



## Terms of Reference

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**Position Title: Consultant: Improvement of the Agricultural and Environmental Statistics compiled by the Department of Statistics of Jordan, and development of an agricultural employment survey**

**Contract type: External Collaborator**

**Duty Station: Remotely**

**Duration of Consultancy: 10 April – 31 May 2022**

**Number of workdays: 25**

**Organization unit: Regional Office for the Arab States**

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### Background

The ILO is supporting the Department of Statistics of Jordan (DOS) in improving its technical capacity. The Directorate of Agricultural and Environmental Statistics of the DOS conducts a comprehensive agricultural census every ten years as recommended by the Food and Agriculture Organization of the United Nations (FAO). The first agricultural census was conducted in 1953, and the most recent one, the seventh agricultural census, in 2017. The 2017 agricultural census provided a comprehensive, up-to-date and accurate picture of the agricultural sector according to the Central Product Classification (CPC1) at the level of small administrative units. The statistical information obtained from the census provides a basis for all plans and strategies for agricultural development and reform by collecting quantitative information about the structure of the agricultural sector (structuring the agricultural sector) using the agricultural holding as a unit of enumeration. The census covers all regions of the Kingdom for an entire agricultural year.

The Directorate of Agricultural and Environmental Statistics also produces annual agricultural statistical data through a number of sample surveys – namely, the Olive Press Survey, the Agricultural Nurseries Survey, the Fish Survey and the Beehives Survey (<http://dosweb.dos.gov.jo/agriculture/agricultural-strategy/>) – developed within the framework of *the National Strategy for Agricultural Development (NSAD) 2002 – 2010*. The *NSAD 2002 – 2010* recommended that the DOS take the lead in collecting data on agricultural activities and production, and coordinating the data production of other

relevant agencies, in order to assist in agricultural sector planning and policy-making. The surveys are conducted monthly, quarterly, semi-annually or annually, and some also make use of administrative records. The samples for the agricultural surveys are designed based on the framework provided by the agricultural census of 2017.

The objectives of the agricultural surveys conducted by the DOS can be summarized as follows:

1. Estimating the planted areas and production for field crops, fruit trees and vegetables by variety and season;
2. Estimating the total numbers of fruit-bearing trees by variety;
3. Estimating the quantity and value of the plant and livestock production requirements (inputs) used during the agricultural year;
4. Estimating the size of the agricultural workforce by type of employment, gender, nationality and age group;
5. Estimating the contribution of agricultural activity to the Gross Domestic Product;
6. Providing accurate and comprehensive data on the numbers and characteristics of livestock by type, breed, sex and age group;
7. Estimating wholesale prices, central market prices and farm gate prices for various agricultural products;
8. Estimating the marketing costs incurred by farmers selling their products on wholesale markets or central markets or at the farm gate, together with the relative weight of each component of these costs;
9. Estimating the average prices of the production requirements (inputs), and
10. Estimating the shares of the total quantities of products sold that are marketed via wholesale markets, central markets and local markets, and at the farm gate.

As seen above, the fourth objective of the agricultural surveys concerns employment in the agricultural sector and envisages estimating the volume of agricultural labour by type of employment, gender, nationality and age group. Thus data on agricultural employment is obtained by means of questions included in the regularly-implemented surveys of plant and livestock production and inputs.

Further information and data published by the Directorate of Agricultural and Environmental Statistics is available at the links provided in the Annex.

The mission of the DOS is to provide updated statistical products and value-added services characterised by accuracy, comprehensiveness and credibility in accordance with the best standards and practices. The DOS is seeking to improve the quality and coverage of agricultural statistics. In this context, it intends to conduct a dedicated survey on

employment in the agricultural sector, in line with the *Resolution concerning statistics on work, employment and underemployment* adopted at the 19th International Conference of Labour Statisticians (ICLS) in 2013<sup>1</sup>.

To these ends, the DOS wishes to review the methodologies currently used in producing agricultural statistics and to produce and disseminate statistics on agriculture, including employment in the agricultural sector, in line with the relevant international standards in order to meet the needs of decision-makers and policy-makers in Jordan.

The ILO/ROAS therefore requires the services of a Consultant (a) to study the existing sources of data on the agricultural sector in Jordan, assess the strengths and weaknesses of the data, and develop and propose ways of improving them, and (d) to develop the methodology and questionnaire to be used in an agricultural employment survey conforming to international standards.

### **Description of Tasks**

The Consultant will be expected to undertake the following tasks related to the conduct of an employment survey in the agricultural sector and the sectors supporting it:

1. Study the existing sources of data on the agricultural sector in Jordan, assess the strengths and weaknesses of the data, develop and propose ways of improving them, and
  - a. Prepare a report accordingly and share it for comments.
  - b. Incorporate the comments.
2. Develop the methodology and questionnaire required to conduct the agricultural employment survey in full conformity with international standards. The methodology should also discuss the possibility of calculating agricultural labour cost indexes.
  - a. Share the methodology and questionnaire for the comments.
  - b. Incorporate the comments.
3. Prepare a list of indicators and their operational definitions based on the draft questionnaire and suggest a list of minimum cross-tables for dissemination.
  - a. Share the indicators, operational definitions, and list of tables for comments.
  - b. Incorporate the comments.
4. Develop the methodology for linking the results of the agricultural employment survey to the administrative records by suggesting a reconciliation table(s),

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<sup>1</sup> ILO, 19th ICLS, [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_230304.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_230304.pdf)

- a. Share the draft methodology for comments; and
- b. Incorporate the comments by 27 May 2022.

### **Professional Qualifications and Experience**

The Consultant should be a qualified survey design expert or statistician with a background in survey design for agricultural statistics, including the use of administrative data for improving the sampling frame, and in the analysis of agricultural statistics. Knowledge and experience in developing questionnaires for the establishment surveys will be an added advantage.

### **Administrative Arrangements**

The Consultant will work directly under the technical supervision of ILO's Regional Office for the Arab States, and the administrative supervision of Ms. Fride KHAN, Sr Spec, Gender Equality and Coordinator of Jordan DWCP, ILO/ROAS.

### **Duty Station or Location of Assignment**

The Consultant is expected to work remotely. Participation in regular video/call conferences will be required. No travel is foreseen under this contract. If needed, travel will be arranged separately by the ILO.

### **Duration**

The assignment will start on 10 April 2022 and ends on 31 May 2022.

### **Other**

The rest covered by standard text.

### **How to Apply**

Experts wishing to apply to this assignment must send an email to Ms. Wedyan abu swilem at [abuswilem@ilo.org](mailto:abuswilem@ilo.org). The email shall include:

1. The consultant's updated curriculum vitae
2. A detailed financial offer
3. Writing sample on a similar topic from the expert's own work.

Emails must use subject title: **the Agricultural and Environmental Statistics \_ JO**

**The deadline for receiving applications is 10<sup>th</sup> of April 2022 COB Only applications that fulfil the requirements indicated above will be considered.**

## **Annex: Sources of online information on agricultural statistics:**

1. DOS statistics on the agricultural sector:  
<http://dosweb.dos.gov.jo/agriculture/>
2. Agricultural Census Bulletin (pdf) (2007-2017):  
<http://dosweb.dos.gov.jo/product-category/agricultural-census/>
3. The Census Bulletin also includes agricultural employment data, and can be visited at:  
[http://dosweb.dos.gov.jo/censuses/agriculture-census/census2017\\_tables/](http://dosweb.dos.gov.jo/censuses/agriculture-census/census2017_tables/)
4. Number of Family Labour and Hired Permanent Labour in Agricultural Holdings by Nationality, Sex and Total Area Size Class of the Holding:  
[http://www.dos.gov.jo/dos\\_home\\_e/main/agriculture/census/tables1/tab3\\_1.pdf](http://www.dos.gov.jo/dos_home_e/main/agriculture/census/tables1/tab3_1.pdf)
5. Number of Family Labour and Hired Permanent Labour in Agricultural Holdings by Nationality:  
[http://www.dos.gov.jo/dos\\_home\\_e/main/agriculture/census/tables1/tab3\\_2.pdf](http://www.dos.gov.jo/dos_home_e/main/agriculture/census/tables1/tab3_2.pdf)
6. Number of Family Labour and Hired Permanent Labour in Crops Parcels by Nationality:  
[http://www.dos.gov.jo/dos\\_home\\_e/main/agriculture/census/tables1/tab3\\_3.pdf](http://www.dos.gov.jo/dos_home_e/main/agriculture/census/tables1/tab3_3.pdf)
7. Number of Family Labour and Hired Permanent Labour in Livestock Parcels by Nationality:  
[http://www.dos.gov.jo/dos\\_home\\_e/main/agriculture/census/tables1/tab3\\_5.pdf](http://www.dos.gov.jo/dos_home_e/main/agriculture/census/tables1/tab3_5.pdf)
8. Number and Area of Agricultural Holdings Reporting Using Labour and Total Area Size Class of the Holding, Jordan:  
[http://www.dos.gov.jo/dos\\_home\\_e/main/agriculture/census/tables1/tab3\\_5.pdf](http://www.dos.gov.jo/dos_home_e/main/agriculture/census/tables1/tab3_5.pdf)
9. Agricultural Statistics Bulletin (pdf):  
<http://dosweb.dos.gov.jo/product-category/agricultural-statistics/>

The information included in the Agricultural Statistics Bulletin is as follows:

- a. Survey of agricultural areas
  - b. Survey of plant production inputs
  - c. Study of the economic indicators of plant production
  - d. Livestock survey (Informal sector)
  - e. Survey of economic indicators (Formal sector)
  - f. Livestock input survey
  - g. Study of the prices of agricultural producers (farm gate price)
  - h. General monthly price index of agricultural producers
  - i. Study of marketing costs
  - j. Study of the prices of agricultural production requirements (inputs).
  - k. Capital formation survey (Data for this is not published on the website; it is only obtained for the national accounts through agricultural censuses).
10. Livestock data is available at:  
<http://dosweb.dos.gov.jo/agriculture/livestock/>
  11. Or through the interactive data bank link:  
[http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS\\_Database/](http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS_Database/)

12. Livestock data including agricultural labour, poultry (broilers, laying eggs, mothers and grandmothers), hatcheries, cows, sheep and goats is available through the interactive table Number of Employees in the Livestock Activity aged 16 Years and Above by Type of Holdings, Activity and Kind of Labour, Nationality, Sex and Time:  
[http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS\\_Database/START\\_07/AGR\\_WRK/](http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS_Database/START_07/AGR_WRK/)
13. Crops Statistics are published at:  
<http://dosweb.dos.gov.jo/agriculture/crops-statistics/>
14. Or through the interactive data bank link:  
[http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS\\_Database/](http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS_Database/)
15. Data on crops includes agricultural labour through the table The Number and Characteristics of Workers by Level, Activity and Kind of Labour, Nationality, Sex & Age and Time:  
[http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS\\_Database/START\\_08/AGR\\_VEGWRK/](http://jorinfo.dos.gov.jo/Databank/pxweb/en/DOS_Database/START_08/AGR_VEGWRK/)
16. Agricultural prices are published at:  
<http://dosweb.dos.gov.jo/agriculture/agricultural-prices/>
17. The National Agricultural Strategy Bulletin (pdf):  
<http://dosweb.dos.gov.jo/product-category/agricultural-strategy/>

The Agricultural Strategy Bulletin includes data from the following surveys and studies:

- a. Survey of beekeeping.
  - b. Survey of fish farms.
  - c. Fishing survey.
  - d. Survey of olive presses production.
  - e. Survey of agricultural nurseries.
18. The Agricultural Statistics Strategy (pdf), including data on agricultural employment in the beekeeping and fish farming sectors:  
<http://dosweb.dos.gov.jo/agriculture/agricultural-strategy/>
  19. The Food Balance Bulletin (pdf) is available at:  
<http://dosweb.dos.gov.jo/product-category/food-balance/>
  20. Or through the interactive data bank link:  
<http://jorinfo.dos.gov.jo/Databank/pxweb/en/FoodBalanceSheet/>