

SCIENTIFIC LEGACY OF THE DISTINGUISHED BULGARIAN STATISTICIAN, ECONOMIST AND PUBLIC MAN - ACADEMICIAN IVAN STEFANOV (110TH ANNIVERSARY OF HIS BIRTH)

The scientific legacy of Acad. Ivan Stefanov is comprehensive with profound knowledge, however it is difficult to be understood without being aware of the entire bibliography of his works.¹

He was born on 3 March 1899 in the City of Varna in a large family, dating back to an old kin from the City of Kotel, the kin of G. S. Rakovsky. After graduating from the Varna Secondary School, he went to study law and economics at the Berlin University "Friedrich Wilhelm" (The Humboldt University) in the autumn of 1920, specializing in statistics. He continued his study with the world-famous statistician Prof. Borkiewicz defending the thesis "Marriage statistics tables for Prussia and Saxony – 1910 – 1911", for which he was conferred the academic degree "State Science Doctor", majoring in statistics and political economy. He came back to Bulgaria with an advanced statistical education in the sphere of theory and its application in practice – the so called applied statistics. In 1927 he started work at the General Statistics Directorate (GSD). In 1936 he became a lecturer at the Technical University "D. A. Tsenov", and from 1937 to 1946 he became an associate professor and professor there, establishing the departments "Statistics" and "Insurance Business" and initiating courses of lectures in his subjects. Later Ivan Stefanov became a professor at the Sofia University (1946) and at the Karl Marx Higher Institute of Economics (1952). In 1945 he became the governor of the Bulgarian National Bank, and in the period 1946 – 1949 he was the Finance Minister and MP at the VIth Grand National Assembly. In 1947 Prof. Iv. Stefanov Sc.Dr. was elected full member of the Bulgarian Academy of Science and was the first director of the newly established Institute of Economics (1949). At that time the Coordination Center for Demographic Research at the Bulgarian Academy of Sciences was also established under his initiative. Between 1956 - 1963 Acad. Iv. Stefanov became the Head of the Statistics Department at the K. Marx Higher Institute of Economics, the Head of Statistics and Accounting Section at the Institute of Economics, which was reorganized in 1963 into the section "Statistics with an economic and mathematical laboratory". He was a member of the International Statistics Institute, the International Institute for Demographic Research and the International Econometrics Society.

In recognition of his major contribution to science and his extensive public activities Acad. Stefanov was awarded with high national and international honors.

He has contributed to the development of statistics in Bulgaria for fifty years. During the period between 1930 – 1940 he published his articles in the

¹ Bibliography of the works of Acad. Ivan Stefanov - In: 100th anniversary of the birth of Acad. Ivan Stefanov. Sofia, Publishing House "Prof. M. Drinov", 1999, pp. 121-142.

periodicals “Zvezda (Star)”, “Zemedelski Problemi (Agricultural Issues)”, “Zemedelski Obzor (Agricultural Survey)”, “Koopativna Tribuna (Cooperative Tribune)”, “Stopanski Problemi (Economic Issues)”, “Spisanie na Bulgarskoto ikonomichesko obstesto (Magazine of the Bulgarian Economic Society”, etc.) numerous articles, surveys and reviews mainly on economic and social issues, of public concern in Bulgaria at that time, most of them dedicated to the Bulgarian agriculture.² The statistician Ivan Stefanov analyzed and interpreted such figures. Not of minor importance for him was processing data from censuses and elaborating table forms from primary data. This side of his works has always been of benefit for all generations of economists and statisticians.

The publicistic works of Acad. Stefanov cover a quite interesting empiric research. Especially the issues, analyzed by him after he came back to Bulgaria in 1927 are : the current agrarian policy in Bulgaria in the period of the Great Global Depression and later on and on the state of Bulgarian agriculture sector; the farmers' incomes in Bulgaria; the use of farming machinery; the dimensions of the farms and the two possible ways for establishing large farms, delving deeper into the rural problems in Bulgaria – the class differentiation, and converting the debts of the farms. Meanwhile he hasn't evaded the problems of the global economic crisis; the general economic situation in Bulgaria and dedicated numerous publications to the farm cooperatives in the Bulgarian villages. In 1933 Dr. Ivan Stefanov wrote a special article on land leasing in Bulgaria,³ reviewing the farming relations before the liberation of Bulgaria from Turkish occupation and in the newly established state. The ensuing class differentiation among the Bulgarian farmers resulted in changes in the land lease relations. He wrote: “The agricultural farm census as at 31 December 1926 enabled the study the land leasing pattern in Bulgaria, but the official statistics accepted as sufficient a quite conventional and unsystematic processing of the respective data”. Dr. Stefanov was of the opinion, that it would be more advisable the plots of land to be grouped according to the size of the own land, on the one part, and according to the size of the leased land, on the other part. His conclusion, based on the data obtained from the above census, is that most of the agricultural farms in Bulgaria are purely privately owned; that most of the leased farms are farms of owners, who re-lease less land, than they own, the number of purely leased farms using only leased land is insignificant. According to the author, such data conceal the available deep class differentiation among the farms of the leaseholders. This paper is also of benefit mainly with the analysis and interpretation of the census data for the current investigations on the lease relations in the Bulgarian agriculture, especially taking into consideration the study of the lease and lease relations in other countries, such as England, USA, Canada, France, Germany, Belgium, Italy and Denmark.

² Bibliography of the works of Acad. Ivan Stefanov..., pp. 121 – 128.

³ *Stefanov, I.* Land lease in Bulgaria. – *Zvezda*, 1934, N 17, pp. 523 – 531.

A special attention should be paid to the period after 1933, when extensive large-scale socio-economic surveys and representative studies were carried out, demonstrating the high professionalism and vision of statisticians, such as K. Popov, O. N. Anderson, D. Mishaykov, G. Danailov, Pr. Kiranov and Iv. Stefanov. The large-scale agricultural inquiry of the General Statistics Directorate was held in 1934 under the management of Iv. Stefanov. The motivation of this ingenious statistical study indicated, that "it should enable the agrarian economists to have an insight into the structure, state and conditions for development of agriculture in Bulgaria, as well as of the results thereof" There are two aspects of the meaning of this inquiry – as an empirical survey and as a methodology, with its modern sample model – two-phase, cluster, regional, representative monitoring, equalizing the sample according to lateral control indicators. The object of the agricultural inquiry and the basic statistic unit were the same as at the census of 1926 – the farm.⁴ The overall schedule of the inquiry was divided in 6 questionnaires: 1) general questionnaire for the complete village, with data, characterizing the common natural, economic and cultural environment, for the farms in each surveyed village; 2) questionnaire on the public lands; 3) questionnaire on each surveyed farm; 4) questionnaire on each tenth surveyed farm with the above-mentioned detailed data; 5) questionnaire on the households without agricultural farm and 6) profile with personal information of each farmer. The inquiry made in 1934 was met with great interest abroad, due to the ingenious methodological decision and the theoretical - probability foundations. At that time Iv. Stefanov Dr. Ec. Sc. was at the "Agricultural statistics" department until 1936, when he became a lecturer at the "D. A. Tsenov" Academy of Economics – Svistov, without losing his connections with the General Statistics Directorate.

In the period between 1937 – 1940 he wrote and published at the Almanac of the university: some of his most valuable papers in terms of methodology : "Agricultural statistics in Bulgaria: methodological studies" (1938); "General theory of statistics" (1938) –one of the first systematic university courses in theory of statistics focusing on monographs; "Methods of industrial censuses in Bulgaria, Part I" (1939); "Methods of industrial statistics in Bulgaria, Part II" (1940); "New concepts of theoretical statistics" – academic speech - at the solemn meeting of the Technical University "D. A. Tsenov" on 15 May 1940.⁵ These works of Acad. Stefanov are of great importance, because they were written by a researcher, being well familiar with the contemporary socio-economic environment and with his inherent thorough, analytical and precise views the works present the theory and practice of Bulgarian statistics in the pre-war period, the complete procedure of launching the first special statistical facilities in 1912 until the introduction of information technologies.

⁴ *Stefanov, I.* Planning, preparations and arrangements of the first Agricultural Inquiry in Bulgaria in 1934– Statistical News, 1934, N 8, pp. 398 – 411.

⁵ Almanac of the Technical University D. A. Tzenov, Svistov. T. 3, 1940, pp. 37 - 53.

Numerous *assessments* of the Bulgarian statistics were made in the works of Acad. Stefanov. They are of benefit for the generations of statisticians, because of being made by a scientist and a public man, who has been aware of the statistic science and practice in the European countries since the beginning of the XX century as well as in Bulgaria for half a century. Having been actively involved in the Bulgarian government statistics he wrote studies on its legacy,⁶ followed by outlines of the main aspects of its development.⁷

In the second article for the first Statistical Almanach for Bulgaria in 1909, published in 1910, and on the publication "Monthly statistical news" (1908) Acad. Stefanov's estimation was "very well made, since the very beginning, even compared with similar publications in the countries with government statistics at advanced stage of development at that time" (p. 5). His view sounds very up-to-date, that "the current needs of social management require an up-to-date statistical information of a new quality" and that the "dynamics of the public life makes the current information more and more necessary for immediate feedback" Even more up-to-date is his statement, *that "management and statistics are entirely set apart in our minds, however we should get used to see the close link between them"* (p. 15).

Academician Ivan Stefanov is distinguished as a scientist, analyzing data thoroughly and synthesizing statistical information as a typical economist, and when highlighting statistical methodology and methodological decisions, he implicates therein the corresponding economic theory and methodology. These two aspects of his scientific works go hand-in-hand, complement each other and thus contribute to the evaluation of the statistic science and the methodology of statistical studies. His scientific legacy is not just an inexhaustible source of knowledge on the development of statistics in Bulgaria, but also abounds in wisdom, of benefit and use for the contemporary information society.

Nadezhda Nikolova, Professor, Dr. Ec. Scs.

⁶ *Stefanov, I.* On the legacy in the Bulgarian government statistics – News of the Finance and Economics University, Svistov, 1962, N 4, pp. 413 – 438.

⁷ *Stefanov, I.* Major trends in the development of the Bulgarian Government Statistics. – Statistics, 1977, N 1, pp. 3-19.