

TWINNING CONTRACT

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Further Support to the Reform of Statistics System in Bosnia and Herzegovina



MISSION REPORT

Activity 2C: Further work on the Master Plan, including the Agricultural Census

Component 2 - Agriculture Statistics

Mission carried out by
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List of Abbreviations

BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CBBH	Central Bank of Bosnia and Herzegovina
EC	European Commission
EU	European Union
FBiH	Federation of Bosnia and Herzegovina
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
MS	EU Member State
RSIS	Institute for Statistics of Republika Srpska
RTA	Resident Twinning Adviser
ToR	Terms of Reference

Executive Summary

The work was focused on the agricultural census. Two weeks ago a mission regarding the agricultural census was made by the GOPA-project (service contract No 2018:0436). They made suggestions for further work and we the mission tapped in to some of the suggested further work for example a close comparison of the definitions in regulation (EU) 2018/1091 on integrated farm statistics and the content of the questionnaire.

1. General comments

This mission report was prepared within the EU Twinning Project "Further Support to the Reform of the Statistics System in Bosnia and Herzegovina". It was the third mission to be devoted to the Agriculture Statistics Component of the Project.

The purposes of the mission were:

- To continue the work on the Master Plan
- Agricultural Census:
 - Questionnaire adjusted for the needs of the CAPI method
 - Creation of rules for data quality control
- Other issues to be decided
- Preparation of ToR for next activity including time and agenda

The consultants would like to express their thanks to all officials and individuals from Bosnia and Herzegovina met for the kind support and valuable information, and which highly facilitated the work of the consultant.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, BHAS, FIS, RSIS, CBBH, Statistics Denmark, Statistics Finland, Statistics Sweden and The Italian National Institute of Statistics.

2. Assessment and results

2.1 Agricultural census

The part of the mission that was focused on the plans for the agricultural census discussed significant and non-significant variables, controls and editing, design of questionnaires and guidelines, thresholds. Furthermore, a comparison between the definition of IFS-variables and the content of the questionnaires was made. Finally, an example of modelling was presented.

During the mission, practises for questionnaires and guidelines were discussed for example:

- The need for systematic testing and in-office testing or laboratory testing was suggested
- Formulation of questions to avoid misleading questions
- Importance of flow of the questionnaire

The IFS-regulation has no specific guidelines on how to define non-existing or not-significant variables. When the questionnaire was reviewed, several variables were highlighted, which were not included because they were not significant in BiH. We would recommend that a list of these would be made.

Regarding controls, different kind of controls (soft-hard) min-max, correlation controls were discussed. Rules for prioritising among controls and edits were presented and a way of grouping holdings with the same type of errors in order to automatically correct the holdings was presented.

An approach to model animal housing was presented. It was concluded that modelling large sections of IFS is not possible in BiH based on lack of data.

BiH have done two drafts of questionnaires according to regulation (EU) 2018/1091 (IFS-regulation) to use in the pilot 2022. The two versions are one short version that will be used when size of the farm is below the thresholds, and a long version which includes all variables in the census.

In article 7 in the IFS regulation it is declare which module should be included which year during the 10-year period that the regulation covers.

	2020	2023	2026
Core	x	x	x
Labour force and other gainful activities	x	x	x
Rural development	x	x	x
Animal housing and manure management	x		x
Irrigation		x	
Soil management practices		x	
Machinery and equipment		x	
Orchard		x	
Vineyard			x

During the mission, we compared questions in the long versions with all variable in IFS, both core variable and variable in different modules that was use in 2020 and will be use in 2023 or 2026.

Almost all of the core variables and most of the variables in *Labour force and other gainful activities* and *Animal housing and manure management* are included in the questionnaire. Below is a summary of the findings and the results of the findings during the mission.

Questionnaire / application

The two different questionnaires have different questions in the beginning that depends on that they are drafts but the plan is that they will be harmonised. The long version studied is the one that will be used for natural persons. A somewhat revised version will be used for legal persons.

Long version

For some variables, the same information is asked in two different places in the questionnaire. However, the question will not be asked twice the system will duplicate the information and put it into another section as a help to answer more detailed questions and as a control.

Core General Variables

Implementation act	Descriptions	Questions	Bosnia-Herzegovina
CGNR 002	Geographical location	Can you get it from the addresses? Or do you need coordinates	Not sure yet how to solve it, by coordinates, information about where each enumerates work, or something else.
	Legal personality of the agricultural holding	Is it always natural person? Or how do you know if it is a Legal person?	The will have a questionnaire for legal persons as well.
CGNR 017	Manager of the holding: sex?	How do you know if it is a male or female? In Labour force?	Gender is in the part with labour force.
CGNR 026-028	Organic farming	How do you know if there are organic farming and how many hectares?	Use a register where all organic farmers are registered.
CLND 086-111		Organic areas for different crops	
CLVS 034-043		Organic animals	

Variable of land

Land	Descriptions	Comments	Bosnia-Herzegovina
CLND 011-013	Sorghum, other cereals, rice	You have one variable: other cereals. Do you know if sorghum and rice are NS/NE?	Probably they are NS/NE, they will control it.
CLND 019	Other root crops	Is it NS/NE? or Fodder beet?	
CLND 027-031	Fibre flax	Is it NS/NE? hemp, cotton and more	
CLND 039	Leguminous plants harvested green	Is it NS/NE?	

CLND 055-060	Fruits, berries and nuts	Orchards	Yes, the total area is in section about orchards
CLND 073	Kitchen gardens	?	They have kitchen gardens, the problem is to decide what are included,
CLND 074-078	Other farmland	?	They asked about some, but not all of these variables.
CLND 112	Total irrigable area	Which year do you ask about?	Clarify which year it refers to.

Variable of livestock

The variables in the livestock section are more detailed than needed for IFS. However, section is in line with the questions asked in AFS (agricultural farm survey). AFS is a yearly survey on crops and animals. It is seen as a benefit if the questions are the same in the census. The pilot for the census will be in October 2022 and AFS are usually done in December each year. The idea is to use the pilot also for the annual statistics.

Labour force and other gainful activities

For national purposes, more questions are asked than required in the IFS-regulation.

Code in implementation act	Descriptions	Comments	Bosnia-Herzegovina
MLFO 004	Farm safety plan	Is it question number 398?	Yes, they have the question.
MLFO 021	Other	I think it is good to have an alternative "other"	They will probably add the possibility to answer "other" Other Gainful Activity
MLFO 022	Percentage of OGA	% - interval, it should be 0-10, 10-50, 50-100 (give help text?)	In draft they could ask any percent, maybe will change it to the interval in regulation

Rural development

In the rural development section, 15 variables linked to regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development. The regulation is not in force in BiH and therefore questions in relation to the regulation is not possible. Regarding question on organic farming it will be investigated administrative registers might be used as a source. The section will be discussed with the Ministry of Agriculture to find out if they need information from this section.

Animal housing and manure management

Animal housing

In animal housing the regulation are interested of “places”, but the questions in the questionnaire ask about “number of heads”. It was decided that the wording should be further investigated and the wording that would be best understood by the farmers used.

Code in implementation act	Descriptions	Comments	Bosnia-Herzegovina
MAHM 027	Breeding sows outdoors (free range)	Is it question number 222? Loose housing, number of heads?	Yes, it is the same.
Code in implementation act	Descriptions	Comments	Bosnia-Herzegovina
MAHM 049	Organic and waste-based fertilisers other than manure used on the agricultural holding	NS/NE?	It is probably NS, but necessary to investigate

Manure application techniques and facilities for manure

Nothing to comment.

Irrigation

In the questionnaire: “Specify the irrigated area in 2021/2022, by types of crops and plantations”, which period the question refers to need to be specified.

The more specified questions were not included in the questionnaire see below.

Code in implementation act	Descriptions	Comments	Bosnia-Herzegovina
MIRR 001	Average last 3 year	The question are missing	
MIRR 003	Volume of water	?	Difficult to include because of the response burden.
MIRR 012	Payment terms for irrigation water	?	
MIRR 013-018	technical parameters of the irrigation equipment	?	
Code in implementation act	Descriptions	Comments	Bosnia-Herzegovina

MIRR 021	Dry pulses and protein crops		Will do controls, which crops are interesting?
MIRR 026	Fibre crops		
MIRR 027	Plants harvested green		
MIRR 030	Permanent grassland		
MIRR 031-034	permanent crops		

Soil management practices

The module contains 5 different parts:

- Drainage
- Tillage methods
- Soil cover on arable land
- Crop rotation
- Ecological focus area ((EU) No 1307/2013)

There are no questions in the questionnaire about variables in this module.

Machinery and equipment

There are more questions asked than needed for IFS. Some definitions are not in line with IFS for example the size of tractors. However, it was concluded that the definitions are suitable for the conditions in BiH and needed for EAA. Further harmonization's with IFS will be taken into account.

Orchard

The total area for each crop was asked for, but not divided into age or density. It was explained that the question will be used to sample a later survey.

Vineyard

The module is included in IFS 2026 and the variables are not defined in implementing IFS-regulations. Total area is included, which is enough for the Census demands.

Masterplan

During the mission, it was decided that the ten-year masterplan should start one year after the reference year for the agricultural census. The census is planned for 2023 so the scope of the masterplan is from 2024-2033. If the census should be rescheduled so will also the masterplan.

When the census is done the plan is to harmonise agricultural surveys with the EU-regulated surveys. At the moment the most comprehensive agricultural regulation Statistics on agricultural input and output (SAIO) is under development. The work on the master plan will be based on the Commission proposal for the SAIO-regulation and will later be adjusted so that the activities are harmonized with the decided regulation.

During the mission, a timetable with reference-periods and deadlines for the agricultural statistics was made.

Conclusions and recommendations

During the mission we compared the content of the census with all modules of IFS. It is our conclusion that the response burden would be far too high if all modules should be included. It is our recommendation to focus on the core variables, parts that also fulfil national needs and variables needed to make good samples for the future.

The non-significant variables should be summarised in a table, at the moment most of them are already excluded from the questionnaire.

Regarding the masterplan, it was decided that the starting point should start the year after the reference year for the census.

The next mission is planned to be a digital short mission in June. The next physical mission is planned after the pilot and will be focused on further development of findings in the pilot. A study visit to Sweden in mid-2023 was also planned if the project is extended.

The digital mission will be focused on upcoming questions regarding the pilot census.

Annex 1. Terms of Reference for the current mission

Terms of Reference

EU Twinning Project BA 17 IPA ST 01 20

Component 2 - Agriculture Statistics

Period: 29th March – 1st April 2022

Venue: BHAS, Zelenih beretki 26
71 000, Sarajevo
Bosnia and Herzegovina

Activity 2C: Further work on the Master Plan, including the Agricultural Census

1. Mandatory result

The component on Agricultural Statistics has three main objectives:

- 2.1 Master Plan for Agriculture statistics for the period 2020-2030 developed and adopted (with clearly defined objectives, timetable of implementation for the implementation of the objectives and precisely defined responsibilities of all stakeholders.)
- 2.2. Cooperation among all stakeholders improved
- 2.3. Protocol(s) on cooperation and exchange of data among all stakeholders adopted

Indicator / Relevant Milestones / Internal deadlines:

- Master Plan for Agriculture statistics in BiH available on web
- Identification of stakeholders at national and entity level
- Responsibilities of each stakeholder clarified
- Overview of currently available data both administrative and from surveys
- Development of roadmap for implementation
- Development of initial budget for agricultural census
- Definition of SRPG ~Statistical Register of Agricultural Holdings
- Development of high-level cooperation agreements / Memorandums of Understanding
- Protocols describing specific exchange of data

2. Purpose of the activity

- To continue the work on the Master Plan
- Agricultural Census:
 - Questionnaire adjusted for the needs of the CAPI method
 - Creation of rules for data quality control
- Other issues to be decided
- Preparation of ToR for next activity including time and agenda

3. Expected output of the activity

- ToR for next activity made including time and agenda
- Mission report

Annex 2. Persons met

BHAS:

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Ljubiša Eskić, Senior Advisor for Structural Statistics in Agriculture

FIS:

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Elmina Ramić-Lukač, Senior Officer for Agriculture Statistics
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