

**TWINNING PROJECT**

**Support to Development Process in the State  
Statistics Service of Ukraine with the Objective to  
Enhance its Capacity and Production**

**Ukraine**



**MISSION REPORT**

**on**

**Component 7 – Agricultural Statistics**

**Activity 7.1 Assessment Mission – Typology of agricultural holdings**

Mission carried out by Mr Karsten Larsen and Mr Peter Vig Jensen, Denmark

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*Author's name, address, e-mail*

*Mr Peter Vig Jensen  
Statistics Denmark  
Sejrøgade 11  
DK-2100 Copenhagen Ø  
Denmark  
Tel: +45 39 17 30 31  
Mob: +45 22 92 15 99  
Email: pvj@dst.dk*

*Mr Karsten Larsen  
Statistics Denmark  
Sejrøgade 11  
DK-2100 Copenhagen Ø  
Denmark  
Tel: +45 39 17 33 78  
Email: kkl@dst.dk*

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## List of Abbreviations

ToR	Terms of Reference
SSSU	State Statistics Service of Ukraine
SD	Statistics Denmark
FSS	Farm Structure Survey
FADN	Farm Accountancy Data Network
SO	Standard Output
DG Agri	Directorate-General for Agriculture and Rural Development

## Executive summary

The mission was carried out according to ToR. Relevant information was shared between the SSSU and Danish experts and common base of knowledge and understanding was established.

A number of specific actions were agreed upon and preliminary plans were made for the coming mission and study visit to Denmark.

Finally five recommendations were made:

1. The SSSU experts will make a pilot study using the FSS typology on a sample of Ukrainian agricultural enterprises and divide the enterprises into the eight general groups (P1-P8) of the typology.
2. For the medium or long term perspective it is proposed to do a census in one district for two to four selected villages.
3. The SSSU experts should get further acquainted with the relevant regulations and documentation.
4. SSSU shall introduce the concept of agricultural holding in line with the European regulation.
5. An agricultural census should be conducted – preferably before 2018.

## 1. General comments

This mission report was prepared within the Twinning Project „Support to Development process in the State Statistics Service of Ukraine with the Objective to Enhance its Capacity and Production”. It was the first mission within Component 7 “Agricultural Statistics”. The mission was aimed at the subject of typology of agricultural holdings.

The concrete objectives of the mission were:

1. to familiarize the Danish experts with the existing in Ukraine practice of grouping (breakdown by types, kinds, etc.) agricultural producers;
2. to familiarize the SSSU specialists with major international (European) standards and methodology of typologization of agricultural holdings;
3. to specify the plan of further activities to be carried out and outline the list of issues to be considered during the next mission.

The mission setup was excellent. Good meeting facilities, translation and highly qualified SSSU experts took part in the mission. The Danish experts would like to express their thanks to all officials and individuals met for the kind support and valuable information which we received during the stay in Ukraine, and which highly facilitated the work of the experts.

The views and observations stated in this report are those of the experts and do not necessarily correspond to the views of EU, SSSU or Statistics Denmark.

## 2. Assessment and results

*According to the first objective the Danish experts were introduced to Ukrainian practice and conditions as summed up below.*

### Enterprises and households

In Ukraine there are about 55.000 agricultural farms registered as enterprises. Most of them, about 45.000, are privately owned, the rest of them are state farms, cooperatives, agrarian companies. All these farms are registered by the authorities and are well described in both registers and surveys of different kinds.

In addition to the “real farms”/enterprises there are a huge amount of small household plots which have agriculture; either crops, livestock or both. They contribute significantly to the total agricultural production, especially for vegetable products. Thus these “small farms” cannot be ignored in the statistics of agriculture, neither for the economic statistics nor farm structure statistics.

### **State Statistics Service of Ukraine**

The central statistical office SSSU is located in Kiev. There are about 25 colleagues working with agricultural statistics.

There are 27 different regional offices and 490 district offices. Each district has to co-operate with a number of village councils. There are approximately 10.900 villages in Ukraine. The village councils should keep a local book which best could be understood as a kind of a local population register, also with information on households with agriculture. Normally the information is stored on paper only.

### **Agricultural statistics**

Ukraine has 22 different agricultural surveys which cover different aspects of the agricultural sector, both area with crops, harvest and livestock. Generally all big and medium farms are selected whereas a sample of small sized farms is made.

For the agricultural holdings plots a smaller sample is selected. The procedure is that a district selects a few villages where a fraction of households stratified by size are selected.

The surveys aim at fulfilling different needs:

- Information on land use
- Number of livestock
- Size of production
- National accounts needs

*The Danish experts introduced relevant EU typology according to the second objective of the mission.*

### **Typology**

EU regulation 1242/2008 covers the typology. The typology is a rather complex system which describes the farms and their specialisation into different agricultural activities so that for instance farms where pigs are dominating over crops and livestock are described accordingly.

There are five main groups:

- 1) Field crops: farms with normal agricultural crops like cereals, oil seed, potatoes etc.
- 2) Vegetable growing: farms with vegetables etc. grown either in the open or in green houses.
- 3) Permanent crops: farms with fruit plantations, vine, citrus and olive.
- 4) Grazing livestock: farms with cattle, sheep, goats and horses.
- 5) Grain eating animals: farms with pigs and poultry.

The rule for being grouped in 1, 2, 3, 4 or 5 is that the farm has more than 2/3 of its standard output from the respective activities. The standard output is calculated by assigning a special parameter to each crop and livestock – a parameter which indicates what a farmer normally can earn by having these and these crops and animals.

Farms not specialised within the five main groups are placed in the groups below:

- 6) Mixed crops
- 7) Mixed livestock
- 8) Mixed crops/livestock

The typology is used both in the accounts statistics (FADN) of DG Agri and the farm structure statistics (FSS) of Eurostat. The Ukrainian experts approve the typology as a sound principle of describing the farms, and they would like to implement it in the future.

Regulation 1166/2008 lays down the EU requirements of farm structure statistics. There have to be surveys in 2010, 2013 and 2016 where 2010 had to be a total census. A wide range of items have to be covered:

- 1) Crops
- 2) Livestock
- 3) Labour force
- 4) Machinery
- 5) Other items like for instance organic farming and irrigation.

The crops and livestock questions are the necessary base for the typology so the regulations on typology and farm structure statistics should be seen in close relation to each other. The typology is unthinkable without a farm structure survey. On the other hand the FSS provides a much broader description of the farm structure than just the typology.

The concept of standard output (SO) was introduced and practical examples of calculating farm size and farm type were given.

### **Assessment**

The experts would like to stress the following major findings:

- Agriculture should be seen as something special and must be covered particularly for a number of reasons:
  - Unlike most other sectors the agricultural sector consists of many small units which are run by one family and often without any paid labour. This is the case all over Europe, also among old EU countries.
  - Agriculture and forestry play a special role for the land scape and the environment. It means that agricultural statistics can be seen as more than regular business statistics. It is also environmental statistics which is needed by many groups, for instance students, researchers and politicians.
  - Agriculture has a certain role to play in the politics of most countries. The common agricultural policy in EU is well known but also most other countries have a special agricultural policy. It means that a solid statistical coverage is of vital importance for the politicians and the administrative bodies.

The SSSU has so far not implemented the common European typology, see a description above. NACE classification is used as far as the registered farms are concerned. For the households it is not possible to calculate any classification since the individual information is only available at the village level and most often not in an electronic format.

When conducting the sample surveys on households a rather sophisticated procedure is chosen. Each district must select a number of village councils to be covered. In the village council the population is divided into four groups or strata by size of the total area of the land used by the household:

- 1) Smaller than 0.5 hectares
- 2) 0.5-0.9 hectares
- 3) 1.0 hectares or more
- 4) Extraordinary big households are selected by certain principles. They are in practice real farms/legal entities but have not been registered as such.

For these four groups 30 %, 50 %, 20 and 100 percent of the households are selected respectively. Extrapolation factors are calculated along rather sophisticated lines where the probability of being

selected is dependent on the size of the area which in turn influences the size of the extrapolation factor. Evidently non response is accounted for when calculating the extrapolation factors.

## 2.1. Agreed actions

The following was agreed upon during the mission:

- The Danish experts will send a methodology document by Karsten Larsen to SSSU.
- The Danish experts will send information on Danish slaughtering statistics to SSSU.
- If requested by the SSSU that the Danish experts will try to provide SO coefficients from a relevant EU member state.
- A study visit to Denmark was proposed for the week 22-26 June 2014. The Danish experts will confirm whether this will be possible. If not an alternative date will be proposed.
  - The Danish experts will make a draft programme for the study trip, including general introduction to Danish statistics focusing on agriculture, organization, software solutions, FSS and typology.
  - Experience from the study visits will be taken into account when planning the future missions.
- The next mission was proposed for the end of October. The Danish experts will confirm this date.
- It was agreed that the Danish and SSSU experts can communicate bilaterally by email.

## 3. Conclusions and recommendations

After the first mission the relevant preconditions have been identified to ensure implementation of component 7 on agricultural statistics. Hence the Danish experts have the following recommendations:

1. The SSSU experts will make a pilot study using the FSS typology on a sample of Ukrainian agricultural enterprises and divide the enterprises into the eight general groups (P1-P8) of the typology. It is proposed to take a sample of approximately 9.000 large enterprises where the relevant data is available. In addition approximately 12.000 small and medium sized enterprises will be included. If too many challenges will be encountered it is proposed to carry out the pilot with a smaller sample.  
The pilot will start now and the first experiences will be gathered before the study visit – actual results will not be expected.
2. For the medium or long term perspective it is proposed to do a census in one district for two to four selected villages. The individual agricultural information should be collected and stored electronically. However certain aspect will have to be clarified, as SSSU does not have the authority to make binding requests from village councils.
3. The SSSU experts should get further acquainted with the relevant regulations and documentation.
  - a. Regulation 1166/2008 on farm structure statistics.
  - b. Regulation 1242/2008 on farm typology
  - c. RI/CC 1500 rev. 3 – Typology handbook
4. SSSU shall introduce the concept of agricultural holding in line with European regulation 1166/2008.
5. An agricultural census should be conducted – preferably before 2018.

## Annex 1. Terms of Reference



### European Union Twinning Project

**Support to Development Process in the State Statistics Service of Ukraine with the Objective to Enhance its Capacity and Production**

**Twinning No.: UA/13/ENP/ST/38**

### Terms of Reference

for a short-term mission to the State Statistics Service of Ukraine

*Component 7 Agricultural Statistics  
Activity 7.1. Assessment mission*

#### General information

Statistics Denmark in partnership with INSEE France, Statistics Lithuania, Statistics Finland, Statistics Sweden, Central Statistical Bureau of Latvia, Central Statistical Office of Poland, Italian National Institute of Statistics (ISTAT) and Statistical Office of Spain (INE) is leading the EU-Twinning project on “Support to Development Process in the State Statistics Service of Ukraine with the Objective to Enhance its Capacity and Production” in Ukraine. The beneficiary is the State Statistics Service of Ukraine.

This activity is implemented under the Component 7 “Agricultural Statistics”. The purpose of this component is to introduce the methodology of typologization of agricultural holdings into Ukrainian Agricultural Statistics.

This activity will help to

- improve the knowledge and practical skills of the SSSU specialists on the European methodology of typologization of agricultural holdings;
- assess the current practice of grouping agricultural producers in Ukraine;
- carry out work on the introduction of the term "agricultural holding" as a general category of agricultural producers;
- prepare translations of legal documents of the EU and the FAO (UN) concerning the typologization of agricultural holdings;
- prepare draft methodological guidelines on the typologization of agricultural holdings and test them.



**Purpose of the mission**

Mission's priority purpose:

- to familiarize the EU experts with the existing in Ukraine practice of grouping (breakdown by types, kinds, etc.) agricultural producers;
- to familiarize the SSSU specialists with major international (European) standards and methodology of typologization of agricultural holdings;
- to specify the plan of further activities to be carried out and outline the list of issues to be considered during the next mission.

**Activities**

Approximate scheduling:

**Day 1 – April 1, 2014**

The SSSU experts make the presentation on:

- the existing in Ukraine system of statistical accounting of major agricultural producers and their performance (methodological approaches and forms of state statistical observations);
- the Statistical Register of AGRO - list of actors who carry out their economic activities in agricultural sector, hunting, forestry and fishery as the basis for state statistical observations in relevant fields;
- the existing practice of using grouping of agricultural producers by their types, kinds, etc. while disseminating and analysing the statistical data.

**Day 2– April 2, 2014**

- the SSSU specialists will get familiarized with the regulations of the European Commission related to typologization of agricultural holdings and conducting structural surveys on agricultural holdings in the EU, as well as with the term "agricultural holding" and the experience of their practical implementation.

**Day 3 – April 3, 2014**

- the EU experts assess the compliance of the Ukrainian practice of grouping major agricultural producers with the EU standards; identify opportunities and ways to improve it by introducing the concept of "agricultural holdings" and their typologization.
- discussion of the content of further actions under this component.
- planning and outlining the issues to be studied during the study visits.

**Consultant and partner**

The mission will be carried out by:

Mr Peter Vig Jensen (Statistics Denmark)

Mr Karsten Larsen (Statistics Denmark)

**Beneficiary Institution:**

Department of Agriculture and environment statistics

Oleg Procopenko, Director

Olga Sikachyna, Deputy Director

Lesya Rabush, Head of the Unit of structural surveys in Agriculture and statistical register

**Scheduling**

The Mission will take place on 1-3 April, 2014 in Kyiv, Ukraine.

**Report**

The final report on the mission should be submitted no later than two weeks after the completion of the mission.

**Annex 2. Persons met****SSSU:**

Oleg Procopenko, Director, Agriculture Statistics

Olga Sikachyna, Deputy Director, Agriculture Statistics

Svitlana Masyuk, deputy Director, Head of Unit of agriculture and fishery products

Lesya Rabush, Head of the Unit of structural surveys in Agriculture and statistical register

Volodymyr Kobylin, Head of sector for organization and conduction of agriculture census

**RTA Team:**

Irina Bernstein, RTA

Olga Burbelo, RTA assistant

## **Annex 3. The farm concept**

### **What is a farm?**

**Karsten Larsen, Statistics Denmark**

#### **1. Producer of agricultural products**

According to the EU-regulation 1166/2008 a farm is defined as a unit producing agricultural products, either crops or livestock. The regulation has a long list of crops and animals which a farm structure survey (FSS) has to cover. Generally the list is in accordance with a normal understanding of agricultural activities.

It means that farms with for example cereals, pulses, root crops, fruits, berries and animal fodder crops should be covered as well as livestock farms with cattle, pigs, sheep, goats, horses and poultries.

Some cases often give rise to discussion or misunderstanding. It could be mentioned that these activities do not have to be covered in the FSS:

- Fur animals
- Forestry
- Aqua culture
- Agricultural service

However, any EU country is free to cover these aspects in the FSS for national reasons.

Among questionable cases which have to be covered the following items could be mentioned:

- Bee hives
- Rabbits
- Christmas trees

It is not of importance whether a farm produces for the market or not. The question of survey thresholds will be dealt with in chapter 5 but here it should just be emphasized that a farm with for example cows should be included in the FSS whether the milk is sold to the dairy or consumed by the farmer's family.

Likewise farms should be covered by the FSS both if the land is owned or leased, and also if the land is partly owned and partly leased.

#### **2. Location of the farm**

Regional statistics about agriculture are most often of great interest among the users. Very often they demand even very detailed statistics with figures for municipalities.

Thereby every farm should have a municipality code which indicates where the agricultural activity takes place.

Normally it is pretty easy to determine the municipality code of the farm. It is simply the town where the farm is located. But there might situations where there could be doubt. If a farm has land in more than one municipality it should have the municipality code where the farmer has his house. If the farmer lives somewhere else the municipality code should be where the farm has its biggest area. It should be noticed that the farmer's private address might differ from the address of the farm.

### 3. Different types of organisations

Normally the statistical definition of a farm does not conflict with the intuitive understanding: One man owns or rents some land and cultivates the crops and has some animals, for instance cattle and pigs. He is the leader and runs the farm with the help of his family and might also have one or more non family workers if the farm is big.

It means that in most cases there can be no doubt about the statistical unit. The following list concerns special cases:

- **Two farmers have a close co-operation.** There is no exact rule as to when the co-operation is so close that the case in fact should be considered as one farm. For big farms a criterion could be common book keeping but it would hardly make much sense for small farms with no formal book keeping system.
- **Collective and state farms** should be included in the FSS.
- **Private companies** with agriculture.
- **Farms with livestock but no land** should also be included. They might have bought or leased a pig or cattle stable from another farm so that the land and the livestock of what used to be one farm unit now are two farms.
- **Agro scientific research farms** are also farms. They have most often land and livestock which easily can be recorded in the questionnaire. Labour force questions are more difficult because most of the staff is not traditional agricultural workers.
- **Common land farms** are special farms which hardly can be seen as real farms. The problem concerns cases where livestock farms in a village have access to an area with common grass land. The land cannot be attributed to any specific farm; one farmer cannot know how big an area he uses of the common land.
- Other special cases are agricultural land owned by **religious societies, prisons, hospitals, homes for disabled persons, schools** and **military barracks**. Such farms should also be included in the FSS.

### 4. Holder/Farmer

When conducting a farm structure survey in accordance with the EU standard the following persons should report their working time:

- The farmer (holder)
- The manager (if there is no personal holder or if the holder does not work at the farm).
- The wife of the farmer
- Family workers
- Non family workers

It is thus of importance to decide who is the farmer and who should be recorded somewhere else. For a traditional farm the farmer is the person who owns the land and runs the farm, very often together with his family.

In the following are listed the cases where doubt might arise:

- **Man-wife farms:** Here the farmer should be the spouse with the biggest responsibility. If the children take part in the work of the farm it could occur that for example the oldest son might be the best choice as the farmer, especially if the parents are not quite young anymore.

- Farms run by two or more partners: Again the partner with the biggest responsibility should be chosen.
- The owner/tenant of the land does not work at the farm: in these cases a manager should be chosen, who is hired by the farmer to take care of leading of the farm. Such a case is very rare.
- The farmer is not a natural person: This is the case for farms owned by government institutions and farms run by companies. For such farms one person should be selected as the manager.

If it is difficult to determine who has the biggest responsibility at a farm other criteria might be used, for instance to choose the oldest person working at the farm.

### **5. Thresholds, defining the population of the agricultural census**

In the farm structure statistics it is very common to exclude the smallest farms as long as they do not contribute very much to the agricultural land and the livestock.

Also the EU regulation deals with so-called threshold which means that EU countries are allowed to exclude very small farms. The rules might be a bit tricky:

A country should include either:

- 1) All farms which have at least 1.0 hectare of agricultural land.

Or

- 2) If another threshold is selected – say 3.0 hectares – all farms with at least 98 per cent of the area and at least 98 per cent of the livestock (livestock units) should be covered.
- 3) Irrespective of 1) and 2) all farms which fulfil just one of the following criteria should be included:
  - a) At least 5.0 hectares of agricultural land
  - b) At least 0.5 hectares with vegetables, fruits and berries
  - c) At least 0.1 hectares with green house crops
  - d) At least 0.5 hectares with tobacco, hops or cotton
  - e) At least 10 cattle
  - f) At least 20 sheep
  - g) At least 20 goats
  - h) At least 50 pigs
  - i) At least 20 sows
  - j) At least 1.000 poultrys

So it should be noticed that there never can be any freedom from including farms which fulfil just one single of the criteria a-j.