

Challenges of Adapting the Slovenian National Statistical System of Agriculture Concerning European and Other International Requirements

Barbara KUTIN, BSc (Agric)

Head of Agriculture, Forestry, Fishing and Hunting Statistics Department
Statistical Office of the Republic of Slovenia
Address: Vožarski pot 12, SI-1000 Ljubljana
E-mail: barbara.kutin@gov.si

Abstract:

The Statistical Office of the Republic of Slovenia started to adjust its agriculture statistics to European requirements in 1993. The main effort made in this period of adjustment was to provide methodologically comparable time series of most important data for a sufficiently long period before the changes were introduced.

The paper describes the main content related aspects of adjustment and problems encountered after adjusting agriculture statistics to European requirements. The future of agriculture statistics is also described from the point of view of a small and heterogeneous country such as Slovenia.

Keywords:

agriculture, Slovenian National Statistical System of Agriculture, classifications, Statistical Farm Register, administrative sources in agriculture.

1. Introduction

The Statistical Office of the Republic of Slovenia started to adjust its agriculture statistics to European requirements in 1993. At that time, we were preparing the census of agriculture, which was planned for the year 2000. Until 1997, data on agricultural production on family farms – which represent the predominant part of agricultural production in Slovenia – were mostly estimated, therefore the transition to collecting data directly from family farms was quite demanding, especially in terms of establishing the basic list of family farms. We also had to determine a new threshold (determination of agricultural holdings satisfying the criteria of EU comparable threshold).

The main effort invested after the year 2000 was to provide methodologically comparable time series of important data for a sufficiently long period before the introduction of changes. In the field of agriculture statistics this was the period since 1991 (since the last census before the year 2000) and in the field of agricultural prices and economic accounts for agriculture the period since 2000 and 1995 respectively.

Due to the necessary rationalisation of work and costs, after 2000 we started with intensive introduction of modern dissemination processes (introduction of software for rapid and simple tabulation as well as presentation of data and publications on the Internet) and using administrative data sources to the greatest possible extent.

The paper describes the main aspects of adjustment in terms of contents and problems we are facing after adjusting agriculture statistics to European requirements. The future of agriculture statistics is also described from the point of view of a small and heterogeneous country such as Slovenia.

2. Adjustment of agriculture statistics to requirements of the EU and other international organisations

The main objective in adjusting agriculture statistics to requirements of the EU and other international organisations was to preserve or even improve the quality of statistical data that had been achieved by developing the method of data collection. At the same time we had to take into account the legal platform governed by the EU or by the national statistical legislation: independence of official statistics, objective methodology and personal data protection. Introducing methodological changes, we had to provide data comparability with previous years. We were aware that various users will demand ever more data, therefore we had to provide the easiest possible data access for them as well as technically simple and rapid solutions for data tabulation and analysis.

The basis for preparing the 2000 Census of Agriculture was the Register of Territorial Units in Slovenia, which was set up by the Statistical Office of the Republic of Slovenia and which is now being kept (from 1995) by the Surveying and Mapping Authority of the Republic of Slovenia. This source of spatial data on household addresses was necessary for preparing fieldwork and later on for setting up the Statistical Farm Register. At the same time this is also the single source of territorial data for all registers and records in Slovenia, which is the basis for linking units from various administrative and statistical sources.

2.1. The period up to 2000

The start of the period is 1993, while the first survey conducted by taking into account Eurostat recommendations took place in 1997 when we implemented the Sample Farm Structure Survey. Our purpose was to test the questionnaire and fieldwork for the 2000 Census of Agriculture. In the same year the Census of Orchard Plantations was also carried out, which was completely harmonised with Eurostat recommendations. One of the main purposes of this survey was to complete the list of family farms with orchard plantations for the 2000 Census of Agriculture.

The main purpose of these surveys was to learn about the problems with fieldwork, to test the use of methods adjusted in terms of contents and to determine the threshold of covering agricultural holdings (to determine criteria for European size class agricultural holdings).

The project of determining the criteria for European size class agricultural holdings was entitled 'Socioeconomic and size structure of family farms in the 1981-1991 period'¹. The bases for determining the criteria were the size structure of family farms in Slovenia, EU legislation and criteria used in some EU Member States. An analysis was prepared of data recalculated according to various thresholds. The analysis compared coverage of agricultural production and costs as well as the necessary number of interviewers for the 2000 Census of Agriculture.

Classifications according to which data were collected also needed to be updated. We had to take into account data comparability for the period before the change and

¹ The mentioned project was financed by the Ministry of Agriculture, Forestry and Food, while data analyses were prepared by the Biotechnical Faculty in Ljubljana (Department of Rural Economics) and the Statistical Office of the Republic of Slovenia.

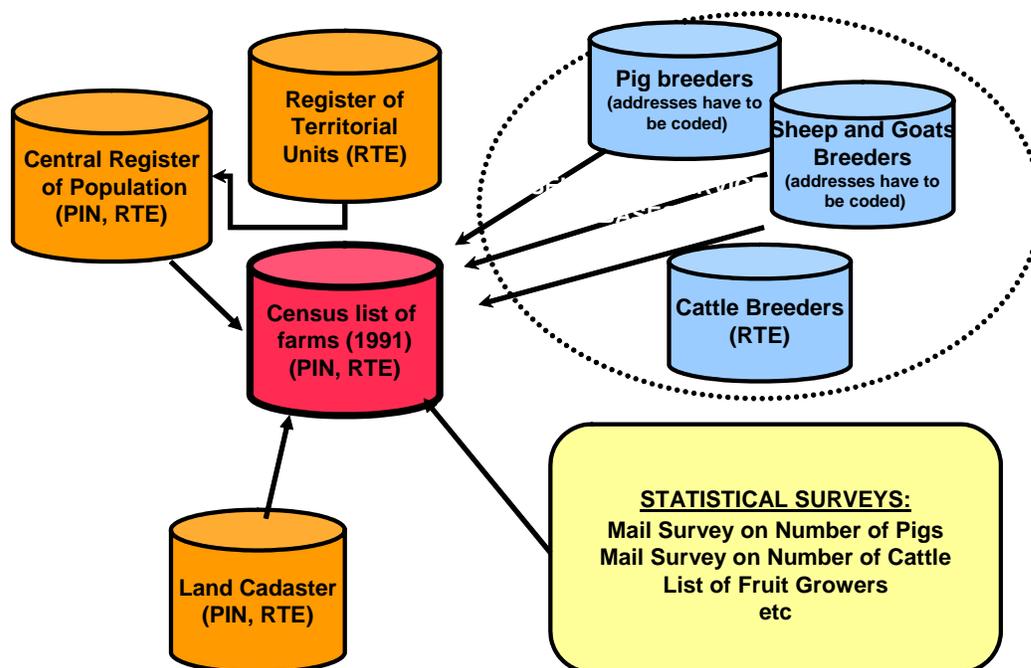
complementarity between the updated classification of agricultural products and other classifications defining the same products but for other purposes (e.g. HS/CN, CPA).

The final solution was a multilevel classification, which at the lowest level contains a very detailed list of products. Higher levels of this classification are determined by taking into account national needs for data dissemination and considering to the greatest extent the New Cronos classification. For the needs of data dissemination according to other internationally important and applied classifications, we can prepare conversion tables that convert categories in our classification at the lowest level into appropriate higher levels of other classifications.

Monitoring of some data was connected with major methodological interventions in terms of contents. An example is collecting data on cattle herd where we were gradually harmonising the categories regarding age classes of animals and supplemented them with the breakdown by purpose of breeding. In doing that we had to take into account various EU requirements: surveys on the number of animals and farm structure surveys. In preparing comparable time series, we could not avoid estimating data for the period before the change.

Preparations for the 2000 Census of Agriculture, which had been going on since 1995, were the start of using administrative sources as we understand it today. We had to prepare a good list of agricultural holdings covered by the census. The basic list included agricultural enterprises and co-operatives – we have already been monitoring their agricultural production every year – and family farms – we have had their list since the 1991 population census. Because of great changes in the 1991-2000 period, the 1991 list was out-of-date. For preparing the list of family farms we have therefore used information from our regular surveys and all available administrative sources, combined them, eliminated doubles to the greatest possible extent and with the help of the Central Register of Population updated the names of addressees (*Chart 1*).

Chart 1: Use of various statistical and administrative sources for preparing the list of family farms participating in the 2000 Census of Agriculture (Source: Orešnik, SURS):



2.2. The period after 2000

With the 2000 Census of Agriculture we obtained the basis for further work in terms of adjusting the system of agriculture statistics to EU recommendations: setting up the Statistical Farm Register and preparation of methodologically harmonised time series of data on agricultural products for the period between the last two censuses (1991-2000). As regards the contents, this was the most demanding step, which had been prepared before. In preparing harmonised time series of data on agricultural products we were assisted by the Agriculture Institute of Slovenia.

On the basis of 2000 census data, we calculated for the first time production typology and economic size of agricultural holdings according to Eurostat recommendations. This calculation was prepared in co-operation with the Methodology Department of the Statistical Office of the Republic of Slovenia and the Agriculture Institute of Slovenia.

As expected, users' requests for data increased considerably after the Census of Agriculture. Therefore, with the help of Phare funds we organised data into Data Warehouse and prepared the census database for access with rapid and simple tabulation software called Oracle Discoverer, which shortened the time for preparing tables. At the same time, we anticipated data presentation regarding various size classes or various classifications, which enabled subject-matter specialists to independently and rapidly prepare data according to different requests and formats. In the 2001–2003 period we prepared in the same way data of the Census of Horticulture and of the Census of Orchard Plantations. Later on the Office started modernising its web pages and agriculture statistics were the first prepared for access via the Internet in PC-AXIS format (<http://www.stat.si/pxweb/dialog/statfile1.asp>).

At the beginning of 2004 we set up the Statistical Farm Register (hereinafter: the register), the main purpose of which is to provide a good sampling frame for preparing samples of agricultural holdings. In addition to the latest situation of address and contents data, the register contains the history of data on agricultural holdings since 2000. The most demanding task in setting up the register was updating of data since during the year and between individual years we use various statistical sources (statistical surveys) to update data in the register. In addition, we also used IACS (Integrated Administrative and Control System) data to update the register. Various data sources are prepared in various forms, so it was necessary to adjust the method of updating the register.

The entire time since 2000 activities have taken place in connection with harmonising other agriculture statistics with international requirements (milk and dairy statistics, agricultural balance sheets, statistics of agricultural prices and economic accounts for agriculture, etc.). Most of these were properly methodologically harmonised by May 2004.

All the mentioned activities connected with adjusting agriculture statistics to EU and international requirements were implemented by 2004 with the help of EU funds. This enabled occasional employment of additional human resources, which is no longer possible for regular tasks. Financial resources available for statistics are decreasing. How can the system be maintained in the future? The only answer is rationalisation of work within the national statistical office and among various institutions, which means using modern technical equipment and administrative sources for statistical surveys.

Because of the mentioned reasons, in 2000 the Agriculture Statistics Department of the Statistical Office of the Republic of Slovenia started using and studying the possibility of using data from various administrative sources. At that time we took over data from the administrative register of grape and wine producers as the basic data for the Census of Vineyards. In 2001 we used IACS data for the first time in a statistical survey. By using administrative data, we saved the costs of fieldwork and decreased the burden of agricultural holdings; however, additional work was required regarding methodological adjustment of administrative data for statistical use. In addition to advantages, we were faced with problems of using administrative sources:

- the reference date of the survey and the date of updating the administrative source often differ;
- difficult harmonisation in terms of sending administrative data for statistical purposes (it is difficult to meet the deadlines for publishing final data);
- in some administrative sources there are major differences in classifications used, which requires urgent agreement on the method of data collection between various institutions keeping administrative data sources.

Already during the period of intensive adjustment of our agriculture statistics to international and EU recommendations there were new and different needs for data in connection with changes of the Common Agricultural Policy (CAP). At the same time with the reform of the CAP the contents of IACS data also change. By enforcing the changes they will no longer be a comprehensive data source for agriculture statistics.

What will be the future of agriculture statistics and to what extent can it be predicted?

3. The future of agriculture statistics

The needs of agriculture statistics are changing. In the past the most important data were that on production and intensive production of agricultural produce was emphasised. Today we are talking about sustainable use of natural resources, about sustainable agriculture, consumer protection and healthy food, users are asking about the data indicating environment protection and sustainable agriculture, and data on food safety and organic farming are gaining importance.

Data for calculating new indicators users are asking about are located in various databases kept by various institutions. This calls for a new approach and new knowledge in preparing statistical data. Good co-operation between various institutions and good knowledge of methodological bases of official statistics are important in order to achieve harmonisation of various administrative sources in terms of contents. We cannot avoid this because due to urgent rational approach to data collection the use of administrative sources in statistical surveys will be essential. Of course, we have to preserve the objectivity and independence of official statistics, which means that statistical surveys cannot be abolished, but only that the source of data in statistical surveys will gradually change. It is important to be able to replace at any time administrative data sources in important statistical surveys with classical methods of data collection.

User's requests, especially from those users who need data for economic analyses, have changed and will continue to do so. Official statistics must follow the demand for data that are important nationally or for the European or international Community. It is therefore our task to build a statistical system that is economical in data collection, adjustable as regards data sources and provides quality and objective data.