

DEVELOPMENT OF AGRICULTURAL STATISTICS IN THE KINGDOM OF YUGOSLAVIA

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Summary

The aim of this paper is to explore the development of agricultural statistics in the Kingdom of Yugoslavia in 1918-1941 period. Collecting statistical data on agriculture was a duty of the Ministry of Agriculture. The paper reveals how the Ministry performed this job, which data were collected and in which publications these data were published. The development of agricultural statistics has been analysed by applying historical method. Comparison with agricultural statistics of certain European countries has been made by applying comparative method. It has been concluded that agricultural statistics in the Kingdom of Yugoslavia recorded significant improvements during the interwar period: all relevant data were collected, international standards were met, and publications were modernized. As for the manner of conducting statistical research and presentation of statistical data, they were in the spirit of the time and responded to the achieved level of development of statistics in the Kingdom of Yugoslavia.

Key words: *agricultural statistics, statistical publications, agricultural census, the Kingdom of Yugoslavia*

JEL: *Q10, C82, N54*

Introduction

In the Kingdom of Serbia, before World War I, statistical data on agriculture had been collected and sorted by the Administration of Government Statistics of the Kingdom of Serbia. Those data were published in publications named *The Census of Cultivated*

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Land (published once in four years, from 1889 to 1900), *The Census of Domestic Cattle* (published every five years since 1893) and agriculture had its section in the *Statistical Yearbook of the Kingdom of Serbia* which had been published since 1893. Publication *The Statistics of Farming and Harvest Yields* had been published since 1901 and it replaced *The Census of Cultivated Land*. It was published yearly until 1904. The last edition of *The Census of Domestic Cattle* had been published in 1905. *The Agricultural Price Statistics* (for periods: 1890-1895; 1896-1900; 1901-1905) is also worth mentioning.

Last published agricultural statistics data for the Kingdom of Serbia (for 1908) could be found in *The Statistical Yearbook*, book XIII, 1913. There are no sorted neither published data on agriculture for 1909-1919 period. War conditions had stopped every statistical activity including this one.

Immediately after the creation of the Kingdom of Serbs, Croats and Slovenes (SCS) all important issues concerning state organization and administration were approached to. New Government statistical service had been created called Government Statistics Directorate which incorporated the Government statistics of Serbia. Apart from the central statistical office – Government Statistics Directorate (which in 1929 changed its name to General Government Statistics of the Kingdom of Yugoslavia), almost each Ministry had its own statistical service which collected statistical data for its own purposes. Statistical services were established in the Ministry of Education, the Ministry of Army, the Ministry of Justice, the Ministry of Finance, the Ministry of Transport, the Ministry of Post Office, the Ministry of Construction, the Ministry of Agriculture, the Ministry of Forests and Mines, the Ministry of Trade and Industry, the Ministry of Social Policy and the Ministry of Public Health. In addition to the ministries, statistical research in the Kingdom of Yugoslavia was carried out by banks, cooperative associations, industrial, commercial and craft chambers, social security organizations, workers' chambers and trade unions.

The collection of statistical data on agriculture was the responsibility of the Ministry of Agriculture. The way in which this Ministry collected data on agriculture, the type of data on agriculture it collected and the publications with information on agriculture that were published are going to be presented in this paper.

After the Introduction, the methods applied in the research and the data sources are presented in Part two of the paper. The organization of statistical service in the Kingdom of Yugoslavia in the interwar period is explained in Part three of the paper. This issue is important for explaining the statistical coverage of areas of economic and social life in general and agriculture in particular. In Part four of the paper the work of the Ministry of Agriculture in collecting data on agriculture is described, sources of information on agriculture are presented, the way in which data were collected is described and the content of data collected is analysed. In the fifth part of the paper we point to the way in which agriculture had been presented in the statistical publications of the time and we give a brief overview of these publications. At the end, conclusions are drawn about the

level of development of agricultural statistics in the Kingdom of Yugoslavia and pointed to the future directions in the study of historical development of agricultural statistics.

Scientific methods and data sources in agricultural statistics

The bases for the researches of agriculture as well as agro-industry as sectors of national economy have always been time series of relevant macroeconomic indicators (Savić, Bošković, Mičić, 2016). Also, comparative studies on agricultural and agro-industrial development of different countries have always been firmly founded on relevant data of national statistical services (Jevtić, 1996). The countries with long and rich agricultural tradition such as, for example, the United States of America, Great Britain, Scotland and Hungary have thoroughly researched the history of their agricultural statistics. This subject is mainly on the agenda of the Government statistical institutions. Thus the history of agricultural census in USA could be, for example, found in the works of the U.S. Department of Commerce (see U.S. Department of Commerce, 1992) as well as on the internet site of the United States Department of Agriculture which has its own National Agricultural Statistics Service. Also, there is a briefing paper on the beginnings of agricultural statistics prepared for The House of Commons of Great Britain (Zayed, 2016). Laszka (2015) in his work on the development of agricultural statistics says that "...agricultural statistics have always been in the forefront of developments of Hungarian statistics." Finally, the internet site of the Government of Scotland, through the section on statistics, leads to Historical Agricultural Publications dating from the time even before World War I. Similarly, in other countries mentioned the time series of agriculture date back to the mid-19th century, when the development of agricultural statistics ever started. From sources we learn that after the population census, data on agriculture were the first to be systematically collected and written down (Korunić, 2012). In the Kingdom of Serbia, the collection and publication of statistical data on agriculture began in the late 19th century and then continued in the Kingdom of Yugoslavia. There was not, therefore, much lagging behind Europe. Even the quality of statistical publications was at the European level compared, for example, with *Report on the Acreage and Production of Crops and Number of Live Stock in Scotland* published in 1929 by the Department of Agriculture for Scotland.

A paper dealing with the history and development of national statistics and its particular areas has reasonably called for the application of historical method and significant research in libraries and archives (Pejanović, 2009). In search for archival documents and originals of statistical publications we visited the library of the Statistical Office of the Republic of Serbia. There, we started studying the publications of the Government Statistics of the Kingdom of Serbia. The list of these publications was found in *Statistical Yearbook of the Kingdom of Yugoslavia* for 1931, when this list was published for the first time. Also, ever since *Statistical Yearbook of the Kingdom of Yugoslavia* for 1932 has been published, the list of publications of the General Government Statistics of the Kingdom of Yugoslavia regularly appeared. Listed were the publications printed after the creation of The Kingdom of SCS.

While General Government Statistics published *Statistical Yearbook* and census books, individual ministries issued their own publications. The data represented in these publications were used as the sources for the corresponding parts of the *Statistical Yearbook*. Thus the publications of the Ministry of Agriculture were used as sources for section named Agriculture in the *Yearbook*, referenced under the heading: Printed sources. Along with the *Statistical Yearbook*, the list of publications of the Ministry of Agriculture appeared in a publication: *Cultivated Land and Crop Yields*. All publications of General Government Statistics of the Kingdom of Yugoslavia and the Ministry of Agriculture, as well as publications of the Administration of Government Statistics of the Kingdom of Serbia, have been preserved and are available in the library fund of the Statistical Office of the Republic of Serbia.

The Archives of Yugoslavia preserves also a large number of original documents of the Ministry of Agriculture and statistical data in the field of agriculture from the time of the Kingdom of Yugoslavia (Milošević, 2010). The fund: Ministry of Agriculture of the Kingdom of Yugoslavia contains tables with data on seeded fields and yields from 1920 and onwards (different cultures, vineyards, orchards...), information on the land structure (arable land, gardens, meadows, pastures), statistical data on the prices of agricultural products and the reports on the progress of crops. The fund of the Ministry of Agriculture has not been digitalized nor microfilmed yet. Also, in the Archives of Yugoslavia, originals of the *Official Gazettes* of the Kingdom of SCS and the Kingdom of Yugoslavia could be found in which decisions, laws and regulations were made public, as well as the Bulletin of the Ministry of Agriculture and original statistical publications of the Ministry of Agriculture whose copies are also deposited in the library of the Statistical Office of the Republic of Serbia.

Organization of the statistical service in the Kingdom of Yugoslavia

The Government Statistics Directorate of the Kingdom of SCS was founded in 1919 within the Ministry of Social Policy. It incorporated immediately the Administration of Government Statistics of the Kingdom of Serbia and in 1924 two large provincial offices - Provincial Statistical Office in Zagreb and Statistics Department of the Provincial Government in Sarajevo, which had previously been independent. Later, Statistical Office was opened in Ljubljana, too. In 1929, the Government Statistics Directorate was transferred from the Ministry of Social Policy to the Ministerial Council and changed the name to the General Government Statistics. In 1931, it became part of the Ministry of Interior. Decree of 18 August 1936 determined the scope and structure of this department within the Ministry. Main outlines about the organization of the civil service in general and statistical service in particular in the Kingdom of Yugoslavia could be found in Petaković (2011), Aleksić (2010), Čalić (2004) and Paskojević (1937) while the creation of national statistical institutions has been explained in the publication of the Statistical Office of the Republic of Serbia (2002).

In addition to the Government Statistics Directorate (later General Government Statistics), statistical data were also collected by the ministries. Government Statistics

Directorate had certain authority in coordination, but the statistical service at ministerial level functioned largely independently. Departmental statistical organization had its advantages. In addition to saving money it allowed the ministries to carry out easily and efficiently statistical research in their fields. Benefits of the concentration of statistical activities came to the effect later, during developing and standardizing the methodology. With the establishment of new administrative organization of the State in 1929, statistical services were organized at the level of Banovinas (Stanković, 1981). However, despite the existence of Banovina offices, most of the statistical surveys were still conducted by ministries. This method of organization of national statistics had been maintained until the beginning of the World War II.

In the last Government of the Kingdom of Serbia the Ministry of Agriculture did not exist, but only the Ministry of Economics which incorporated the Department of Agriculture. The Ministry of Agriculture of the Kingdom of SCS was established by the *Decree on the Organization of the Ministry of Agriculture*, on 19 February 1919, although the first Minister of Agriculture had been already appointed by the end of 1918. The *Decree* of 8 July 1919, renamed the Ministry of Agriculture to the Ministry of Agriculture and Water. The tasks of the Ministry were: to promote all branches of agriculture and cattle breeding, to expand agricultural knowledge in the population by establishing primary, secondary and higher agricultural schools and institutes, to ensure the preservation of the health of livestock and transport of livestock, to provide maintenance, improvement and utilization of water and water flows, to collect and provide the public with statistical data on agriculture and to monitor the development of agriculture and agricultural achievements abroad.

Who were the beneficiaries of the collected data and to what purposes these data were collected? „The Ministry of Agriculture and Water could not be without necessary data on cultivated land, the sowing and harvest, and the state of fruit and vineyard growing. Therefore, it considers necessary to obtain and arrange the statistical data, in order to get a picture about the state of our annual agricultural production.” In addition ... „Only half of the State has a survey of individual land owners ... Ahead of us is the revision of the cadastre in areas that had been measured and the execution of cadastre in areas that so far have not been measured” (Ministarstvo poljoprivrede i voda Kraljevine Srba, Hrvata i Slovenaca, 1922). This was partly realized by agricultural census in 1931 (Gnjatović, 2010a; Gnjatović, 2010b).

In April 1920, the *Decree on the Organization of the Ministry of Agriculture and Water* of 8 July 1919 became the subject to amendments. Within these amendments, the Department for Agricultural Statistics had been founded within the Ministry of Agriculture with the task of collecting, sorting and publishing the statistical data on seeded land and annual agricultural production.

The scope of agricultural statistics

The work in the Department of Agricultural Statistics started in the second half of 1920, when it was ordered to all relevant authorities to collect the necessary data, present

them on temporary forms and submit them to the Ministry. The data collected for the year 1920 were not published because they were incomplete - not all the territories of the new, enlarged State were included. Collected data had been checked, updated and revised during the data collection for the year 1921. Thus sorted data for 1920 and 1921 were finally published in 1922 in the publication: *Cultivated Land and Crop Yields* (Ministarstvo poljoprivrede i voda Kraljevine Srba, Hrvata i Slovenaca, 1922).

During 1921, the Department of Agricultural Statistics has worked on the standardization of procedures and uniformed data collection for the whole country. The state of affairs in provinces (Serbia; Montenegro; Bosnia and Herzegovina; Dalmatia; Croatia and Slavonia; Slovenia; Banat, Bačka and Baranja) was such that the data were collected and sorted out in different ways. On 28 November 1921, Minister of Agriculture and Water issued the *Rules for the agricultural statistics* with the necessary instructions and all necessary forms for data collection. These documents have the character of methodological guidance in today's sense of the word. The *Rules* with instructions were promulgated in the *Official Gazette*, number 284 of 20 December 1921.

According to the *Rules for the agricultural statistics*, information on agriculture for the State as a whole were to be prepared by the Department of Agricultural Statistics while information on agriculture for the provincial territories were to be provided by provincial administrations in Belgrade, Zagreb, Sarajevo, Ljubljana and Split. „Data on Agricultural Statistics are collected by all state and self-governing authorities in the country in line with their official duties. Municipal courts, municipal (territorial) governments, administrations of towns and cities, are required to appoint the officials to gather these data every year. In addition to these official bodies, data collection is also done with the help of professionals and experienced farmers, knowledgeable about the agricultural conditions of their regions. The selection of these persons is carried out by the said authorities themselves among their officials, councillors and farmers as well as among the other people capable of such work” (Ministarstvo poljoprivrede i voda Kraljevine Srba, Hrvata i Slovenaca, 1922). The following data were collected: the land structure, cultivated and sown land, the harvested crops of all important cultures of agricultural production, the number of fruit trees, the olive groves and vineyards and the areas devastated by natural disasters or pests.

Besides regular data collection, two agricultural censuses were conducted. The first one was the livestock census carried out on 31 January 1921 along with the population census on the basis of *Decree on the population census and domestic cattle on 31 December 1920* adopted by Ministerial Council on 31 March 1920. However, due to great difficulties, the census could not be performed before 1921. The census was managed by the Government Statistics Directorate in Belgrade. The Ministry of Social Policy issued *Guidelines* for the implementation of the census. These guidelines included instructions to enumerators to fill out the form *Data on domestic livestock* (Annex 1). The census results were published in 1927, in a special publication of Government Statistics Directorate titled *Results of the census of domestic cattle in the Kingdom of SCS, dated 31 January 1921* (Direkcija državne statistike u Beogradu, 1927). It was a 413 pages bilingual publication (in Serbian

and French) with lots of data and tables. The publication presented data on domestic livestock by provinces, counties, districts and municipalities; the feathered livestock and beehives by provinces, counties and districts, and a summary of livestock, poultry and beehives by provinces, counties and districts. In addition to this publication, the data gathered by the census were presented in the *Statistical Yearbook of the Kingdom of Yugoslavia* for 1929. Tables in this *Yearbook* presented domestic livestock by Banovinas (Annex 2), then the number of livestock per 100 inhabitants and per 1 km², the percentages of livestock by species and by Banovinas, as well as died and killed livestock and poultry and data on beekeeping and poultry breeding.

After this census, a large agricultural census was planned, which would be carried out within the framework of the population census, which would include the farms as well as the entire agricultural production. „After the war, in our Kingdom, an agricultural census has not been carried out yet, so the acreage (territoire agricole) has not been established yet, which makes it very difficult to work. In the last ten years, from 1920 to 1929, our agricultural statistics had to cope with great difficulties in the collection of data on the farmland. Nevertheless, according to the decision of the International Institute of Agriculture in Rome, whose member is our Kingdom, agricultural census is going to be carried out in 1930 in almost all European countries, and our country has also agreed in principle to carry out such census” (Ministarstvo poljoprivrede Kraljevine Jugoslavije, 1930).

The population and agriculture census was a major event. Statistical Service of the Kingdom of Yugoslavia had just „stood on its feet” in the first years after the War, when it had to perform so difficult and complex task, such as agricultural census. By comparison, some more developed and richer European countries did not dare to organize such census. France conducted its first agricultural census only in 1955, while in the interwar period information on agriculture were collected sporadically and were based on estimates rather than on direct data collection (Carré, Dubois, Malinvaud, 1975). On the other hand, in some countries which have also a long agricultural tradition, agricultural censuses were conducted already in the 19th century. In the United Kingdom, the first agricultural census was conducted in 1851 and since then, it has been performed every year and the types of data collected on the number of livestock and the land sown with agricultural crops are nowadays more or less the same (Mills, 1999).

Agricultural Census has been conducted in the Kingdom of Yugoslavia on 1 April 1931 within the population census. This was the second regular population census after the World War II, stipulated by the *Law on the Census of Population, Agricultural Households and Livestock* of 31 January 1931 (*Official Gazette*, no. 29-VIII, 9 February 1931). According to Article 2 of this Law, along with the population, both agricultural households and all livestock had been inventoried while the 1921 Census covered only the population and the livestock. On 24 February 1931, based of Article 14 of the *Law on the Census*, the President of the Ministerial Council issued *Ordinance* for carrying out the Census (*Official Gazette*, no. 52-XV, 7 March 1931).

Due to objective circumstances the Census data processing was carried out slowly. Agricultural Census data were published gradually as they arrived. Main results of the Census of agricultural households were published in the *Statistical Yearbook* for 1936 and data on livestock (cattle breeding, poultry farming, beekeeping and sericulture) in the *Statistical Yearbook* for 1934/35. In addition to data on the number and size of farms according to their size, legal address of their processing and the types of agricultural culture, the data on the size of the vineyards and the number of fruit trees on farms could be found in the *Statistical Yearbook* for 1936. Finally, information on the number and size of farms by districts appeared in the *Statistical Yearbook* for 1937.

Agriculture in statistical publications in the interwar period

The most important publication of national statistics of the Kingdom of Yugoslavia was the *Statistical Yearbook*. From 1929 until the beginning of the World War II, ten *Statistical Yearbooks of the Kingdom of Yugoslavia* were issued, one for each year, except for two biannual issues (Volume VI, for 1934-1935 and Volume IX for 1938-1939). The first *Statistical Yearbook* for 1929 was published in 1932. Before that, in 1926, the *Yearbook of the Kingdom of Serbs, Croats and Slovenes* (Godišnjak Kraljevine Srba, Hrvata i Slovenaca, 1926) was published, containing statistical data on most economic activities for the period from 1920 to 1924 and for certain activities, such as transport and mining also data for 1919 and 1925. The *Yearbook of the Kingdom of Serbs, Croats and Slovenes* was of somewhat different character from the *Statistical Yearbook of the Kingdom of Yugoslavia* that followed. In addition to statistical data, it was well equipped with photographs and it contained a large number of articles on various topics on economic, social and cultural life whose authors were prominent people and well-known experts of the time.

When it comes to agriculture, it is worth mentioning an authentic and lively overview of the state of this branch of the economy in the articles written by Ljudevit Prohaska and Milorad Nedeljković, who dedicated six articles to agriculture on as many as 57 pages of the *Yearbook*. The titles of these articles are: *Agrarian Reform in the Kingdom of SCS*, *Farming*, *Cattle Breeding*, *Viticulture and Fruit Growing*, *Agricultural Education* and *Development of Cooperatives in the Kingdom SCS*. In these articles, tables with statistical data for agriculture for 1920, 1921, 1922, 1923 and 1924 (agricultural land, seeded land, the average yield, situation in livestock, production of wine, fruit growing conditions, export of and import of fruit, the total yield and many others) had been presented. Also, the state of certain fields of agriculture had been described, an analysis of the achieved level of development had been made and measures for the improvement of agricultural production had been suggested.

The Statistical Yearbooks of the Kingdom of Yugoslavia do not contain articles of this kind. Statistical data are presented in the tables which are divided in sections. *The Statistical Yearbook* contains five sections: *Geographical Data*; *Population*; *Economy*; *Culture and the State of Moral*; *The State Administration*. At the beginning of publishing, the tables were simple and short time series. Over time, the *Statistical Yearbook* was

enriched with new data and tables, which were becoming increasingly complex and slowly it took the shape and form of modern editions that are known to us today. There are no photographs in the *Statistical Yearbooks* and graphical displays of time series are rare and they are handmade, reflecting the achieved level of development of statistics at that time. There are ten editions of the *Yearbook*, but graphics, including graphical presentation of agriculture, could be found just in two of them. *The Statistical Yearbook* for 1929 contains the graphical presentation of livestock, forests and cultivated land in 1929 (Annex 3). *The Statistical Yearbook* for 1934-1935 includes a larger number of graphic annexes among which there are a cartographic presentation of livestock breeding according to the 1931 Census and graphs showing the cultivated land, production of serials and orchards in the period from 1925 to 1935 (Annex 4).

In the *Statistical Yearbook*, agriculture had always been presented at the beginning of the chapter devoted to the economy. That was in line with the fact that three thirds of rural population of the Kingdom of Yugoslavia lived exclusively from agriculture, and that in the overall interwar period, around 55 percent of national income had been created in agriculture and forestry (Gnjatović, Aleksić, 2011). The section devoted to agriculture contained time series for crop farming, cattle breeding, poultry farming, bee-keeping and sericulture, forestry, maritime fishing and land improvement. Sources of data on agriculture for the *Statistical Yearbook* were statistical materials collected and sorted by General Government Statistics (results of the Census), publications of the Ministry of Agriculture and statistical publications of certain state and public institutions (for example, Department of Maritime Traffic in Split - for the statistics of marine fisheries) and other ministries (Ministry of forests and mines – for the statistics of the forestry and afforestation, the Ministry of Construction – for the statistics of land improvement). The publications of the Ministry of Agriculture were: *Cultivated Land and Harvest Yields* and *Annual Agricultural Statistics*.

The first book of *Cultivated Land and Harvest Yields* was published in 1922 (for 1920 and 1921) and the last in 1933 (for 1932), and it was succeeded by the *Annual Agricultural Statistics* which was a publication of similar content, published also by the Ministry of Agriculture. The system of collecting and sorting of statistical data in this publication was the one applied already in the *Rules and Guidelines for Agricultural Statistics* (Official Gazette, no. 284, 1922) as amended by two decisions of the Minister of Agriculture (no. 31.147 of 6 November 1922 and no. 27.060 of 11 July 1928). The publication was a bilingual (Serbian and French) and contained information on the cultivated land; arable land by type of culture; information on crop yields; area planted, destroyed and harvested; total crop yields and average yields per hectare for all types of culture; information on vineyards and orchards (number of trees and fruit yield), all of this summarized for districts, provinces (since 1929 by Banovinas) and the entire Kingdom; and in the end, information on prices of agricultural products. Being every year richer and richer with data, the last issues of the publication had more than 170 pages.

Annual Agricultural Statistics had been first published in 1934 covering data for 1933

and it was published until 1940, when its last issue appeared with data for 1939. This was even more extensive publication with more than 180 pages, also bilingual, and contained also data on exports and imports of agricultural products, taken from the official publication *Statistics of Foreign Trade of the Kingdom of Yugoslavia* issued by the Ministry of Finance. Over time, agricultural statistics had been enriched with all the new data. Collecting data on the yield of honey and wax was introduced starting in 1933, for soybean, sunflower, cherries, apricots, peaches, quinces, almonds, lemons and oranges - from 1934; vetches for hay, the yield of the grapes, olive yield, especially seed yield and fiber, cottonseed - from 1935. In time, the publication required adding new tables and data processing. For example, on Banovina level, the incidence of certain types of livestock and poultry and the percentage distribution of individual crops, fallows, meadows, pasture and reeds had been presented.

Regarding data collection, at the beginning of the publication, in the Preliminary Remarks it was explained that the data on arable land, crop yield, the number of cattle, poultry and beehives were determined based on estimates of the municipal statistical authorities. Those estimates were made not only by municipal clerks but also by private individuals from amongst the prominent farmers. Data for municipalities were submitted to the relevant District Office and after being inspected and sorted, sent to the Department of Agriculture of relevant Banovina. There, the data from all municipalities were gathered and then submitted to the Ministry of Agriculture, where the final inspection and sorting took place (Kraljevina Jugoslavija Ministarstvo poljoprivrede, 1933).

Conclusion

The last *Statistical Yearbook of the Kingdom of Yugoslavia* was published in 1941 with data for the year 1940. Once again, the events of the war ravaged Yugoslavia. However, not everything was gone by then achieved. The development of the national statistical service continued after the Second World War with the establishment of the Government Statistical Office of the Democratic Federative Yugoslavia in 1944. Following the example of its organization before the War, statistical services developed within individual ministries, inheriting the achievements of pre-War statistics and knowledge of the experts who survived.

The foundations of modern national statistics were made through the development of statistical services of Serbia and Yugoslavia. The level of development of agricultural statistics in the Kingdom of Yugoslavia was best evidenced by the number and quality of relevant publications. Their characteristics were: the regularity of their publishing, quality of printing and comprehensiveness of data. The quality of these publications did not lag much behind the quality of corresponding publications of developed European countries of that time. As for the manner of conducting statistical surveys, it depended on concrete objective possibilities. Statisticians had to cope often with the lack of money, illiteracy of rural population and lack of staff. Nevertheless, statistical surveys were in the spirit of the time and corresponded to the achieved level of the development of statistics in the region.

Future researches of agricultural statistics should look deeper in the past, to its very beginning in the Kingdom of Serbia having in mind that such researches have not been done yet. Detailed comparisons with the operations of national statistical services of other European countries are also needed in order to assess properly the overall development of national agricultural statistics.

Literature

1. Aleksić D. (2010): *Država i privreda u Kraljevini SHS*, Institut za savremenu istoriju, Beograd, Srbija.
2. Carré J., Dubois P., Malinvaud E. (1975): *French Economic Growth*, Stanford University Press, Stanford, California.
3. Čalić Ž. M. (2004): *Socijalna istorija Srbije, 1815–1941*, Clio, Beograd, Srbija.
4. Direkcija državne statistike u Beogradu (1927): *Rezultati popisa domaće stoke u Kraljevini Srba, Hrvata i Slovenaca od 31. januara 1921. godine*, Sarajevo, Kraljevina Srba, Hrvata i Slovenaca.
5. *Godišnjak Kraljevine Srba, Hrvata i Slovenaca* (1926): Urednik: Dobr. Stošović, Izdavači: Dobr. Stošović i H. T. Montague Bell, Beograd, Kraljevina Srba, Hrvata i Slovenaca, (available at: <http://pod2.stat.gov.rs/ObjavljenePublikacije/G1926/pdf/G192611001.pdf>).
6. Gnjatović, D. (2010a): *Poljoprivredni kredit u vreme stvaranja SHS na području važenja srpskih zakona*, Bankarstvo, Vol. 39, no. 5-6, pp. 10-25, Udruženje banaka Srbije, Beograd, Srbija, (available at: http://www.ubs-asb.com/Portals/0/Casopis/2010/5_6/B05-06-2010-Gnjatovic.pdf).
7. Gnjatović, D. (2010b): *Poljoprivredni kredit u vreme stvaranja SHS na području važenja austro-ugarskih zakona*, Bankarstvo, Vol. 39, no.7-8, pp. 8-27, Udruženje banaka Srbije, Beograd, Srbija, (available at: http://www.ubs-asb.com/Portals/0/Casopis/2010/7_8/B07-08-2010-Gnjatovic.pdf).
8. Gnjatović D., Aleksić V. (2011): *Rescuing Agricultural and Banking Sector from Collapse: Agricultural Debt Consolidation in Yugoslavia 1932-1936*, Industrija, Vol. 39, no. 2, pp. 284-296, Ekonomski institut, Beograd, Srbija, (available at: <http://www.ecinst.org.rs/sites/default/files/industrija/industrija-br-2-sr.pdf>).
9. Jevtić, M. (1993): *Poljoprivreda balkanskih zemalja*, Ekonomika poljoprivrede, Vol. 40, no. 3-4, pp. 74-80, Naučno društvo agrarnih ekonomista Balkana, Institut za ekonomiku poljoprivrede, Beograd, Srbija.
10. Korunić, P. (2012): *Početak moderne statistike u Hrvatskoj i Slavoniji od 1850. do 1857. godine*, Historijski zbornik, Vol. 63, no. 1, pp. 53–77, Društvo za hrvatsku povjesnicu, Zagreb, Hrvatska, (available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=121474).
11. Kraljevina Jugoslavija (1932): *Statistički godišnjak, Knjiga I 1929*, Beograd,

Kraljevina Jugoslavija.

12. Kraljevina Jugoslavija Opšta državna statistika (1936): *Statistički godišnjak 1934-1935, Knjiga VI*, Beograd, Kraljevina Jugoslavija.
13. Laczka, É (2015): Development of Agricultural Statistics from Design to Publication of Data, *Statistics and Economy Journal*, Vol. 95, no. 2, pp. 68-78, Czech Statistical Office, Prague, Czech Republic, (available at: <https://www.czso.cz/documents/10180/20550317/32019715q2068.pdf/02769add-1ae6-4756-8277-17711e9ea92c?version=1.0>)
14. Mills, D.R. (1999): *Trouble with Farms at the Census Office: An Evaluation of Farm Statistics from the Censuses of 1851-1881 in England and Wales*, The Agricultural History Review, Vol. 47, Part 1, pp. 58-77, British Agricultural History Society, United Kingdom, (available at: <http://www.bahs.org.uk/AGHR/AGHR47.pdf>).
15. Milošević, M. (2010): *60 Years since the Foundation of the Archives of Yugoslavia*, Arhiv, Vol. 11, no 1/2, pp. 9-13, Arhiv Jugoslavije, Beograd, Srbija, (available at: http://www.arhivyu.gov.rs/active/sr-cyrillic/home/glavna_navigacija/izdanja/casopis_arhiv_v01/dosadasnji_brojevi/casopis_god_11_br_1i2.html).
16. Kraljevina Jugoslavija Ministarstvo poljoprivrede (1933): *Poljoprivredna godišnja statistika (proizvodnja, izvoz, uvoz)*, Beograd, Kraljevina Jugoslavija.
17. Ministarstvo poljoprivrede i voda Kraljevina Srba, Hrvata i Slovenaca (1922): *Obrađena zemlja i žetveni prinosi*, Beograd, Kraljevina Srba, Hrvata i Slovenaca.
18. Ministarstvo poljoprivrede Kraljevine Jugoslavije (1930): *Obrađena zemlja i žetveni prinosi u 1929. godini*, Beograd, Kraljevina Jugoslavija.
19. Opšta državna statistika Kraljevine Jugoslavije (1937): *Definitivni rezultati popisa stanovništva od 31. marta 1931. godine, Knjiga I: Prisutno stanovništvo, broj kuća i domaćinstava*, Beograd, Kraljevina Jugoslavija.
20. Pejanović, R. (2009): *Metodi kvalitativnih istraživanja u društveno ekonomskoj (i agroekonomskoj) nauci*, Letopis naučnih radova, Vol. 33, no. 1, pp. 5-18, Poljoprivredni fakultet, Beograd, Srbija, (available at: <http://scindeks-clanci.ceon.rs/data/pdf/0546-8264/2009/0546-82640901005P.pdf>).
21. Petaković J. (2011): *Prilog proučavanju industrijske konjunktore u Kraljevini Jugoslaviji – proizvodnja uglja od 1920. do 1938. godine*, Tokovi istorije Vol. 39, no. 2, pp. 42-61, Institut za noviju istoriju Srbije, Beograd, Srbija, (available at: http://www.inisbgd.co.rs/celo/2011_2.pdf).
22. Richard-Schott F. (2009): *Le Recensement Général de l'Agriculture de 1955, une référence pour les géographes?*, Géocarrefour, Vol. 84, no. 4, pp. 271-279, l'Association des amis de la Revue de Géographie de Lyon, France, (available at: <https://geocarrefour.revues.org/7567>)

23. Savezni zavod za statistiku (2002): *140 godina zvanične statistike*, Beograd, Savezna Republika Jugoslavija, (available at: <http://pod2.stat.gov.rs/ObjavljenePublikacije/G2002/pdf/G20026002.pdf>)
24. Savić, Lj., Bošković, G., Mičić, V. (2016): *Serbian Agro-Industry Potentials and Perspectives*, Economics of Agriculture, Vol. 63, No.1, pp. 107-122, The Balkan Scientific Association of Agrarian Economists, Institute of Agricultural Economics, Belgrade, Serbia, (available at: <http://www.ea.bg.ac.rs/images/Arhiva/2016/Broj%201/7%20EP%201%202016-7.pdf>).
25. Stanković, Đ. (1981): *Administrativna podela Kraljevine SHS*, Istorijski glasnik, Vol. 34, no. 1-2, pp. 35-37, Istorijsko društvo Srbije, Beograd, Srbija.
26. Zayed, Y. (2016): *Agriculture: historical statistics*, House of Commons Library, Briefing paper Number 03339, 21 January 2016, (available at: <https://researchbriefings.files.parliament.uk/documents/SN03339/SN03339.pdf>)
27. U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census (1992): *Census of Agriculture, Volume 2: SUBJECT SERIES, Part 4: History*, Washington, D.C., United States, (available at: <http://usda.mannlib.cornell.edu/usda/AgCensusImages/1992/02/History.pdf>)

Annex 1

The form *Data on domestic livestock* used in the livestock census carried out on 31 January 1921

Образац 4
Obrazac 4

Број пописног круга
Broj popisnog kruga

Редни број листе за домаћинства
Redni broj liste za domaćinstva

Подаци о домаћој стоци. — Podaci о домаћој stoci.

Округ (Купинава)
Okrug (Zupanija)

Срез (Котар)
Srez (Kotar)

Општина
Opština

Место
Mesto

Део или котар града
Deo ili kotar grada

Улица, кућа број
Ulica, kuća broj

I. Говеда — Goveda		Број глава Broj glava	III. Коња — Konji	Број глава Broj glava	VII. Овце — Ovce	Број глава Broj glava	
1. Телад мушка Telad muška	по 1 године do 1 godine		1. Жаребад мушка Žarebad muška	по 1 године do 1 godine	1. Јагњад (шиљежад) мушка Jagnjad (šilježad) muška		
2. Телад женска Telad ženska			2. Жаребад женска Žarebad ženska				2. Јагњад (шиљежад) женска Jagnjad (šilježad) ženska
3. Јунак мушка Junak muška	од 1—2 године od 1—2 godine		3. Омад (ждребад) мушка Omad (ždrebad) muška	од 1—2 године od 1—2 godine	3. Овнице за приплод Ovници за приплод		
4. Јунак женска Junak ženska			4. Омад (ждребад) женска Omad (ždrebad) ženska				4. Овце за приплод Oвце за приплод
5. Краве козаре Kраве козаре	преко 2 године preko 2 godine		5. Кобале Kobale	преко 2 године preko 2 godine	5. Остале овце Oстале овце		
6. Краве јазове Kраве јазове			6. Пастуни Pastuni				
7. Бивоци Bивоци			7. Коња Konji				
8. Волкови Volovi							
Свега говеда Sвега говеда							Свега коња Sвега коња
II. Бивоци — Bivoци			IV. Магаре и куле — Maгаре i куле		VIII. Коње — Koње		
1. Бивоцад мушка Bивоцад мушка	по 1 године do 1 godine		V. Магарци — Maгарци		1. Јарад (козица) Jarad (kozica)	Свега коња Sвега коња	
2. Бивоцад женска Bивоцад женска			VI. Свиње — Sвинје		2. Коње Kоње		
3. Бивоци Bивоци	1. Прасад до 3 месеца Prasad do 3 meseca		3. Јарци Jarci				
4. Бивоцице Bивоцице	2. Назимад (прасад) од 3 месеца до 1 године Nazimad (prasad) od 3 meseca do 1 godine		IX. Пераци — Perаци		1. Кокони Kokoni	Коваци Kоваци	
Свега бивола Sвега бивола	3. Вепрови за приплод Vepрови за приплод		1. Гуске Gуске		2. Патке (паовке, расе) Patke (paovke, rase)		
	4. Крмаче за приплод Kрмаче за приплод	од 1 и преко od 1 i preko od 1 godine	4. Остале свиње Oстале свиње		4. Турци (пурани) Turci (purani)	Свега пераци Sвега peraci	
	5. Остале свиње Oстале свиње			X. Кошинице — Koшинице		1. Бричаре, шетаре домаће Vричаре, šetаре домаће	
	Свега свиња Sвега свиња				2. Са покретним сањем Sa pokretnim saњem		
					3. Мешовите (за Словенију) Mешовите (za Sloveniju)		
					Мешовите (за Словенију) Mешовите (za Sloveniju)	Свега кошница Sвега košnica	

Source: Rezultati popisa domaće stoke u Kraljevini Srba, Hrvata i Slovenaca od 31. Januara 1921. godine, Kraljevina Jugoslavija, Direkcija državne statistike, 1927.

Annex 2

Results of the livestock census published in *Statistical Yearbook of the Kingdom of Yugoslavia for 1929*

6 Домаћа стока по попису од 31 јануара 1921 године*)
6 Animaux domestiques d'après le recensement du 31 janvier 1921*)

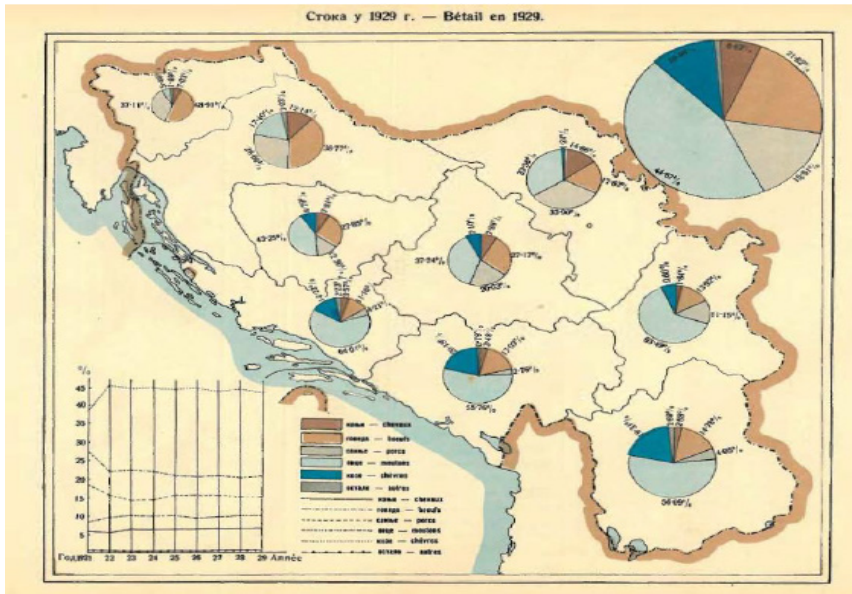
Бановина — Валевине	Ковњи Chevauz	Магарци Anes	Масти и муле Bœufs et mules	Говеда Bœufs	Бивоци и биво- ва Bœufs et buffe- tes	Свиње Porcs	Оваци Moutons	Козе Chèvres	Свела стоке Total du bétail
Дравска	58.093	272	246	466.800	16	298.127	74.729	23.996	922.279
Дринска	127.875	472	1.000	717.050	168	453.906	627.340	106.904	2,034.715
Дунавска	360.727	1.892	1.061	648.388	1.146	1,318.238	1,053.955	22.171	3,406.578
Морavsка	25.678	1.014	1.193	478.403	4.000	295.878	1,403.627	220.408	2,430.201
Приморска	38.903	14.243	2.739	181.892	46	26.325	591.165	218.928	1,074.241
Савска	243.773	2.148	1.444	1,005.145	210	632.275	396.397	80.339	2,361.731
Вардavsка	64.258	54.903	6.415	509.925	44.284	110.100	1,369.219	409.755	2,568.839
Врбavsка	89.918	340	225	581.372	653	165.574	630.431	120.653	1,589.168
Зетска	46.351	8.864	3.546	357.799	911	39.314	851.789	348.998	1,657.572
Управа града Београда Préfecture de la ville de Belgrade	6.767	34	222	4.565	34	9.767	4.372	403	26.164
Укупно — Total:	1,062.343	84.182	18.091	4,951.339	31.470	3,349.504	7,002.124	1,552.555	18,071.608

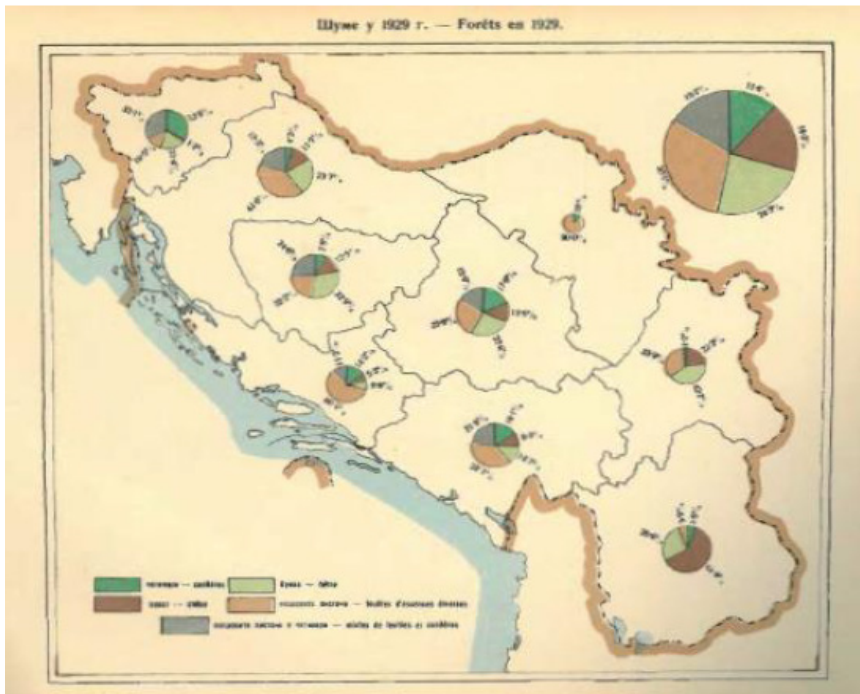
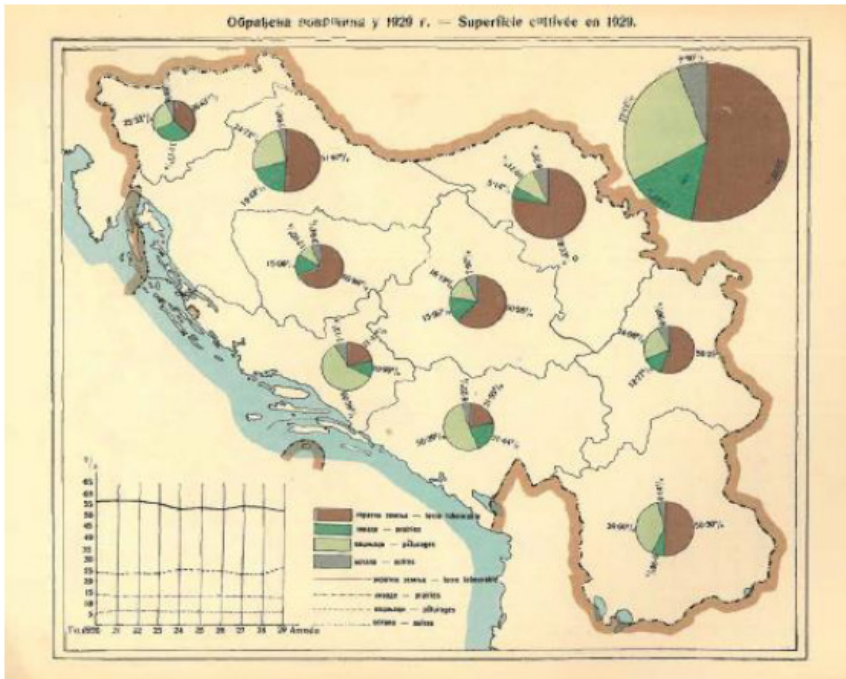
*) Дефинитивни резултати. — *) Résultats définitifs.

Source: *Kraljevina Jugoslavija, Statistički godišnjak, Knjiga I 1929, Beograd, 1932.*

Annex 3

Livestock, forests and cultivated land in the Kingdom of Yugoslavia in 1929.

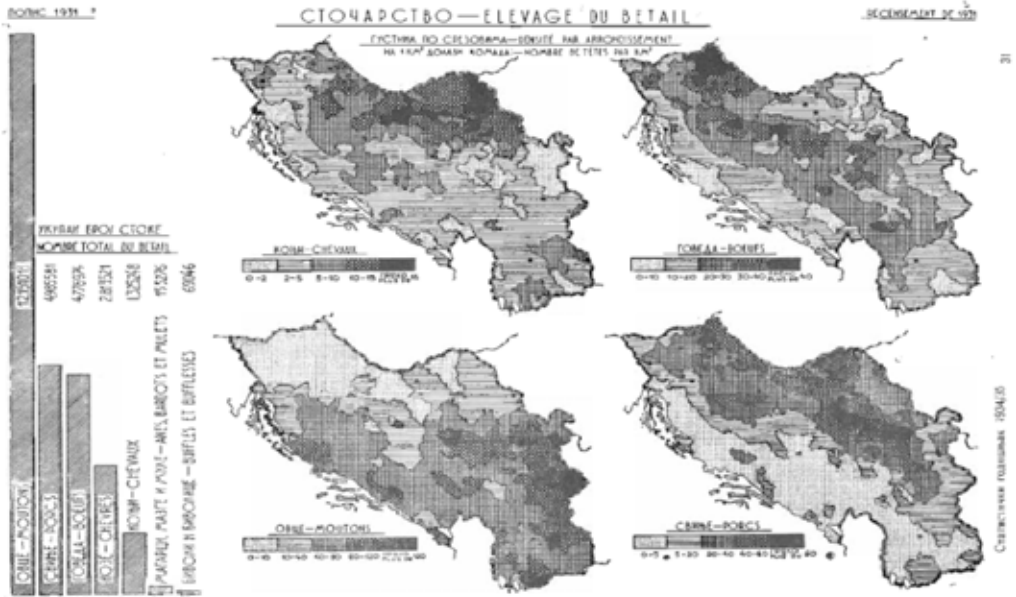


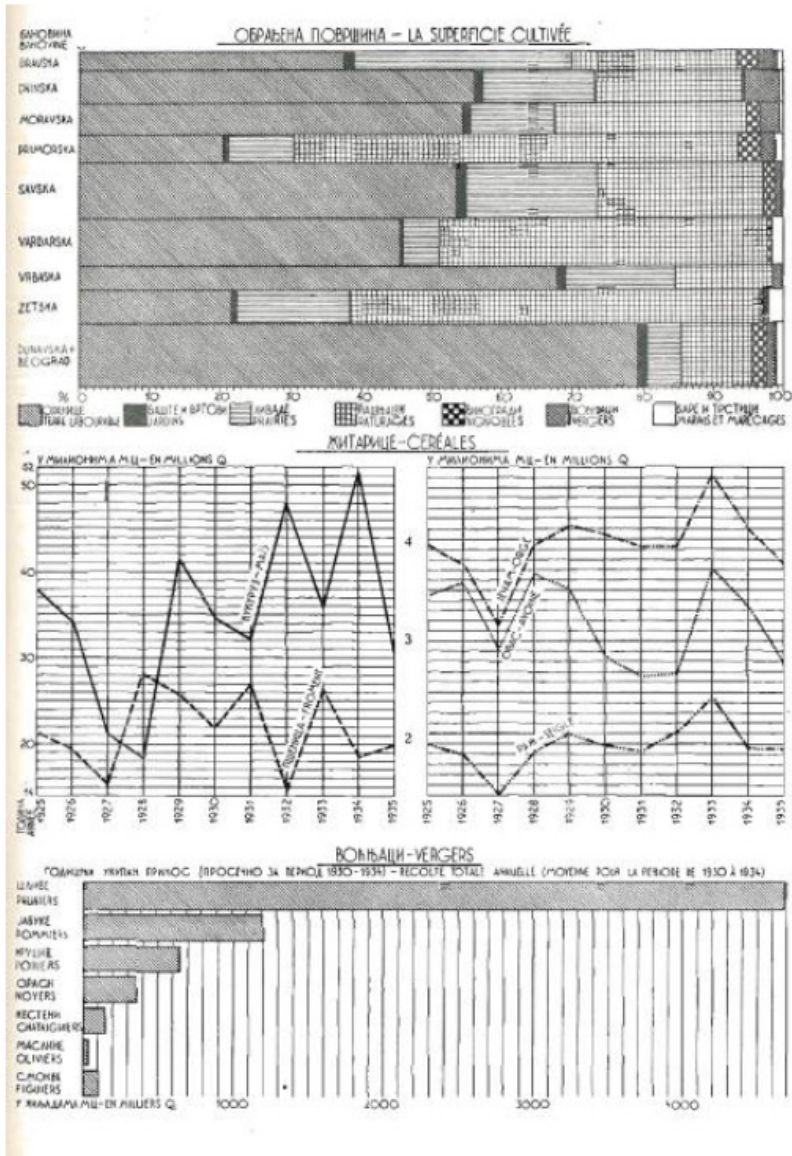


Source: Kraljevina Jugoslavija, Statistički godišnjak, Knjiga I 1929, Beograd, 1932.

Annex 4

The cultivated land, production of serials and orchards the Kingdom of Yugoslavia in the period from 1925 to 1935.





Source: Kraljevina Jugoslavija Opšta državna statistika, Statistički godišnjak 1934-1935, Knjiga VI, Beograd, 1936.

RAZVOJ STATISTIKE POLJOPRIVREDE U KRALJEVINI JUGOSLAVIJI

Jelena Radović - Stojanović⁴, Dragana Gnjatović⁵, Aleksandra Zečević⁶

Rezime

Cilj rada je bio da se istraži razvoj statistike poljoprivrede u Kraljevini Jugoslaviji u periodu od 1918-1941. godine. Za prikupljanje statističkih podataka o poljoprivredi u Kraljevini Jugoslaviji bilo je zaduženo Ministarstvo poljoprivrede. U radu je prikazano na koji način je to Ministarstvo činilo, kako su se prikupljali statistički podaci o poljoprivredi, koji su podaci prikupljeni i u kojim statističkim publikacijama su podaci objavljivani. Primenom istorijskog metoda analizirano je kako se razvijala statistika poljoprivrede. Primenom komparativnog metoda izvršeno je poređenje sa statistikom poljoprivrede pojedinih evropskih zemalja. Došlo se do zaključka da je statistika poljoprivrede u Kraljevini Srbiji zabeležila značajan napredak u periodu između dva rata: prikupljeni su svi relevantni podaci, odgovarano je na međunarodne zahteve, publikacije su osavremenjivane a što se tiče načina sprovođenja statističkih istraživanja i predstavljanja statističkih podataka, oni su bili u duhu tadašnjeg vremena i odgovarali su dostignutom nivou razvoja statistike u Kraljevini Jugoslaviji.

Ključne reči: *statistika poljoprivrede, statističke publikacije, popis poljoprivrede, Kraljevina Jugoslavija*

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