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## **LONG-TERM RETROSPECTIVE DEVELOPMENT OF AGRICULTURE IN BULGARIA, 1934–1989**

*The reform of agricultural land was one of the primary tasks during the transition from centrally planned to market economy in Bulgaria. The only undoubted point was the necessity of land restitution. It was without a doubt important to return the land to its rightful owners, the so called restitution. Both politicians and theoreticians were caught off guard in the face of the much needed radical reforms. The former is the main reason rendering some of the laws voted by the Bulgarian Parliament, including Law on Ownership and Use of the Farmland (1991) inefficient. The paper is aimed at outlining the main features of the long-term agricultural development in Bulgaria throughout the 20<sup>th</sup> century, namely before and during WWII as well as the period of centrally planned economy leading up to 1989. The historical overview is employed a background for the purpose of outlining preconditions for the following process of transition once again of agriculture to market economy type.*

**Key words:** *agriculture, agricultural development, Bulgaria, centrally planned economy, market type economy*

**Introduction and review of literature.** The foundations of the state statistics in Bulgaria were placed in the beginning of the 1880s and went through remarkable development in the years that followed. By the first decade of the 20<sup>th</sup> Bulgaria already stands out as one of the countries with fairly well organized economic statistics boasting a broad scope. By the end of WWII period the ever evolving official statistics has arrived to equality in many ways to the level of those in the well developed countries in Europe. This is indicated by many facts with regard the field of demographic, agricultural, industrial and foreign trade statistics. This early period marks well pronounced and accelerated development in the agricultural science in Bulgaria.

Measurement of the indicator National Income is of particular importance. The calculations (estimates) of the Bulgarian statisticians refer mainly to the period from 1924 to 1945. The work done has been fully in line with the efforts of the advanced countries to define the term National Income and the method of measuring it. We are able to analyze the matters regarding agriculture thanks to the work of prominent statisticians at that time as C. G. Popov [9] – the creator of Bulgarian statistics, A. Chakalov [4], A. Kemilev [6], I. Stefanov [14], A. Y. Totev [15], N. Kondov [7], and others (see R. Rangelova [10] and [11]).

Data for the agricultural development in Bulgaria is provided by two sample

surveys (called census), conducted in the periods 1934–1935 and 1944–1945 respectively. The samples covered 100 villages throughout the country and was carried out in March, when due to the seasonal character of agriculture, people were moderately busy. The first survey is recognized as one of the most advanced for its time in the world (I. Stefanov [14]).

The decade between the two surveys considered was very important because this was a period of conformation of the capitalism in Bulgaria, particularly the period of the Great Depression in the 1930s and time before and during WWII.

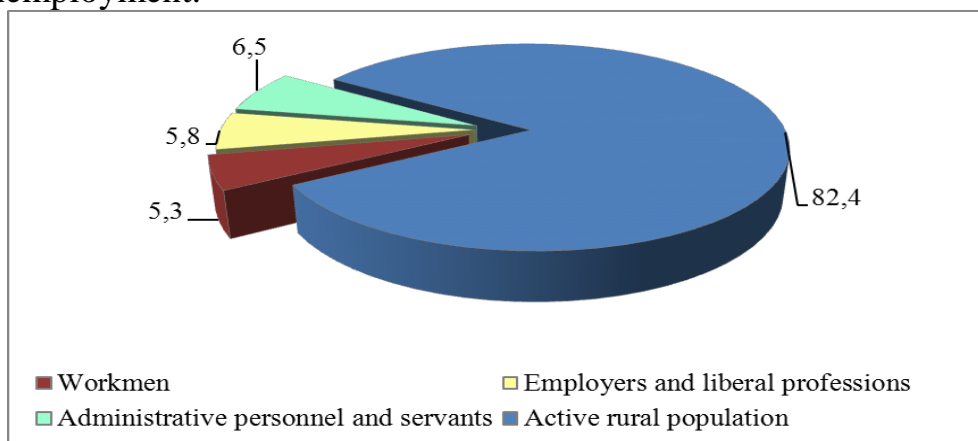
**The purpose of the article** is to describe the main features of the long-term agricultural development in Bulgaria over 20<sup>th</sup> century, namely before and during WWII as well as under the conditions of centrally planned economy (CPE) until 1989. This historical retrospective review is aimed at outlining the very drastic changes in the agricultural sector in Bulgaria from market to centrally planned economy after the WWII as preconditions for the following process of turning again agriculture on market economy type after 1989.

## **Results and discussion.**

### **I. The Agricultural Sector during 1934–1945**

#### **1. Agricultural development**

In the first half of the 20<sup>th</sup> century Bulgaria was a backward agrarian country, suffering from overpopulated and overemployed land. According to the data of 1934 survey, over 84% of total economically active population was engaged in agriculture, showing a very slight decrease up to 1945 (Fig. 1). In the 1930s the country had nearly exhausted the possibilities of extensive growth in the agriculture. The prevailing part of farms were small-scale by land, parcelled out, with enormous hidden unemployment.



**Fig. 1. Structure of actively employed population in Bulgaria by social status in 1945**

Source: A. Chakalov [4, p. 38].

The overpopulated agricultural sector was the main reason for economic migration of Bulgarian farmworkers to other countries, like Hungary, Czechoslovakia, Austria and others, where Bulgarians had proven their experience and skills in horticulture. In the years after WWI emigration however reduced compared to pre-war period (before 1912) mainly due to the restrictive conditions

introduced by most developed countries. For this reason as well as due to the high population growth rate an increasing number of rural population remained engaged in agriculture.

Due to the slow industrialization of the country the industry sector had small propensity for the growing rural population. Other economic sectors were even more limited in offering employment to the excess labor among the rural population.

The study of A. Kemilev [6] was devoted mainly to the development of agriculture in Bulgaria's economy in 1936–1945. This study deserves special attention for at least four reasons:

- It covers about 73% of the country's population and over 80% of the economically active population, which produces nearly two-thirds of National Income and provides 85% of national exports (A. Y. Totev [15, pp. 37–56]).
- It is based on reliable information, taking into account the conducted two considered agricultural sample surveys.
- The period under review is particularly important in terms of economic history, because this is the period between the world crisis (the Great Depression) and WWII.
- Original approach is used for calculation of earnings in agriculture, and the results are presented in 185 tables in Bulgarian and French languages.

During 1934–1945, the decade between the two considered surveys, the following basic changes could be pointed out (N. Kondov [7, pp. 32–45]):

- \* an inconsiderable increase of the farm land by only 0.17%, whereas the number of farms increased by 15.84%. As a result the average area per farm decreased from 50.4 decares in 1934 to 43.3 decares in 1944;
- \* the group of the smallest farms marked the biggest increase, especially those holding from 20 to 30 decares, whereas the biggest farms holding between 400 and 500 decares decreased.

This was a sign that a distinct process of parcellation and consequently differentiation was going on in Bulgaria agriculture, as the biggest fragmentation was among the smallest farms holding under 10 decares and the biggest enlargement – among the largest farms. Until the end of World War II there were 1.2 million small-scale private farms, as the largest-scale farms possessed only 2% of total cultivated land in the country.

Traditionally the biggest Bulgarian family at that time and the manner of inheritance of land were the main factors contributing to its further fragmentation. It led to lower productivity and profitability, which in turn has fueled poverty of the rural population. Land fragmentation hampered the rational management. Certainly the small farms in Bulgaria were much less effective than large-scale farms in some European countries in generating economic growth. At the end of the 1930s the yield per unit area in Bulgaria was about two times lower than in developed countries with similar and worse soil and climatic conditions.

In international comparative perspective it is worth noting that the average possessed land in Bulgaria by a farm was 2–3 times smaller than ones in other countries like Rumania, Hungary, Czechslovakia and others.

At the same time the industrial sector was underdeveloped. The co-operative form of property has been already known and practised for 2–3 decades in Bulgaria, not only in the agricultural sector but in other branches too, as effective form of organization. In fact Bulgaria is a member country of the International Cooperative Union since 1903.

The described profile of agriculture in Bulgaria gives indications how radical was the following reform at the beginning of the construction of the socialist system, particular the collectivization of agriculture. Similar was the situation with the agriculture reforms in the other countries of Central and Eastern Europe (CEE) on the path of implementation of CPE.

## **2. Agricultural performance**

The Bulgarian economist A. Chakalov provided estimates for national income, including agriculture in the long run (Table 1). Chakalov's estimates of national income of Bulgaria are well known outside, as particularly valuable and used was from the specialist on economic history and statistics Angus Madison.

*Table 1*

### **National Income of Bulgaria at constant purchasing power of BGN, based on retail price index, 1939=100**

Year	Value Added – million BGN, including:				Share of agriculture in National Income, %
	Agriculture	Others*	National Income		
			Million BGN	Index, 1939=100	
1924	16,737	11,169	27,906	47	60.0
1925	18,763	10,142	28,905	49	64.9
1926	22,450	14,958	37,408	63	60.0
1927	23,959	16,817	40,776	69	58.8
1928	23,892	16,260	40,152	68	59.5
1929	22,593	16,787	39,380	66	57.4
1930	24,210	19,173	43,383	73	55.8
1931	27,189	22,556	49,745	84	54.7
1932	25,487	24,580	50,067	84	50.9
1933	25,289	25,623	50,912	86	49.7
1934	23,696	22,896	46,592	78	50.8
1935	23,784	20,669	44,453	75	53.5
1936	27,476	26,649	54,125	91	50.8
1937	29,889	27,295	57,184	96	52.3
1938	30,489	28,185	58,674	99	52.0
1939	30,936	28,461	59,430	100	52.1
1940	29,210	28,622	57,832	97	50.5
1941	31,082	27,908	58,990	99	52.7
1942	27,993	28,154	56,147	94	49.8
1943	30,392	27,526	57,918	97	52.5
1944	32,713	20,846	53,559	90	61.1
1945	22,588	19,174	41,762	70	54.1

\* Including: crafts, industry, transport and communications, trade, credit, insurance, savings and capital, free professions and services, covered estate, salaries and pensions of state-owned enterprises.

Source: A. Chakalov [4, p. 117].



Agriculture was the main and dominant sector of the Bulgarian economy, which in 1924 represented 60% of National Income, gradually decreasing to 54.1% in 1945. Based on estimates from Table 1 the average annual growth rates of National Income and of separate branches were calculated (Table 2).

*Table 2*

**Average annual rate of economic growth in Bulgaria, 1924–1945  
 (based on index of retail prices in 1939)**

Period	National Income - total	including:				National income per capita
		Agriculture	Industry	Crafts	Others*	
1924–1928	9.5	9.3	7.8	6.6	11.0	7.6
1929–1933	6.6	2.9	17.8	9.0	10.3	5.3
1934–1939	5.0	5.5	8.8	3.0	3.8	4.1
1940–1945	-6.3	-5.0	-6.8	-7.8	-7.5	-7.9
1924–1945	1.9	1.4	4.5	1.2	2.6	0.6

\* Including: transport and communications, trade, credit, insurance, savings and capital, free professions and services, covered estate, salaries and pensions of state-owned enterprises.

*Source:* authors' calculations based on estimates of A. Chakalov [4, p. 117].

The relatively long period under consideration by over 20 years was filled with turbulent global phenomena affecting and Bulgaria. The change in the structure of the participation of various branches of the economy however was not particularly sensitive. A steady downward trend is observed in agriculture with at least two features: (a) a more pronounced slowdown in the years of the Great Depression (1929–1933), which stems from the strong reduction in agricultural prices, reflected in the decrease of foreign trade; (b) the relative contribution of agriculture continues to decline.

Only a few countries preserved their positive growth rates of National Income during the Great Depression and afterwards (1929–1938) – Bulgaria, the Soviet Union, Romania, Denmark, Greece, Norway, and Finland. For Bulgaria the rates were significantly higher than of the other countries. The positive rates of growth were due to the fact that those countries were mainly small economies, mostly agricultural (some of them semi-natural by character) and are therefore less open to the world. The planned economy of the Soviet Union was virtually economically cut off from the world and the crisis did not affect the country.

In the early 20th century Bulgaria's exports consist almost entirely of agricultural products. For most of the years during the period under review the country achieved a positive trade balance. In the 1920s, however, it was negative. In the 1930s and especially in the second half the foreign trade balance becomes positive again. That was mainly due to the active state control to direct foreign trade to Germany, which often did not cover exports from Bulgaria to counter imports. Furthermore, the average amount of import duties was quite high (in 1931–1932 it reaches 51%), which was aimed at sharp reduction in imports of competitive products and stimulate local economic activity.

Annual data on foreign trade of Bulgaria before and after WWI show another

positive tendency – the share of exports to European countries grows faster than that of any other country on the continent.

For agricultural country like Bulgaria it was natural that the majority of the production for export is agricultural (Table 3). In that period of over 20 years, a strong reduction is observed in the share of grain exports (the largest decrease among the Balkan countries), and other unprocessed and cereal products. This was charged to the strong increase of the share of tobacco and to a lesser extent of eggs and «other products». The decrease in grain exports was due to mainly to the expansion of imports of the same product from the US and Canada, leading to a reduction in the area cultivated with grain, and also due to the prevailing retail sector, which hinders effective quality control according to standards of these leading countries in the world. All of the above mentioned caused loss of competitiveness.

*Table 3*

**Structure of the exports in Bulgaria, 1907–1930, %, Total=100%**

Goods	1907–1911	1921–1925	1926–1930
Grain	55.7	23.4	14.5
Cereal products	7.5	4.1	3.0
Other unprocessed crop	17.2	5.6	6.4
Tobacco	1.3	26.5	38.5
Rose oil	4.1	1.4	3.5
Eggs	7.6	8.1	12.4
Live animals	5.6	3.1	4.4
Hide	2.2	2.0	4.4
Other	8.8	25.8	12.9

*Source:* J. Lampe and M. Lackson [8, p. 76].

## **II. The Agriculture during 1945–1989**

### ***1. Land Reforms and Development of the Organizational Forms: 1945–1989***

After the WWII Bulgaria embarked on a CPE grounded on state propriety of the means of production (land and assets) and state distribution. The private property has been eliminated as «birthmarks of the capitalism that should be outlived and left to die out». In April 1946 the Landed Property Act was passed and in December 1947 – the Law of Nationalization on which basis the CPE ideas were implemented. Regardless the private property has been recognized officially through an inconsiderable share in the economy. There were admitted consumer and artisan cooperatives, private personal farms, arts and crafts, etc. In principle, those activities were independent of the socialist sector. Due to their small-scale size and the idepological conception of their lack of future in terms of technical progress and economy of scale they were not significantly presented. Their production was mostly labour intensive. Though tolerated, the private legal sector forms, the state did not allow egual access to inputs like the state sector.

During the following over four decades the agricultural development passed consequently through the following phases K. Vladimirova [16, p. 43]:

\* «socialization» of the land through its deprivation from the big landowners and giving it to landless and poor villagers (peasants);

- \* collectivization of the individual farms;
- \* merger of small-scale co-operatives;
- \* establishment of agro-industrial combines;
- \* promotion of individual farms under the conditions of centrally planning.

The agrarian changes in Bulgaria started in 1945 by deprivation, including buying up the land of big landowners, exceeding the maximum area stipulated by the Law: from 200 decares to 300 decares depending on the country region.

Under the Law on Land Property in Bulgaria (1946) nearly three million decares land was deprived from 3,600 farmers. This land was added to other 2,8 million decares and formed the state land fund. Part of this fund was distributed (almost gratis) among landless and poor villagers. In this way nearly 1,3 million decares was distributed and 135,000 people acquired land. The rest of the state land fund was granted for establishment of the following unities: *state agricultural farms* (*durzhavno zemedelsko stopanstvo* – DZS) in size of 1,7 million decares; *cooperative farms* (the so-called *trudovo kooperativno zemedelsko stopanstvo* – TKZS) in size of 1,3 million decares; *auxiliary farms* to industrial enterprises (180 thousand decares). It should be noticed that the expropriated and confiscated land in Bulgaria was only 6% of total arable land, while in Poland it was nearly half of the land, in Hungary - about 15%, etc. (A. Dimov [5, pp. 67–93]).

The government however put a high rent in kind on family farms. As a result the normal process of family farms development was destroyed. The government imposed the understanding that in terms of productivity, the family farms have not yet been perspective. Due to this view a conception for further progress of the land reform was developed, indicating that a policy towards mass co-operation of small and medium-scale farms should be held.

Actually, the collectivization, which means pooling of private farms into big collective farms was performed hastily, in a very short time, without conviction and gradualness, i.e. without observance of the democratic principles of free will. At times unlawful methods were applied against rich farmers and the upper stratum of middle-ranking peasants, aimed at their economic destruction. The mass cooperation during the 1950s was carried out in Bulgaria without the preliminary created necessary basis for machine cultivation of land. After this period *machine and tractor stations* were set up, as in collective farms different types of machinery and technologies were introduced. Gradually a big number of production processes in crops and livestock was mechanized.

Compared to the other countries in CEE undertaking transition to CPE economy at that time, Bulgaria was the first beginning mass cooperation of private farms.

**Initially (the first) phase** of the mass cooperation in Bulgaria was implemented through the only form – co-operative farm. Only in a few months after September 1944 nearly 110 cooperative farms were established. During the period 1946–1950 their number reached about 2,500, as their land exceeded 50% of the total cultivated land in the country. The full triumph of the cooperative system in agriculture was declared officially in 1958. This was the end of the first stage of concentration of



agricultural production (Agrarian Policy [1]).

**The second phase** of this process covered the period 1958–1970. It was typical of merger (pooling) of small-scale cooperatives. While in 1957 the number of cooperative farms in Bulgaria was 3,302, in 1960 it was 932, i.e. less than three times in number. For this reason the average area per cooperative increased from nearly 10,000 decares to 40,000 decares. The second phase was viewed as the most successful for the cooperative farms in Bulgaria. One could regard the rational size of farms was achieved. The changes at that time came in consciousness and psychology of the villagers in favour of the co-operative system because of their bigger social fairness and the possibility of joint settlement of the problems that could arise. At the same time due to the course of industrialization of the country growth rate of industry was much higher than of agriculture (Table 4).

*Table 4*

**Average annual rates of growth of industry and agriculture in Bulgaria,  
1951–1988, %**

Indexes	1951- 1955	1956- 1960	1961- 1965	1966- 1970	1971- 1975	1976- 1980	1981- 1985	1986- 1988
Total industrial production *	13.7	15.9	11.7	10.9	9.1	6.0	4.3	4.4
Total agricultural production *	6.4	5.7	3.2	3.5	2.9	0.9	-0.6	2.0

\* According to the statistical system of CPE, called Material Product System.

Source: Statistical Yearbook of R Bulgaria.

During the second phase both in Bulgaria and in other CEE countries cooperatives with the land owned by the farms members predominated, as these members had got land rent. The size of this rent was depending on the income received by the farms. Under the Law on Agrarian Reform, in particular the regulations for the co-operative farms in Bulgaria (1945) it was recommended 40% of the disposable income to be determined as ground rent. In fact, the rent payments were considerably smaller as amount and at the beginning of the 1960s they were stopped entirely.

Looking at the long-term series one can follow the process of strong property nationalization – the first time crucial at the end of 1940s and the beginning of 1950s and the second time at the end of 1960s and the beginning of 1970s. This fact illustrates the process of hypertrophy of the state property.

Under the conditions of CPE in Bulgaria, like in other CEE countries the pursued state policy was to hasten up the private and individual farms out of the agrarian sector. In the 1970s in the same way was acting in respect to cooperative sector as transforming the cooperative farms and machine and tractor stations in *agro-industrial combines* or *industrial and agrarian combines (or complexes)*. The latter were large-scale farms, designated to combine the agricultural development with complementary and other industrial activities. In this way the form of property and labour organization was changed. The former owners working in the farms, divorced from the ownership and began to treat themselves and behave as hired workers. This situation along with the low ratio of capital investment, stagnating or

even declining production in the agricultural sector, the nonconductive state policy to the farm redemption prices, the underdeveloped industry connected with the agriculture as well as for other reasons caused gradually deterioration of the farm productivity.

Actually, **the third phase** of land reform was marked in the 1970s, expressed in nationalization of the private and cooperative property. As a result the economic performance of the agricultural sector turned down (Table 4). The incentives and labour motivation of active farmers decreased, whereas the social apathy increased. The farm productivity fell off, and problems about feed of population emerged.

The rather limited possibility of the public farms to meet in agriculture the rapidly growing needs of the country, particularly in some products were among the reasons for promotion of the individual farms. Some other reasons were the impossibility to supply the entire village population with farm production and the necessity for the population to self-sufficiency in it, as well as the available potentialities of the villagers to cultivate extra production.

During the late 1970s and particularly in the 1980s the objective prerequisites emerged for the appearance of the individual farms under the conditions of CPE. Experience proved that the individual farms, based on the individual and cooperative property and individual labour, were more effective for the utilization of this capacity. Initially, the individual farms emerged as an element of the cooperative farms in the villages, and as a form which would not only ensure the utilization of some unused resources in cultivating agricultural production, but would also combine better the interests of the cooperative farmers as former private owners with the interests of the co-operative farms. These individual farms could be divided into two groups: *individual farms of the cooperative farmers* and *the individual farms of the workers and other employees*. The latter group appeared later and consisted mainly of people who were predominantly skilled workers in towns. The number of the individual farms gradually increased as they created relations not only with the co-operative farms, but also developed themselves as individual branch.

A considerable contribution was made by the advancement of the agrarian and industrial contacts covering also the individual farms. Under the new circumstances the individual farms stopped producing merely to meet the needs of the single household. The reorientation of production in individual farms towards more labour-consuming market-gardening crops and towards livestock breeding increased their share in the public production and in the national revenue (N. Vulchev and H. Pamukchiev [17, pp. 73–86]).

All these developments showed changes in the CPE and indicated a direction to the principles of a market type economy. The latter should create gradually legal, organizational and economic premises for intensifying of the farm production and overcoming of the existing agrarian crisis.

## ***2. Economic Performance of Agriculture in Bulgaria under Central Planning including Development of the Individual Farms***

According to the terminology of the previous model of the economy in Bulgaria,

i.e. CPE the concept «private property» implies ownership of means of production fixed assets), whereas «personal property» does not include them, but includes personal things, belongings, estates, etc. without production purpose.

Bulgaria was one of the CEE countries with the highest proportion of state property. The so-called joint national, which means the state and cooperative (in fact quasicooperative) property produced over 90% from the National Income during the last three decades and close to 95% from the Total Output.

It should be noted that the growth rates in Bulgaria were generally higher than totally for the former Council of Mutual Economic Assistance (CMEA). This was especially pronounced in industrial production and foreign trade. In terms of agricultural production in Bulgaria noted more pronounced decline in the 1980s than that of CMEA totally [12] and [13].

There was a specific feature of pricing in the countries applying Material Product System of accounting concerning implementation of turnover tax. This tax, as part of the value of social product and Net Material Product (NMP) was registered in all manufacturing industries, but was included in the prices of a few products, which were mostly consumer goods produced in the industry. For this reason, the sectoral structure of Total Output and National Income did not reflect the actual contribution of manufacturing industries in their creation, but shows where Total Output and NMP have found realization. Calculated in this way the rates of growth of total Gross National Income (GNI) and by different branches tended to decline over time as the lowest rates were in the 1980s, particularly during their second half, when the agriculture rates were negative (Table 5).

*Table 5*

**Annual average rates of growth of GNI in Bulgaria by branches, 1965–1990 (%)**

Indexes	1966–1970	1971–1976	1976–1980	1981–1986	1986–1990
GNI – total,	4.7	4.5	1.2	0.9	-1.8
including:					
Industry	8.7	5.5	3.4	1.9	-3.2
Agriculture and forestry	-0.8	1.6	-2.5	-1.8	-2.2
Construction	6.6	3.0	1.9	0.3	-3.6
Transport and communications	11.9	7.8	3.0	1.2	0.4
Trade	8.7	7.9	1.1	2.1	-0.6
Housing building	2.1	3.4	2.5	2.3	1.6
Governance and other services	4.0	4.6	-0.1	1.2	0.4

*Source:* T. P. Alton et al [2].

In the main publication of the Central Statistical Office «Statistical Yearbook of R Bulgaria» at that time it is verbally written that in the category «people's (personal) farms of population» are included personal auxiliary (or relief) farms of workers, employees, pensioners, i.e. former members of cooperative farms and other categories of population, that figure as their own land or land, received from agricultural enterprises, as well as from municipal councils for cultivating and production for the purpose of self-sufficiency.

An observation on the private sector shows its higher profitability versus the

state one. The private sector proportion in the NMP was nearly twofold in comparison with the percentage in the Total Output. Statistical data from the beginning of 1950s to the end of 1980s indicates the long-term profitability of the agricultural production separated by form of property: yields of major crops and livestock productivity. Two facts stand out here. *Firstly*, it turns out that as a whole the profitability of the state sector, i.e. the dominant sector is higher than this one of the private sector. The arguments for this could be divided into two groups - economic and statistical. Under the conditions of CPE there were no *statistical* data on the private sector. As far as there were any data, they were partial, separate, and inconsistent. Among the *economic* arguments are the following: (a) The state sector was developed on the best agricultural land, cultivated with advanced machines and technologies, irrigation, as well as good materials: sowing-seed, manure, fertilizer, etc. The typical products that are more profitable under the conditions of the state property were: wheat, apples, grapes, milk, eggs, wool clipper, etc. Parallel to that there was considerable wastage of agrarian state production, especially during harvest (T. P. Alton et al [3]); (b) some crops are more fruitful under the conditions of private sector. Peanuts (industrial crops), cherries, apricots are among them. In the late 1980s and early 1990s more of the considered crops in the private sector increased the yields and they exceeded the ones of the total amount (both state and private). Main reason for this could be better economic environment that anyway the state policy was trying to ensure for the private sector, in particular for the purposes of so-called self-sufficiency of the population. In general, efforts (actually palliative) was made to involve market type economy elements in the CPE. But there were also other reasons. On the one hand, there was underestimation of private production either because of the lack of strict accounting, or because of tax evasion. On the other hand, there were incentives for exaggeration of the productivity in the state sector, for example for winning so-called socialist emulation among state farms or regional units, that was bringing bonus. The *second impressing fact* is about the mainly slowing down productivity of the agricultural productions in the years after 1986 for some yields of crops considered: maize, grapes, potatoes, peanuts [17, pp. 73–86].

In general, there is imposed the important question of the poor productivity of agricultural productions in a such traditional agrarian country like Bulgaria relative to many other countries in the world, including in CEE. This is connected first of all with the worsening efficiency of national economy under the previous circumstances.

According to data for some major farm products in 1980, 1986, 1989, 1990 and 1993 by category of enterprises, nearly all wheat output was produced by agricultural organizations. During the period 1986–1990 the participation of private farms increased relatively to state ones, increasing the production of table grapes, peppers – red and green, potatoes, tomatoes, etc. At the same time the private farms reduced slightly their share of total production of honey, eggs, cherries. Thus in 1990 the share of private farms was prevailing for the most of products considered.

On the basis of available data [12] and [13] one can calculate NMP per person as an indicator for labour productivity in the material production by forms of



property. The labour productivity in total material sphere (i.e. based on NMP) was BGN 7168 in 1986 and increased to BGN 7962 in 1989, i.e. by 11.1%; in state enterprises – from BGN 7043 to BGN 7691 respectively, i.e. by 9.2%; in cooperative farms – from BGN 5007 to BGN 5715 respectively, i.e. by 11.4% and for private farms and enterprises decreased from BGN 12390 to BGN 10213, i.e. by -17.6%. Even if one takes into account conventionality of the data, it is obvious the considerable higher labour productivity in private sector relative to other forms of property. Bearing in mind the somewhat dubious data reliability, the considerably higher labour productivity in the private sector is obvious as opposed to other forms of property. In the period 1986–1989 however in contrast to the increased total labour productivity (including these of state and cooperative enterprises), the labour productivity in private sector decreased.

**Conclusions.** During the 20th century the agriculture in Bulgaria experienced three very different, contradictory periods of development. In the first half of the century the country was backward agricultural in nature, but known with good agriculture, ensuring positive trade balance. After WWII until 1989 this sector underwent reform to the nature of the planned economy and to collectivization. Despite the transformation to a higher technological and organizational level, the agriculture gradually and particularly over the 1980s began to bring consequences of administrative command and control system, namely got away from the true nature of the economy based on market. As a result, it was formed an economy with low productivity and structural inefficiencies, including high energy consumption and low added value in the final product. This necessitated the next radical shift to a market economy, which began immediately after the start of the political and economic changes in Bulgaria in 1989.

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