers, seed and seedlings, and other arable land crops. Arable land also comprises fallow land. If the same area is under different crops during a year (associated and successive crops in the same time or one after another) the area is counted only once and the data on the main crop is recorded.

The main crop is defined when several different crops are cultivated in the same area during a year (in the same time or one after another). In this case, the main crop is crop with the most production value.

If the main crop cannot be defined according to the production value amount, then the main crop is crop present in longer time period.

Fallow land and other arable land and gardens not worked are areas included in the crop rotation system, not producing harvest during the crop year (fallow land), i.e. not sown for certain reasons (floods, lack of water, and similar). Areas of arable land taken out of production for more than five years are recorded under other uncultivated agricultural land.

Explanations according to the crop groups:

Cereals

Areas to be recorded here are areas of cereals harvested dry for grain, regardless of use (self-consumption, sale, fodder food or seed). Cereals for grain are only those used for the production of grain.

Areas under cereals harvested for feed greens are not recorded (they are included under the row 20 "Other fodder plants harvested green").

The areas under wheat; maize for silage grain with or without parts of the cob, with humidity higher than 20% (excluding sweet corn cobs that are included under Table 19 "Vegetables, strawberries, flowers and ornamental plants", row 12 "Other vegetables"); barley (winter and spring), rye, oats, buckwheat and other cereals. Other cereals are: millet, triticale, etc.

Industrial crops (includes oil-seed plants, but seeds and seedlings for hops, tobacco and other industrial plants are excluded)

Industrial crops are intended for industrial processing before the final use. Here is included: tobacco, aromatic and medicinal plants and other industrial crops.

Aromatic and medicinal plants comprise crops used for perfume manufacture, pharmaceutical purposes and human consumption, for ex. camomile, basil, bay leaves, dill, marigold, lavender, mint, sage, etc.

Other industrial crops include industrial plants that have not been mentioned elsewhere, for example oil seed rape, sunflower, soya, etc.

Potatoes

Early potatoes, late potatoes and seed potatoes at the arable land are included here, regardless of use (self-consumption, sale or animal feed).

Fodder plants

Areas sown with fodder plants under the crop rotation system at the same land area are recorded (annual or multi-annual fodder plants); regardless of use (hay, silage or harvested green).

Here are included: fodder beet, other fodder roots and brassicas, leguminous (lucerne, clover and grass mixtures), green maize and other fodder plants.

Other fodder plants comprise fodder plants not mentioned elsewhere, for ex. fodder pea, sorghum, vetch, etc.

Vegetables

Vegetables grown in the open field for industrial processing (include water melon, melon, and strawberries, and cultivated mushrooms are excluded)

Areas under low, non-accessible cover (sheets of plastic laid flat on the ground, arable land under clothes or tunnels not accessible) are included here also.

Vegetables grown in the open field for fresh consumption (include water melon, melon and strawberries, and cultivated mushrooms are excluded)

Areas under low, non-accessible cover (sheets of plastic laid flat on the ground, arable land under clothes or tunnels not accessible) are included here also.

Vegetables grown under accessible protective cover (water melon, melon and strawberries are included, and cultivated mushrooms are excluded)

Area of crops which are grown for the whole of their period of growth or for the predominant part of it are covered by rigid or flexible plastic, glass (greenhouses of glass or plastic) with regular installations (for ex. irrigation devices, heating, ventilation). Sheets of plastic laid flat on the ground and also arable land under clothes or tunnels not accessible to man.

If the same area under glass is used more than once, it is reported once only, as well as in the case of multi-storeyed greenhouses.

Flowers and ornamental plants (excluding nurseries)

Flowers and ornamental plants in the open field (excluding nurseries) - Areas under flowers and ornamental plants in the open field, as well as under low (not accessible) protective cover are entered here.

Flowers and ornamental plants under protective accessible cover (excluding nurseries) – the area under flowers and ornamental plants under protective cover is recorded here.

Seed and seedlings production (excluding cereals, potato, leguminous, and oil seeds)

Areas with seeds and seedlings for sale, excluding cereals seeds, potato, leguminous and oil seeds are recorded.

Seed and seedlings for the own needs of the holding, e.g. cabbage and lettuce seedlings, as well as seeds of fodder plants, are included under the particular heading of the crop concerned.

Other arable land crops

This includes crops of low economic importance that are not mentioned under previous items. Only plants that cannot be classified under any other item should be contained under this item.

Fallow land and other unsown arable land

Fallow land and other unsown arable land are land areas included in the crop rotation system without harvest produced during the crop year, i.e. that are not sown for certain reasons (floods, lack of water and similar).

Fallow land can be:

- Bare land (areas left to recover whether ploughed in or not);
- Green land (areas sown with crops that will be ploughed in when green aimed at applying manure and improving ground characteristics)
- Land with spontaneous natural growth is land area not utilised several years (up to five years) and they are left for grass to grow spontaneously.

If these areas are taken out of production for more than five years, they should be recorded under *other uncultivated agricultural land* (question 12).

The sum of areas from 1 to 28 is recorded under the row 29 and represents the total area of utilised arable land.

To enter a percentage of arable land not using the crop rotation system

Arable land cultivating the same crops for three or more years successively, and not a part of the planned crop rotation system. Sequence of crops /crop rotation is practice of changing annual crops grown at certain land area according to the planned pattern successively by years, so that crops of the same type are grown without interruption at the same parcel.

Nurseries under glass or other accessible protective cover and permanent pastures are excluded.

7. VINEYARDS (31 May 2010)

Vineyards – plantations (trees) of grapevines intended for the production of grapes.

Plantation vineyards are areas under grapevines with certain distance between vine plants, accessible for processing by use of machinery and usually other agro-technical measures are applied.

Grape varieties are sorts of grapevines for the production of wines and they are of species *Vitis vinifera*.

Table grapes are grapevine varieties for the production of fresh grapes.

Grape is healthy, ripe, over-ripe, dried or naturally frozen fruit that grows on the grapevines varieties for the production of wines or other grape or wine products.

Wine is agricultural – food product as a result of complete or partial alcoholic fermentation of grape must, of fresh grapes suitable for production of wine.

Wines with protected geographical origin must fulfil the following conditions:

- To be produced by the grape producer and wine producer recorded in the register;
- To be produced from the grapes picked and processed in certain region;
- Not to exceed the limit of grape yield per area unit (ha) specified by region and by quality category for wine;
- To origin from the grapevine varieties defined by region definition;
- To have a minimum natural alcoholic strength by volume and other required parameters;
- To have a certain physical-chemical structure and organoleptic characteristics recognisable for products from this area.

The wine quality category with controlled geographic origin is defined by chemical structure and organoleptic (sensor) wine characteristics.

Wines produced in Montenegro are classified into the following quality categories:

1. **Table wine** – wine produced from grapes of one or several grapevine varieties of unspecified geographical origin;
2. **Table wine with the controlled geographical origin** – wine produced from grapes of one or several grapevine varieties harvested and processed in Montenegrin vine growing area;
3. **Quality wine** produced in specified area:
 - **Quality wine with the controlled geographical origin** – wine produced from one or several grapevine varieties with marked quality characteristics for grapevine variety or varieties originated from one region or smaller territorial unit
 - **Wine of superior quality with the controlled geographical origin** is wine produced from grapes of one or several grapevine varieties with very marked quality characteristics for grapevine or grapevines originated from one region or smaller territorial unit
 - **Quality wine with the controlled geographical origin**, quality wines are wines of special quality produced with the extremely favourable treatments of grape ripening at the vine plant, and depending of reached grape over-ripeness, time of harvest and processing, they can have extra-ordinary quality.

Total number, number of vine plants giving fruit and kitchen garden area, total number and number of vine plants for giving fruit at the plantations and plantation area are recorded under the ordinal numbers 1, 2 and 3. The total kitchen garden area is recorded under ordinal number 4, column 3, and column 6 is entered with the total plantation area.

The total number of grapevine plants comprises all vine plants regardless of age. Productive vine plants are plants giving fruit regardless they gave fruit during the year. If the holding does not possess plantations, columns 4, 5 and 6 are left empty.

The total under grapevines (row 4) is the sum of rows 1, 2 and 3 under Columns 3 and 6.

8. ORCHARDS (31 May 2010)

Orchards are agricultural areas growing fruit trees. Total number and number of productive trees are recorded.

The total number of trees is number of all trees regardless of age. The productive trees are included as well as young trees not giving yet fruit, in extensive and plantation orchards.

Productive trees are trees able to give fruit, regardless they gave fruit or not in the reference period within extensive or plantation orchards.

Extensive (traditional) orchards are semi-intensive or extensive fruit trees. Trees in farmyards, kitchen garden, boundaries, by roads, etc. as well trees in orchard of different types of fruit, are included here. Extensive orchard area is recorded only if the area is not recorded as a meadow and if the economic value of orchard is higher.

Plantation orchards are areas under fruit trees with a certain distance between rows and within row accessible for use of machinery and equipment, and usually other agr-technical measures are carried out. Usually, these are larger plantations of fruit trees and berries intended mainly for further distribution. Area of plantation orchards is recorded in ha and m².

Orchards – number of trees in kitchen garden, extensive trees, plantation trees and total plantation area for each of mentioned fruit type are entered from ordinal number 1 to 17.

Under berries only total plantation area is recorded.

Under ordinal number 18 "Total under fruit", the sum of rows from 1 to 17 is recorded for each of columns 1-7.

Under ordinal number 19 "*Total extensive orchard area*", the area of extensive orchards is entered only if the area is not recorded as meadows or something different.

Under ordinal numbers 20 and 21 number of table and olive for oil trees, number of extensive trees, number of plantation trees and total plantation area are entered.

Under ordinal number 22 "*Total under olive trees*" the sum of rows 20 and 21 is entered in columns from 1 to 7.

Under ordinal number 23 "*Total area of extensive olive plantations*" the area of extensive olive plantations is recorded unless already mentioned as meadow or other.

Number of *orange, mandarin, lemon and other citrus fruit tree* in kitchen gardens, number of extensive trees, number of plantation trees and total plantation area are entered under ordinal numbers from 24 to 27.

Under ordinal number 28 "*Total under citrus*" the sum of rows 24, 25, 26 and 27 for every column from 1 to 7 is recorded.

Area of extensive citrus is recorded under ordinal number 29 "*Total area of extensive citrus*" only if the area is not recorded as meadow or something other.

9. NURSERIES (31 May 2010)

Nurseries are land areas of young ligneous (woody) plants grown for subsequent transplantation covering: fruit tree nurseries, vine nurseries, ornamental nurseries, and commercial nurseries of forest trees (excluding those for the holding's own requirements grown within woodland).

Commercial forest-tree nurseries, whether in woodland or outside, are included here, as well as non-commercial forest-tree nurseries for the holding's own requirements outside woodland. Nurseries for the holding's own requirements grown within woodland are included with the Wooded (forest) land.

The total area of nurseries – the sum of areas from 1 to 4

10. PERMANENT MEADOWS AND PASTURES (31 May 2010)

Meadows- land used permanently (for five years or more) to grow herbaceous forage crops, through cultivation (sown) or naturally (self-seeded), and not included in the crops rotation on the holding. Meadows are used for grazing, mown for hay or silage. All regularly harvested (used) meadow areas during the reference year are recorded here.

Pastures – land used for grazing. All types of pasture are included: intensive (low-land) and extensive (on hilly land). Areas used for grazing at least once in vegetation year shall be recorded.

Excluded are common land areas (mountain land).

Meadows and pastures not in use more than a year are recorded under question 12 “Agricultural unutilised land overgrowing”.

On question 10 “**Permanent meadows and pastures**”, under ordinal number 1 “*Once used*” area of meadow and pasture once used during vegetation year (only mown and/or only grazed) is recorded.

Area of meadow and pasture (only mown, only grazed, mown and grazed) several times used during the vegetation year is recorded under ordinal number 2 “*Several times used*”.

The sum of rows 1 and 2 for columns 1, 2, and 3 is recorded under ordinal number 3 “*Total*”.

11. TOTAL UTILISED AGRICULTURAL LAND

The utilised agricultural land is land for growing agricultural crops. The data refer to the area of total agricultural land used by the holding on 31 May 2010.

The total utilised agricultural land is sum of agricultural land taken up by kitchen garden (question 5, row 5), arable land (question 6, row 29), vineyard area (question 7, row 4, column 6), orchard (question 8, row 17, column 7, question 8, row 18, question 8, row 21, column 7, question 8, row 22, question 8, row 27, column 7 and question 8, row 28), nurseries (question 9, row 5), permanent meadows and pastures (question 10, row 3, column 1, question 10, row 3 column 2 and question 10, row 3, column 3).

11.a) of which is agricultural land taken in tenure– The agricultural land used by the holding but owned by others is recorded here. The land is taken in tenure in return for money, in kind, free of charge or similar.

12. OTHER UNCULTIVATED AGRICULTURAL LAND (31 May 2010)

Land previously used as an agricultural area and during the reference year no longer worked for economic, social or other reasons (fallow land is not included under this category).

12.a) of which unutilised pastures and meadows – area of pasture (in the ownership or taken in tenure) not worked in the reference period is recorded here.

13. AGRICULTURAL UNCULTIVATED LAND OVERGROWING (31 May 2010)

Agricultural uncultivated land overgrowing is land not worked for several years partly covered with trees and shrubs, but not belonging to other land category (Wooded/forest land).

14. WOOD/FOREST LAND (31 May 2010)

Wooded land is area covered with trees and forest shrubs, and forest-tree nurseries grown in woodland for the holding's own requirements, as well as forest facilities, roads, etc. Shelter belts and windbreaks and hedgerows are also included in the woodland.

15. INFERTILE LAND (31 May 2010)

Infertile land is area not used for agricultural production as the following: areas occupied by buildings, farm yards, tracks, quarries, heaths, rock, ponds, marshland, and ditches and other area under water.

Areas of infertile land is usually owned by every holding, because here is included area occupied by the farmyards and facilities for cattle poultry housing, and other holding's facilities, pleasure gardens (parks and lawns), etc.

16. TOTAL AVAILABLE LAND (31 May 2010)

The total available land is the sum of total utilised agricultural land (question 11), other uncultivated agricultural land (question 12), agricultural uncultivated land overgrowing (question 13), woodland (question 14) and infertile land (question 15). This data should be equal to the question 4, row 4.

17. LOCATION OF HOLDING'S LAND

If the holding owns /uses land in one municipality only, the data on the area of separate land categories given in rows 1, 1a, 1b, 1c, 1d, 1e, 1f, 2, 3, 4 and 5 are entered under column 1.

If the holding uses land located in several municipalities, the area of separate land categories given in rows 1, 1a, 1b, 1c, 1d, 1e, 1f, 2, 3, 4 and 5 is entered under columns 1 to 4 depending of number of municipalities the holding owns land in.

The sum of areas of separate land categories given in rows 1, 1a, 1b, 1c, 1d, 1e, 1f, 2, 3, 4 and 5 total for all municipalities (sum of columns 1+2+3+4) is entered under column 5.

18. NUMBER OF SEPARATE PARCELS OF UTILISED AGRICULTURAL LAND (31 May 2010) (the data refer to the question 11)

Response on this question refers to the number of separate parcels of utilised agricultural land (question 11).

Separate parcel is every agricultural land area utilised by the holding, surrounded by other holding's land area whether in place/settlement where the holding's residence is or in another place/settlement of Montenegro (the data on holding's residence, question 3).

The separate parcel can comprise one or several cadastre parcels and occupied by one or several agricultural crops (vegetables, industrial crops, orchards, meadows and other). Agricultural land taken in tenure (question 11.a) if it is surrounded by the holding's land is not considered as a separate parcel of agricultural land worked by the holding. If the case is opposite (if not surrounded by the holding's land), it is considered as a separate parcel of agricultural land worked by the holding.

If all land is located in one area, it is recorded under box 01.

19. AREA UNDER CULTIVATED MUSHROOMS (1 June 2009 – 31 May 2010)

Cultivated mushrooms are grown in buildings which have been specially erected or adapted for growing mushrooms, as well as in underground premises, caves and cellars, and similar. The effective growing surface area (beds, bags, or similar surfaces) which are or will be used at least once during the 12-month reference period is recorded. If used more than once the area is still counted once only.

20. VEGETABLES, STRAWBERRIES, AND ORNAMENTAL PLANTS (1 June 2009- 31 May 2010)

The area of kitchen gardens, open field, protective cover (excluding nurseries) on which vegetables, strawberries, flowers and ornamental plants are grown is recorded. The area is recorded according to the type of vegetables given in the table 20: tomato, pepper, cucumber, peas, bean for dry grain, onion, garlic, carrot, cabbage, watermelons, melons, and other vegetables (broccoli, Swiss chard, kale, horse radish, etc.), as well as strawberries, flowers and ornamental plants and areas for seed and seedlings production.

Vegetables in total grown in **kitchen garden**, question 20.14, column 1, should be equal to question 5, row 1.

Vegetables in total grown **outdoor**, question 20.14, column 2 should be equal to the sum of questions 6, row 21 + questions 6, row 22. Outdoor includes low (not accessible) protective covers and low tunnels.

Vegetables in total grown under **glass and other protective (accessible) cover**, question 20.14, column 3 should be equal to question 6, row 23. Crops, which for the whole of their period of growth or for the predominant part of it are covered by greenhouses, fixed or mobile high cover (glass, rigid or flexible plastic) are included here, **excluding** sheets of plastic laid flat on the ground and also arable land under cloches or tunnels not accessible to humans or movable glass-covered frames..

Sum of areas from 1 to 13 is entered in row 14, column 1, 2 and 3 (total vegetables grown in kitchen gardens, outdoor and under protective cover).

Flowers and ornamental plants **outdoor** - question 20.15 column 2 should be equal to question 6.24, and Flowers and ornamental plants **under protective cover** - question 20.15, column 3 should be equal to question 6.25.

Sum of questions on seed and seedlings production (market production) outdoor - question 20.16, column 2, and seed and seedlings production (market production) - question 20.16 column 3 should be equal to question 6.26.

21. MIXED CROPPING, ASSOCIATED AND SUCCESSIVE CROPS ON ARABLE LAND AND GARDEN (1 June 2009 – 31 May 2010)

Mixed cropping and associated crops are grown together with the main crop at the same ground, and successive crops is grown at the ground after main crop is harvested. **These areas are presented in the main crop area not included in the area of total utilised agricultural land.**

22. IRRIGATED AREAS (1 June 2009 – 31 May 2010)

- **Irrigated area** - total utilised agricultural area which could be irrigated in the reference period using the equipment and the quantity of water normally available on the holding, excluding crops under glass or other (accessible) protective cover and kitchen gardens which are almost always irrigated. If the area is irrigated several times during the year – it should be only once indicated, although more than one crop is grown in the same field during the year, the area for the most important irrigated crop shall be recorded. If the irrigation is not used for the holding's areas, this question shall not be answered.

The data is entered for:

- **Source of irrigation water most often used** according to the crop groups in rows from 1 to 11, Column 1. The data refer to the source of the most used (the largest water quantity) water for land irrigation (if more water sources are used). Namely, a holding can use one or more sources of water for irrigation, depending on the weather conditions or source availability. The response is given by entering numbers 1, 2, 3 or 4 depending of water source (ground water, surface water or other sources).

1. *Ground water*

Ground waters comprise: artificial (wells–dug or bored) and natural groundwater springs. Response to this question is given if the source is used at the holding or near the holding.

2. *On-farm surface water (collected rainwater, reservoirs, etc.)*

3. *Off-farm surface water (watercourse, river, lake)*

Surface water is water from water streams or natural ponds or artificial dams.

4. *Other sources (common water supply network)*

- **The most employed irrigation method** according to the crop groups from 1 to 11 - Column 2. The data refer to the most employed irrigation methods (if several different methods are used). The response is given by entering number 1, 2 or 3 in the appropriate boxes.

1. *Surface irrigation* - by flooding the whole area or leading the water along small furrows between the crops that are irrigated.

2. *Sprinkler irrigation* - irrigating the plants by sprinklers (gentle spray sprinklers or high pressure sprinklers flexible or fixed) for propelling water under high pressure as rain over the parcels.

3. *Drop irrigation* is system of tubes or hoses of different sizes and made of different material. The water is placed low by the plants irrigating them drop by drop or with micro spray.

- **The column 3 "Area irrigated in the last 12 months"** in rows from 1 to 11 the irrigated area is recorded according to the crop groups cereals (excluding maize); maize; industrial crops; vegetables; watermelons and strawberries; potato; vineyards; citrus; olive plantations; orchards (including berries and excluding citrus fruit and olives); meadows, etc.).

Under ordinal number 12 "*Total irrigated area*" the sum of rows from 1 to 11 is recorded.

Under ordinal number 13 "*Volume of water used for irrigation for the period from 1 June 2009 to 31 May 2010 (m³)*" the volume of water that has been used for irrigation on the holding during the reference period regardless of the source is recorded here.

Under ordinal number 14 "*Area intended for irrigation*" the area on which the irrigation system is set regardless it is utilised or not.

Under ordinal number 15 "*Average area of irrigation during the last 3 years*".

23. APPLICATION OF NUTRIENTS (1 June 2009 – 31 May 2010)

1. Area spread with mineral fertiliser – the area spread with nitrogen, phosphorus, potassium and mixed fertiliser is recorded.

2. Area spread with solid natural fertiliser – the area spread with solid natural nutrients produced at the holding or purchased from another one is recorded here. When the area is spread with fertilisers several times, it should be recorded once only. If the same area is spread both with mineral and natural fertiliser, the data should refer to the mainly utilised fertiliser at that field.

3. Area spread with liquid natural fertiliser - the area spread with liquid natural fertiliser, produced at the holding or purchased from other.

4. Quantity of applied mineral fertiliser – the quantity of spent mineral fertiliser in **t** and **kg** is recorded here.

5. Quantity of applied natural fertiliser - the quantity of spent natural fertiliser in **t** and **kg** is recorded here.

6. Percentage of total produced solid dung at the holding delivered from the holding – The quantity of solid dung that was sold or removed in another way from the holding is recorded here, estimated as a percentage of total solid dung produced at the holding during the reference year. Solid dung removed from one holding and delivered to another agricultural holding for direct use as fertiliser or for further industrial processing is recorded here.

7. Percentage of total produced liquid manure at the holding delivered from the holding – The quantity of liquid manure that was sold or removed in another way from the holding is recorded, estimated as a percentage of total liquid manure produced at the holding during the reference year. Liquid manure removed from one holding and delivered to another agricultural holding for direct use as fertiliser or for further industrial processing is recorded here.

The manure produced during animal grazing is excluded.

24. APPLICATION OF PLANT PROTECTION PRODUCTS (1 June 2009 – 31 May 2010)

The area spread with plant protection products from weed, diseases, insects and animals in the reference period. If the area is spread several times, it should be only once indicated. If the area is applied with different plant protection products, the data should indicate mainly applied product.

- Herbicide are pesticides for destroying weeds
- Fungicide are pesticides for destroying fungi that cause plant diseases
- Insecticide are pesticides for destroying insects causing harm
- Other pesticides (rodenticidi are pesticides for destroying animals causing harm, moluskocidi are pesticides for destroying snails causing harm, akaricidi are pesticides for destroying maggots)
- Bio-pesticides are protective products of biological origin (mostly are used in organic production)

25. TILLAGE METHOD USED FOR ARABLE LAND (1 June 2009 – 31 May 2010)

Here recorded are arable land areas worked in the reference year between harvest and the next planting/sowing. *The main crops area should be included only.* Areas of utilised kitchen gardens, permanent crops and areas under glass and other protective cover are excluded.

1. Conventional tillage (plough) - The land treated by conventional tillage (ploughing) in ha and m² is recorded here. Conventional tillage involves inversion of the soil with a disc plough or a mouldboard as the primary tillage operation and after that followed by secondary tillage with a disc harrow.

2. Conservation tillage (low tillage) –The land treated by conservation tillage in ha and m² is recorded here. Conservation tillage is practice that leaves plant residues on the soil surface for erosion control and moisture conservation.

Conservation method of tillage can include the following systems: *strip tillage or zonal tillage* refers to a system where strips 5 to 20 cm in width are prepared for sowing while the rest of soil is not disturbed and remains covered with residues; *vertical tillage* refers to a system where the arable land is prepared with equipment which does not invert the soil and which cause little compaction; *ridge tillage* is a system of ridges and furrows. The ridges can be narrow or wide, and furrows parallel with ridges or constructed with gentle slope depending of what the aim is: moisture conservation or moisture surplus drainage.

3. Zero tillage (direct seeding) - The area in which no tillage is applied between harvest and sowing is recorded here. Direct seeding is a minimum tillage practice in which the crops are sown directly into soil not tilled since the harvest of the previous crop.

26. LIVESTOCK BY TYPE AND CATEGORIES (31 May 2010)

The data on livestock by type and categories are entered according to the situation on 31 May 2010.

All livestock types and categories present at the holding on 31 May 2010 are recorded (total number of livestock Column 1, not owned Column 2 and number of livestock grazing on common land – mountain land, common land Column 3) in the period from 1 June 2009 – 31 May 2010.

Horses

The total number of horses (colt, mare and filly, stallion and castrated horses regardless of their gender, age or purpose of breeding) is recorded.

Asses and mules

The total number of asses, mules is recorded regardless of their gender, age or purpose of breeding.

Bovine animals under 1 year old

Young bovines males and females (calves and heifers) under one year old regardless of purpose of breeding are recorded. They are recorded by gender (male and female heads).

Bovine animals 1 but less than 2 years old

Bovine animals one but less than two years old are recorded by gender and purpose (male heads and female heads for fattening and female heads for breeding). Female bovine animals which have already calved are excluded.

Bovine animals 2 years old and over

Bovine animals two years old and over are recorded by gender and purpose (female heads – heifers, heifers in calf, dairy cows, other cows male heads – bulls and oxen).

Heifers are female bovine animals two years old and over that are prepared in weight and physical maturity to be calved for the first time.

Heifers in calf are female bovine animals two years old and over expecting to be calved for the first time.

Dairy cows are cows which have already calved (including those less than two years old) and which by reason of their breed or particular qualities are kept exclusively to produce milk for human consumption or for processing into dairy products. These include cows in calf not at the moment kept for milk and cull taken out of milk production to be slaughtered whether or not fattened between their last lactation and their slaughter.

Other cows are female bovine heads which have already calved and female bovine animals which have already calved and which by reason of their breed or particular qualities are kept exclusively or principally for the production of calves and whose milk is not intended for human consumption or for processing into dairy products.

Draught cows and cull cows whether or not fattened before slaughter are included.

Male heads (bulls and oxen)

Bulls are male heads for breeding two years old and over.

Oxen are male castrated heads two years old and over kept for work.

Bovine animals in total – the sum of rows from 3 to 12 is recorded.

Sheep

Sheep are recorded by age and purpose of use (lambs and yearlings, ewes for milk, other breeding females, rams and sterile ewes).

Lambs and yearlings are young sheep both female and male less than one year old.

Ewes for milk are female heads one year old put to the ram and whose milk is used for human consumption or for processing into dairy products.

Other breeding females are sheep kept mainly for breeding of lambs whose milk is not intended for human consumption or for processing into dairy products. Ewe lambs put to the ram are included here also.

Rams and other ewes – the data is entered for male heads and female heads excluded from breeding (sterile ewes) and cull ewes. Cull ewes already having lamb are included here.

Sheep, total – the sum of rows from 14 to 17 is recorded.

Goats

Goats are recorded by age and purpose (kids, goats for milk, other breeding females, male goats and sterile goats).

Kids are young goats both female and male less than one year old.

Goats for milk are female heads for breeding one year old and which already kidded whose milk is intended for human consumption or for processing milk into dairy products.

Other breeding females are goats kept mainly for breeding kids whose milk is not intended for human consumption or for processing milk into dairy products. Young females which have been mated for the first time are included also.

Male goats and sterile goats – the data is entered for male heads and female heads excluded from breeding (sterile goats) and cull goats. Goats for slaughter which have already kidded are included here.

Goats, total - the sum of rows from 19 to 22 is recorded here.

Pigs

Pigs are recorded by weight and by purpose. The data are collected on piglets weighing less than 19 kg, pigs weighing 20 to 49 kg, fattening pigs of 50 to 79 kg, fattening pigs of 80 to 110 kg and over 110 kg – sows of the first farrow, breeding sows, other sows and boars are excluded.

Sows of the first farrow are young female heads selected for breeding and of the first farrow and it is expected to have first piglets.

Breeding sows are young female heads for breeding that have farrowed at least once.

Other sows comprise sows fattened before their slaughter.

Boars are male heads for breeding. Boars fattened before their slaughter are excluded.

Pigs, total – the sum of rows from 24 to 32 is entered.

Poultry

Poultry is recorded by type, purpose, gender and age.

Broilers are chicks intended for fattening.

Laying hens are all hens which have started to lay are included, whether the eggs are for consumption or for breeding. Growing pullets before point of lay are included if they have been stalled up as laying hens. Cull hens (intended for slaughter and breeding cocks for laying hens are also included.

Geese and turkeys the total number is entered regardless of age, gender and purpose.

Other poultry refers to ducks, quails, pheasants, guinea-fowls, pigeons and other regardless of age, gender and purpose.

Poultry, total – the sum of rows from 34 to 38 is entered.

Beehives, total

All beehives of the holding are recorded, regardless of the nature of hive (with flexible or fixed honeycomb) occupied by the colony of bees.

Rabbits

Breeding female heads are recorded – female rabbits for producing rabbits for meat and which have littered.

Question 26 - row 42 - numbers of days of grazing at common land (mountain land, common land) is recorded, **for question 26 - row 43** number of days of grazing on the holding's own or taken in rent land.

27. TYPES (SYSTEMS) OF LIVESTOCK BREEDING (1 June 2009 – 31 May 2010)

1. Semi-nomadic livestock breeding method refers to the holdings having permanent place of residence – living which move with livestock to another location (mountain land) for a couple of months on a seasonal basis. Temporary settlements are built at those locations, i.e. buildings of temporary living nature are constructed and different crops are cultivated as a supplementary source of food.

2. Stationary system of livestock breeding refers to the holdings having permanent place of residence – living and stable animal housing and feeding, as well as combined use of available areas for crops, afterwards for grazing or in our case, for swath (hay), and afterwards pasture.

28. HOLDINGS IN THE SYSTEM FOR IDENTIFICATION AND REGISTRATION (31 May 2010)

If the question *Is the holding registered in the registration and identification system* answered by the holding with “yes”, then rows 1 and 2 are entered with the holding’s registration number given by the Veterinary Administration within the identification and registration system (for breeding bovine cattle and small stock).
The registration number comprises 7 codes in the left corner of the passport as below in the picture.

Pasoš za goveče

Vlada Republike Crne Gore
Ministarstvo zdravlja

Ime državljanina (državljanin):
Petar Petrović
Vilusi, BB
81423 Vilusi

Broj identifikacije:
ME 10000113

Broj registracije (državljanin):
1002001

Broj državljanina: 10000106
Datum izdavanja: 01.12.2007
Vrsta: 2, vrsta: SM
Datum isteka: _____

Podaci o državljaninu:

Redni broj	Državljanin	Adresa	Broj registracije	Datum	Potpis
1	Petar Petrović	Vilusi, BB 81423 Vilusi	1002001	01.12.2007	<i>P. Petrović</i>
2					
3					
4					
5					

Model of passport for bovine animals

29. FACILITIES FOR HOUSING OF CATTLE AND POULTRY (31 May 2010)

Building of agricultural holding is every separate construction having four fixed walls covered with a roof, and one or several entrances.

Constructions built from weak material (brushwood, boards, etc.) are not considered as the building of agricultural holding.

Cellars and attics are not recorded regardless they can be used for housing agricultural and other products, they are recorded only if they were built exclusively for this purpose (vine cellars and similar). If larger number of buildings with same purpose is used, their number and area is recorded in total.

All agricultural buildings are recorded in state on 31 May 2010, except buildings for cultivating mushrooms – they are recorded if they have been used at least once from 1 June 2009 – 31 May 2010.

According to the purpose, agricultural holding buildings are classified as *buildings for housing cattle and poultry, manure storage facilities and other holding buildings.*

Only buildings which are used in the reference period are recorded (animal houses for bovine animals with floor grid, buildings for housing bovine animals without floor grid, houses for poultry, for housing pigs with floor grid, for housing pigs without floor grid, caged laying-hen house, poultry house with straw beds, poultry house for broilers, and multi-purpose buildings). Multi-purpose buildings for housing cattle and poultry are buildings of an agricultural holding intended **for housing bovine cattle (horses and bovine animals) and small stock (sheep, goats and pigs), poultry and other species.**

Number – of buildings with the same purpose. The appropriate box should be entered with “1” if there is one building, and two buildings with the same purpose should be recorded as “2”, etc.

From which buildings 20 years old – a number of buildings less than 20 years old is recorded. The appropriate box is entered with “1” if there is one building less than 20 years old, “2” is entered for two buildings 20 years old, etc. If a building is older than 20 years, but with complete reconstruction and/or additional construction, building of this kind is considered as a building over 20 years old.

Total area (m²) – the data is entered on the useful area of building calculated as a sum of useful areas of all building parts, measured from inner side of wall. The data on area is expressed in m².

Area of agricultural buildings, such as pigsty, hen houses, stall for horses, stable for bovine animals and other, is recorded only area under the roof, enclosed area (outlet) not covered by roof is not included. The area of two or more buildings of the same purpose is expressed as the sum.

30. STORAGE FACILITIES FOR NATURAL FERTILISERS (31 May 2010)

Manure storage facilities are buildings of the holding (with or without roof) intended for storage of solid dung or liquid manure regardless received from animals reared at the holding or provided by others.

Solid dung storage facilities having impermeable surface with run-off containment, with or without roof. Solid dung is excrements (with or without litter) of domestic animals, possibly including a small amount of urine. Usually a rectangular, three sided or square structure with a concrete floor and reinforced concrete or timber walls. The floor can slope towards the open side where seepage/drainage (liquid fraction) from the stacked solid manure is collected in a gutter and stored separately. Storage facilities that are not used during the reference year are not recorded. A heap or stack of solid manure stored in a field prior to spreading is excluded.

The area/size of buildings (Column 1) is recorded and for the question „with roof” the modality 1 is circled for answer “YES” Column 2 and 0, for “NO” Column 3.

31. OTHER BUILDINGS OF THE HOLDING (31.05.2010.)

The data are collected for all other building not covered with previous questions. The data on number (Column 1), age (Column 2) and total area (Column 3) are collected for:

1. *Storage facilities for agricultural products (they serve for storage of agricultural products produced at the holding – potato, apples, cheese, etc.)*
2. *Storage facilities for other products (they serve for storage of non-agricultural products, products produced at the holding – wood, forest products, fish for consumption, etc.)*
3. *Storage facilities for agricultural machinery and equipment (buildings serving for storage and maintenance of agricultural machinery and equipment)*
4. *Fishponds (all fishponds with purpose of hatchery and raising fish for food and juvenile fish)*
5. *Glasshouses (all glasshouses with or without ordinary installations – ventilation system, irrigation system, heating system, etc. are recorded)*
6. *Greenhouses (all greenhouses with or without ordinary installations - ventilation system, irrigation system, heating system, etc. are recorded)*
7. *Buildings for cultivating mushrooms – these buildings are specially built or adapted for mushrooms production. The actual area of the building which has been used in the reference period is recorded.*

32. ORGANIC AGRICULTURE (31 May 2010)

Organic agricultural production should be practiced according to special legal regulations, so that agricultural parcels, location of production and storage are clearly separate from unit not producing according to the rules for organic production.

1. **Certified land area for organic production** – refers to the state on 31 May 2010. It is expressed in hectares (ha) and square metres (m²). The data refer to the holdings having certified organic production at the certified area and the area is recorded.
2. **Certified organic livestock production** – if the answer is “yes”, then “1” is circled, and if the answer is “no” then “0” is circled. The data refer to the holdings having certified organic production.
3. **Land area in transitional period (in preparation)** – refers to the state on 31 May 2010. The area is expressed in ha and m².
The data refer to the holdings which are in the process of adapting, i.e. they are in the transitional period for organic production but not possessing yet certificate for practicing the mentioned production.

33. AGRICULTURAL SERVICES (in period of three years)

During certain agricultural production phases, if there is a need, holdings use services from other holding, persons or business entities:

1. *Services of advisory service* (professional advices on production activity of good quality)
2. *Services in crop production* (land tillage, fertilize, pesticide treatment)
3. *Services in livestock production* (grazing, feeding the cattle)
4. *Services of association of producers* (sale of livestock food, purchase of machinery)
5. Bank services (users of agricultural loans)
6. Support (subsidy) for livestock production (direct payment)
7. Support (subsidy) for crop production (direct payment)
8. Support (subsidy) on investment in agriculture (agricultural equipment and machinery, investment in livestock production, growing of perennial crops, building and furnishing of cover space, measures for improvement of land quality including irrigation, processing, storage and packing of vegetable and animal products)
9. *Support (subsidy) for organic production*
10. *Support (subsidy) for use of mountain pastures*
11. *Does the holding use the retirement support*
12. Does the holding use the support for infrastructure building within the community

Answers to questions on services - modality 1 for answer "YES", and modality 0 for answer "NO" is circled.

34. AGRICULTURAL MACHINERY AND EQUIPMENT (31 May 2010)

Agricultural machinery and equipment is recorded according to the ownership and age. Machinery and equipment of the agricultural holding is machinery and equipment in proper functioning state or which can proper function with small repairs.

Machinery – the number of machineries in the ownership on 31 May 2010 is entered in Column 1 "Owned (number)".

Under total machinery with age 10 years - Column 2 is entered with „less than 10 years old“, and in Column 3 "11 to 20 years old" there should be recorded machinery from 11 to 20 years old. Under Column 4 "Do you use machinery jointly owned" the modality 1 is circled for the answer "YES" and the modality 0 for the answer "NO". If the holding uses machinery jointly owned, then under Column 5 „Number of machines jointly owned at **the holding** on the day of enumeration" the number of machinery jointly owned is recorded and on the day of enumeration are placed at the enumerated holding.

The data are collected on:

1. **Two-wheel tractors (single axle)** – this group comprises tractors with single axle (two wheels), such as motor cultivators, rotary cultivators and similar.
2. **Four-wheel tractors (two axles)** – here are included tractors with two axles (four wheels) and track-laying tractors, and they are classified according to the motor power expressed in kilowatts (kW) i.e. in horse power (ks).
3. **Combines** are self-propelled machinery used for harvesting grain crops. Silage combines are agricultural machines for silage.
4. **Trucks** are mobile devices for transport of agricultural products.
5. **Mowers** a) tractor like machines to be pushed by the operator and used for cutting the grass mixtures. They are tractor drawn.
b) Self-propelled – mowers having own engine and power, used for cutting grass mixture at smaller production areas.
6. **Baler** – a piece of agricultural machinery used for collection and compressing the semidry grass mass, i.e. hay. They are tractor drawn.
7. **Sowing and seeding machines** – machines for sowing are machine towed by another one and used for spread seeds of cereals, grass mixture and broad crops. Seedling machines are towed machines for planting different types of crops from nurseries (cabbage, tobacco).
8. **Other machines** (spreading fertiliser, sprinklers, etc.) – spreaders of fertilisers are machines (adapted trailers) that spread fertiliser and they are tractor-drawn. Sprinkler machines are towed machines used to apply the plant protection products.
9. **Irrigation equipment** – installation used for the irrigation of crops.
10. **Milking machine**
11. **Device for pressing and crushing grapes** je stationary equipment used in the grape processing.
12. **Other equipment** (plough, harrows, driers, etc.).
13. **Tractor trailers** (all trailers are recorded regardless of capacity and method of unloading).

35. ACQUIRED AGRICULTURAL LAND OF THE AGRICULTURAL HOLDER (31 May 2010)

Knowledge and experience can be acquired by the agricultural holder in practice, by training, seminars and similar, or that he/she possess education in the area of agriculture. This question can be answered with yes/no by circling number one or zero. If the agricultural holder have participated courses on agriculture in the previous 12 months, then modality "1" is circled, if not, the modality "0" is circled.

36. KEEPING RECORDS OF INCOME AND EXPENDITURES (31 May 2010)

Records imply keeping records, also informal one on income and expenditures of the holding. The question on keeping records refers to 31 May 2010. The record of expenditures is related to the cost of household in the process of agricultural production, forest production and fish production. Include the costs of fuel, seeds, plants, machinery, equipment and fertilizer, water for irrigation or pond, for protective equipment, animal feed, and supply of poultry, livestock, and more.

Two possible answers are:

- a) "YES" (to circle 1) if the holding keep records of income and expenditure.
- b) „NO" (to circle 0) if the holding does not keep records of income and expenditure.

If the holding uses a personal computer for the need of holding, the modality "1" is circled; otherwise the modality "0" should be circled.

37. CONSUMPTION OF THE FINAL PRODUCTION ON THE HOLDING (1 June 2009 – 31 May 2010)

Question "Does the holding use produced agricultural products for its own use" is answered by circling appropriate modality 1 - for the answer "yes" or 0 for the answer "NO". Question 37.1 "Does the holding use for its own use more than 50% of product value produced at the holding" refers to all agricultural products produced by the holding during the year (cereals, fruit, vegetables, meat, milk, eggs, etc.).

Under questions 37.2 and 37.3 the percentage of produced meat or milk which the household uses for its own needs is recorded.

38. SALE OF PRODUCED PRODUCTS ON THE HOLDING (1 June 2009 – 31 May 2010)

Under Table 38 "Sale of produced products on the holding", percentage (%) of direct sales (end users) is recorded for the mentioned products (crop products, livestock products, processed products and forest products) in Column 1 "on holdings" and Column 2 "outside holdings. Columns 3, 4, 5 and 6 are entered with the percentage of sale to other farms, enterprises, stores and cooperatives.

Direct sale to final consumer is the sale by the holdings with self produced agricultural products, processed or not, directly to consumers for their consumption.

Last consumer in the most of cases is a natural person, which means restaurants and similar businesses are excluded.

39. MAIN ACTIVITY OF THE HOLDING

The main activity is an activity carried out on the holding most of the year, i.e. which consumes most of the time. Depending on the answers of the main activity, the modality is circled.

1. *Production of crop, seeds and seedlings* include: growing crops, industrial, fodder crops, vegetables, fruits, grapes, flowers, ornamental plants, materials for planting and sowing.
2. *Animal breeding* include: breeding of horses, asses, mules, cattle, sheep, goats, pigs, poultry and other animals; as well as milk production and other products of animal origin.
3. *Production of crops with animal breeding*.
4. *Agricultural services* include: agricultural services, planning and maintenance of the environment and nature. Services for breeding animals, except for veterinary services.

5. *Hunting and breeding of games* include: hunting, farming, restoration and breeding of games, including the appropriate service.
6. *Protection and utilisation of forests* include: growing, use and protection of forests, services in growing and harvesting.
7. *Fishery and fish farming* include the following: fishing, fish farming and service activities in fisheries.

40. LABOUR FORCE OF THE HOLDING (1 June 2009 – 31 May 2010)

Labour force

Labour force of the holding presents all persons aged 15 years performing work on the holding during the reference period from 1 June 2009 – 31 May 2010. Also, all persons who are eligible for retirement (of age 60-65 years), and which continue to work on the holdings, are included in the labour force.

Agricultural holder who does not carry out farm work on the holding is recorded in the questionnaire, but he/she is not counted in the total farm labour force.

Work on the holding

Work on the holding is any type of work performed on the observed holding, including:

- Organization and management (purchasing, sales, accounting, etc.);
- Working in the field (ploughing, gathering hay, harvesting, etc);
- Breeding animals (preparation, distribution of food, to milk, taking care of animals);
- Maintenance (buildings, machinery, installations, etc);
- Own transport - conducted by labour force of the holding for the purposes of the holding;
- All integral non-agricultural secondary activities (production of wine and olive oil from their own grapes and olives).

Work on the holding does not include:

- Work intended for needs of the household (housework), holder or his/her family members;
- Working in the woods, jobs within hunting, fishing or breeding fish whether conducted on holding or not (if these works can not be measured separately, they are included in the work on the holding);
- Detachable (separate) non-agricultural secondary activities such as processing of agricultural products on the holding (making cheese, fruit processing etc.);
- All non-agricultural activities (forestry, fishery, etc) and some other useful (profitable) activities carried out by the holder or labour force of the holding.

Working time

The time spent for farm work on the holding is the working time actually spent on farm work for the holding, excluding work in the household.

Agricultural holder

A person on whose account and in whose name the holding is operated and who is legally and economically responsible for the holding, i.e. person who takes the economic risks of the holding. Agricultural holder can be owner or tenant.

Other holding's members working in the holding (family labour force)

It is consisted of agricultural holder's family members, including spouse, performing work on the holding but they do not have to live on it. Generally, family members of the holder are spouse, parents, relatives in the ascending or descending line (including by marriage and by adoption) and brothers and sisters of the holder or his/her spouse.

Two people living together in consensual union are also treated as spouses.

Non –family labour regularly employed

All persons performing farm work in the holding and receiving any kind of remuneration (salary, wages, profits or other payments including payment in kind) from the agricultural holding, other than the holder and members of his family.

Permanent staff

All persons performing work in the holding every week under the supervision in the reference period from 1 June 2009 to 31 May 2010 regardless of duration of the working week.

Persons worked regularly for part of that period, but were unable for any of the following reasons to work for the entire period, are also included: special conditions for production on the holding (specialized tasks that are done a certain number of months of the year - fattening cattle, growing olives or grapes etc.); absence by reason of holidays, military service, sickness, accident or death, etc.

Other gainful (profitable) activities

Other gainful activity is every activity carried out for remuneration (salary, wages, profits or other payment, including payment in kind, according to service rendered) and which are not jobs on the holding, including work which have been performed by the labour force of that agricultural holding for the another agricultural holding. All gainful activities carried out by the holder or his/her family members as the primary or secondary activity should be registered and divided into: **directly related activities to the holding** (carried out on the holding - such as tourism, local industry, processing of products, forestry etc.) or outside the holding - works under contract for other agricultural holding) and **activities non related to the agricultural holding** (which are done on the holding, as tailor, insurance company, issuing machines or outside it - any other profession, a teacher, working in the bank).

In Table 40, the data are entered on working active persons in the holdings. If several households work in one holding (household of the father and household of the son), the data are collected as for one holding. First we enter the data

about members of one holding, than about members of second and third holdings, etc.

Data are collected in the order of categories, first for the person who is head of the household, and then for other household members and regular employees (non-family labour force).

For agricultural holder and other members working in the holding, the data are collected on:

- Relation to the owner of holding;
- Gender;
- Age;
- Education;
- Work on the holding and work of other useful (profitable) activities that are directly related to activities of the holdings (carried out on and out of the holding);
- Work on other useful (profitable) activities that are not related with the activities of holdings (may be performed on and out of holdings);
- Type of activity (only, the main, additional and occasional);
- Status of person.

Ordinal number of persons (Column 1)

This column includes ordinal numbers related to persons who are employed on the holding. Under ordinal number 1 the data on the agricultural holder are entered, and other numbers from 2 to 15 relate to other staff members working on the holdings family member of the holder, and ordinal numbers from 16 to 20 refer to the regular employees who are not family members of the agricultural holder – non-family labour.

The first row "holder" is entered with the data about agricultural holder, i.e. data about the person on whose name the household is.

Enumerator should bear in mind that the holder is not always the real owner of the land; neither is he/she always the oldest member of the holding. If more than one person is considered as the holder, only one person should be defined as the holder and to enter the data on him/her in the row 1.

Relation to the holder (Column 2)

Column 2 should be entered the data on relation of members of the holding toward the holder, i.e. appropriate code:

Code 1 is intended for the person leading the household (holder),

Code 2 for the spouse of the holder,

Code 3 son/daughter of the holder,

Code 4 is entered for a person who is a father/mother of the holder, the spouse of the holder,

Code 5 is entered for a person, who is brother/sister of the holder,

Code 6 other relatives,

Code 7 is entered for permanent employees in the holding that are not family to the holder – non-family labour.

Gender (column 3)

This column is entered with the data on gender of household/holding members, i.e. appropriate code. Male persons are entered with the code 1 and female persons with the code 2.

Years of age on 31 May 2010 (Column 4)

This column should be entered with the data on the age of person on 31 May 2010 at 00:00 pm, date to be taken as the reference moment of the enumeration to determine the persons' age.

Educational attainment (Column 5)

Educational attainment is type of school of the person has finished as his/her last level of education.

Level of education is acquired by completing regular school or school which replaces the regular school (for example, a school for adult education), or taking exams in a regular school or completing a short education programme.

Education attainment should be acquired according to the law on education, after its completion a person receives the certificate or diploma or other type of certificate.

Courses not offering regular school certificates (for example, a course for accountants, heading for the typists and the like) are not taken into account as answers to this question, but the data is entered on the person's highest reached education level.

Column 5 is entered with the appropriate code on the educational attainment of all members of the holding.

Code 1 - No education

Code 2 - Unfinished primary education

Code 3 - Primary education

Code 4 - 3 years of agricultural secondary school

Code 5 - 3 years of other secondary school

Code 6 - 4 years of agricultural secondary school

Code 7 - 4 years of other secondary school

Code 8 - Post-secondary or higher agricultural education

Code 9 - Post-secondary or higher other education

Code 10 - is entered for persons with master or doctor degree diploma in the field of agricultural science

Code 11 is entered for persons with master or doctor degree diploma in the field of other sciences.

The work on the holding and other related useful (gainful) activities

Column 6 is entered with the number of working days during the reference period spent exclusively for agricultural activities (including processing of their own products from grapes and olives), not including house work.

Column 7 is entered with the average number of working hours in working days, spent exclusively on agricultural activities.

Column 8 is entered with the number of working days spent for other useful (gainful) activities on holding that are directly related to the property (forestry, fishery, hunting, processing agricultural products, services rendered to others outside the holding), not including the house work. All activities are included whether they are carried out on the holdings or out of the holding.

Column 9 is entered with the average number of working hours on weekdays, their consumption on other useful (gainful) activities on the holding that are directly related to the property.

Work on other useful (gainful) activities that are not directly related to the holding of entrepreneur (Column 10)

Column 10 is entered with the following modality:

1. For the response - YES, he/she works more that on the holding
2. For the response -YES, he/she works less that on the holding
3. For the response -NO, he/she does not work on any other activity

If the holder and family members perform other useful (gainful) activities which are not directly related to the property outside of the holding, then "1" or "2" is entered and modality "3" if the person does not perform any of the above mentioned activities.

About the agricultural activity - the only one, main, supplementary and temporary (Column 11)

If the agricultural production is the only activity of the holder or household members, i.e. if the person is not engaged out of agricultural activities, **code 1** - the only activity should be entered.

If persons spend most of their time (working hours) on agricultural activities, then those activities are the main for the persons. Persons can be engaged in other activities too, but the farm labour is their main activity for which **code 2** is put.

Code 3 is specified for supplementary activities, if the person most of his working hours spends on non-agricultural activities.

Code 4 is determined by the temporary activity, if the person carries out agricultural activities only as temporary work.

Status of person (Column 12)

Column 12 is entered with one of the following modalities, **1** is for farmer, **2** is for agricultural insured person, **3** is for employee outside of the holding, **4** is for the unemployed, **5** is for housewife, **6** is for child, pupil, student, **7** is for pensioner, **8** is for agricultural pensioner, **9** is for the beneficiary of the pension support and **10** is for an individual fisherman.

Other persons regularly engaged (non-family) are not recorded in Columns 11 and 12.

The data on the type of activity, educational attainment, number of working hours of the holding, does he/she works outside of the holding and the number

of working hours out of the holding are not recorded household members who are not 15 years old on 31 May 2010.

41. NON-FAMILY LABOUR EMPLOYED ON A NON-REGULAR OR SEASONAL BASIS ON THE HOLDING (1 June 2009 – 31 May 2010)

- Seasonal (non-regular) labour force on the holding of the entrepreneur

Persons who are not permanent employees are those who have not worked on the holding every week during the reference period. Working day of these persons is every day of work for which they are paid by any type of compensation (excluding days off and sick leave), which takes 8 hours.

Non-regular and seasonal engaged persons are persons who occasionally worked on the agricultural holding in the period from 1 June 2009 – 31 May 2010.

Number of persons, for men and women separately, the total number of working days per year spent on agricultural and related activities converted into a working day - 8 hours are entered.

Column 1 should be entered with the number of seasonal engaged persons that are non-family of the household/holding, by gender (male, female), and the total for both sexes, for the period from 1 June 2009 – 31 May 2010.

Column 2 should be entered with the total number of working days that were spent on agricultural activities for that period according to the gender (male, female) and the total for both sexes.

42. ENERGY CONSUMPTION (1 June 2009 – 31 May 2010)

This question refers to the total energy consumption and expenditure from carrying out the activities (for example. spent fuel in its own boiler, for transport, heating room, the air-conditioning, propulsion machinery, etc.). Offered modalities in column 1 and 2 for the type of energy are circled and the total consumption of the holding (Column 3) is entered, and offered modality in columns from 4 to 7 is circled depending on the amount of percentage of energy consumption for agricultural production.

Types of energy:

- 1. Coal** - includes all types of coal and coal products (coal, brown coal, lignite, peat, coal briquettes for all species). To enter the total consumption in tonnes and percentage of spending on holdings;
- 2. Crude oil** - includes all types of fuel oil. To enter the total consumption in kilograms and percentage of spending on holdings;
- 3. Gasoline** - all types of gasoline (leaded, unleaded). To enter the total consumption in litres and percentage of spending of holding;

4. **Oil (petroleum)** - includes all types obtained by processing crude oil other than crude oil row 2; gasoline row 3, row 5 oil such as liquid petroleum gas, propane, butane, LPG, diesel for transport. Enter the total consumption in litres and percentage of spending on holdings
5. **Heating oil** - oil (petroleum) combustion (extra-light). To enter the total consumption in litres and percentage of spending on the holding.
6. **Firewood**, pilot boat and other wastes of plant origin. To enter the total consumption in m³ and the percentage of spending on holdings;
7. **Electrical energy** - derived from the distribution network. To enter the total consumption in kw/h and the percentage of spending on the holding;
8. **Other not mentioned** - includes all other types of energy sources that are not mentioned (in tonnes).

To circle "1" or "0" for the modalities offered "yes" or "no", if "yes" to enter consumption on holdings near the proposed modalities.

43. OTHER USEFUL (GAINFUL) ACTIVITIES (1 June 2009 – 31 May 2010)

These data refer to activities that are described in the table on the labour force Column 8, 9 and 10

If the holding performs also other useful (profitable) activities, which do not belong to agricultural ones, but are directly related to the holding and income generating, for each offered activity the appropriate modality should be circled.

I Other related useful (gainful) activities on the holding:

1. **Tourism and accommodation** - includes all activities in tourism, services, accommodation and food, organizing travel arrangements, sport and recreation and the similar;
2. **Cottage industry** - knitting, embroidery, souvenirs, toys and the similar;
3. **Collection** - wild berries, aromatic and medicinal plants, mushrooms;
4. **Cutting of the forests** - for their own purposes (wood for heating and wood for other purposes), for sale (wood for heating and long purposes) and cutting of the wood (primary processing - making the board);
5. **Processing of products of plant origin in the holding**, own, purchased, own and purchased products;
6. **Processing of products of animal origin in the holding** own, purchased, own and purchased products;
7. **Aquaculture (fish, molluscs, crayfish and water plants)**

Other related useful (gainful) activities out of the holding

- 8. Labour services work with own agricultural machinery** for agriculture, for forestry, and other services (cleaning snow, etc.);

I/1 What is the total of share of the above activities (1-8) in the total value of the holding's production

Total share in % of all activities related to the farm (1-8) in a total value of production of the holdings is entered. The total production value is the value of all agricultural products produced by the holding during the reference period regardless they are used for own consumption or sale.

All activities that are not related to the holding and other types of income (employment income, capital income and income from social transfers, etc.) are excluded.

- 9. packing of own products of plant origin** (agricultural work that contributes to production);
- 10. packing of own products of animal origin** (agricultural work that contributes to production);

II Other non-related useful (gainful) activities on the holding

- 11. Commercial activities (hairstylist, insurance company, shop, etc.);**

Other non-related useful (gainful) activities out of the holding

- 12. Other activities** (working in a bank, accounting, teacher, etc.).

44. SOIL CONSERVATION (1 June 2009 – 31 May 2010)

Soil conservation is a method according to which arable land is covered by plants or plant residues or it is left bare during the winter period.

It also includes arable land that is sown / processed in the reference year, however, exclude the arable land which is not sown / processed during the last year.

It excludes the yard / garden (area where the food products are cultivated for the members of holdings), permanent pasture, permanent crops and area under glass or other protective covering accessible.

- 1. Winter crops** - arable land where crops are sown in the fall and grow during the winter (ex. winter wheat) which are normally harvested or used for grazing.
- 2. Protective crops** - arable land on which plants are sown in order to reduce loss of nutrients. The economic importance of these crops is low and the main objective is to protect the soil and nutrients. These crops are ploughed in spring before planting other crops, they are not harvested and they are not used for grazing. These crops should not be confused with the normal winter crops (winter crops).

3. Plant residues (straw and stubble) - arable land is covered during the winter with plant residues. Potatoes are excluded because the stem rapidly decaying.

4. Land without cover - arable land that is ploughed or otherwise treated in the fall and is not sown or covered during the winter with plant residues, which remain bare of pre-sowing or sowing agro-technical measures in the spring.

Arable land on which methods of processing leaves more than 10% of crop residues on the surface are recorded under "Plant Remains."

Question relating to the preservation of land enrolled in the land area (ha and m²) on which is used a proper way to preserve land in the winter.

45. FENCES and HEDGES

Fences and hedges are constant branches of trees, shrubs or bushes, stone walls, etc., which represent the fields boundary. They can be installed in the early wet areas or between the earlier plot, or pasture, etc. It is believed that they are maintained if it's ensure a minimum of maintenance, and in that way it's avoided the destruction of habitats.

- 1. Hedges** - the families of shrubs and bushes that are making a living fence sometimes with the central tree line.
- 2. Tree lines** - the permanent kind of woody vegetation that usually makes the boundaries of the fields inside of agricultural land or along roads or waterways. Excluding the vegetation that can be considered part of the used agricultural area (vineyards, orchards of fruit seedlings, etc.)
- 3. Stone walls** – construction that man-made of brick and stone walls for example.

Question relating to maintenance of fences and hedges in the last three years (Column 1) and the formation of fences and hedges in the last three years (Column 2) is answered by circling the modality "1" for the answer "yes" or "0" for the answer "no".

On the first and the last page of the form P-1 is necessary to provide (insert) technical details of the interview, such as date of enumeration, time of start and end of the interview and the date of the control of the municipal instructor. These data shall be used in a future planning and the enumerator is required to enter the same in a form, and to eventually sign the form and request the signature of the interviewed.

TABLE FOR CONVERSION OF THE LOCAL UNIT OF MEASURE, SQUARE METRES (m²)

1 PLUG - PLOUGH	40 ARI	4000 m²
1 KOSA – SPUR	36 ARI	3600 m²
1 RALO – PLOUGHSHARE	18 ARI	1800 m²
1 MOTIKA – HOE	8 ARI	800 m²
1 ČEREK	4.5 ARI	450 m²
1 ARGAT	6 ARI	600 m²
1 DULUM	10 ARI	1000 m²
1 KATASTARSKO JUTRO	57 ARI	5700 m²
1 KVADRATNI HVAT	0.036 ARI	3,6 m²
1 ŠINIK	7.5 ARI	750 m²
1 LANAC	71.9 ARI	7190 m²

1 ha (hectare) = 100 ares = 10 000 m²

1 are = 100 m²

10 are = 1000 m²

Annexes

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