LABOR POTENTIAL OF AGRICULTURE IN THE REPUBLIC OF BULGARIA

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Abstract

The development of agriculture in Bulgaria as a member of the EU faces serious difficulties. They are expressed in the unfavorable demographic condition of the population in the villages and those working in the field of agriculture. These difficulties are as a consequence of the medium in which the population is formed and the labor potential. The overcoming of the stated difficulties can be achieved through the elaboration and applying of a unitary strategy for the development of the national agriculture including the agricultural production. The actual approaches, ways and measures include: the creating of motivation and incentives for life in rural regions and villages; the establishment of diversified regional production structures for the employment of the population in the rural regions; the increase of the role of the country and municipality in the establishment of competitive farms; the increase of the role of the country’s co-financing of agricultural production; regulation of the labor market; creating conditions for the use of new technologies in agriculture; incentives to enhance the qualification of the employed; renegotiation of the agreements in the EU in compliance with the new financial and economic conditions in the Union.

Key Words: Agricultural labor, labor potential, rural development, agriculture strategy, Bulgaria.

BULGARİSTAN'DA TARıMSAL İŞGÜCÜ POTANSİYELİ

Öz


Anahtar Kelimeler: Tarımsal işgücü, işgücü potansiyeli, kursal kalkınma, tarım stratejisi, Bulgaristan.

Introduction

This article sums up the results of an extensive study of the labor potential of agriculture in Bulgaria. Why exactly agriculture as a subject of human activity? Because the natural conditions in our country are favorable for its development. Due to the current lasting economic and food crisis agriculture could boost the economic and social growth all over the world. It is also owing to the EC decision on the membership application filed by Bulgaria in January 1997, stating, that Bulgaria’s EU membership requires an adequate high level of human and natural capital.

1. Development of the Bulgarian agriculture and the demographic condition of the population in the country

In some circumstances the agricultural production with its potential could be essential for Bulgaria to achieve the strategic objectives and to be a successful EU member, which is of benefit for the population. The revival and the further development of agriculture require investments in modern technologies, making the production more efficient and environmentally friendly. Not only fiscal and material resources are required, but also qualified management and production staff. The competitiveness of farm production depends on their sufficiency, qualification level and work experience ceteris paribus (other things being equal). Along with money, how turns out to be a crucial asset. A large share of the profit passes through it.

What is the real picture, actually? The rural population has been reduced by 54% since 1956 - from 5057 th. inhabitants to 2755 th. inhabitants. For the last 50 years the average annual decrease is 55 000 persons. This regressive demographic process has had inevitably a very strong pressure on the village, considered as a

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territory, settlement, social and economic unit, a pressure that has been changing it not in line with its usual development, regardless of the measures taken during «the socialist period». The first noticeable consequence of the population decline is the reduced number of the villages and their inhabitants.

The villages in Bulgaria now are 5086 compared to 5927 in 1946. The inhabitants of the disappeared settlements used to be engaged with farming – land cultivation and livestock breeding. Most of them disposed of a school, a cultural house, communications, roads and other infrastructure. The residents of 70% of the villages in Bulgaria are up to 500 persons. The drop-down of the village people also has a negative impact on the rural development in all aspects – demographic, economic, social, etc.

During the period of the study a drastic decline was observed in the rural marriage rate, being the basis of the birth rate. From 8.9 per 1000 in 1960, it fell to 3.0 – i.e. 3 times. The less marriages relative to a number of inhabitants, reduce the opportunities for the births, despite the growing number of extramarital childbirths in the last few years. The birth rate fell from 18.8 per 1000 people in 1960 down to 8.3 i.e. 2.3 times. The main reason for such negative change in the birth rate index is the continuous reduction of the number of women of fertility age, especially given the aging population and the migration. The more than 4 times drop down of the number of women in fertile age resulted in 4.9 times decrease in the number of live births.

Adverse trends in the marriage and birth rates of the population i.e. the reproductive behavior of the rural population are also accompanied by an increase in mortality. Out of 9 death cases per 1000 people in 1960, they increased to 20.8 – i.e. more than double mortality rate.

The unfavorable changes in the birth and mortality rate in rural areas decreased the natural growth of the population - in the late 1970s it became negative. It reached 12.7%, compared to 9.8 per 1000 in 1960. It influenced negatively the age structure of the rural families, expressed by the index – the average number and age of children in a family. Every third family has no children.

The families consisting of two spouses with children below 18 are about 60%, with one child below 18 – just 24%, with two children (the condition for simple reproduction) - 15%, with three children – just 1.54%, etc. The relative share of the one and two member households is stepping up, and the share of three, four etc. – member households is stepping down.

The adverse changes in the primary demographic reproductive indicators and the migration processes in the village in the past gave rise to the decline in the rural population and the collapse of its structures. It should be noted however, that before 1989, due to the restrictions in the free movement of people, there were rare cases of migrants from the villages to other countries, except for the emigration to the Republic of Turkey under the bilateral agreements from 1972 и 1978 as well as the ethnic emigration in 1989.

2. Movement of the rural inhabitants. Inner and outer migration

The liberalized travelling abroad after 1990, the legal and illegal job opportunities in foreign countries, the growing unemployment gave rise to emigration from the villages as well. According to the published data, between 1989 - 2000 there were 680-700 thousand emigrants abroad, and between 1996 - 2000 the immigrants in Bulgaria were 50-60 thousand persons. It could be assumed, that some of the emigrants were from the rural population, and a few of them (about 15%) of the immigrants have settled down in the villages. Emigration is a factor, reducing the rural population and deteriorating its structure.

Another reason for the reduction of the rural population is the fact that from 1956 to 2004 many villages have become towns and the population automatically became urban.

2.1 The impact of the movement of the population on the age and educational structure

The abovementioned factors of natural and mechanical movement of the rural inhabitants, had also a negative impact on generating their age structure. The relative share of the young and middle aged generations dropped down compared to the increase in the elderly and the eldest age group. According to the data of the last census the inhabitants below 14 years of age are 14.74%, between 15 - 34 - 22.24%, from 35 to 54 – 23.85% and over 54 – 39.17%.

The quality of the rural population depends on the education – i.e. the ability to apply knowledge at work. The data from the study reveal, that the education structure of the village people is rather unfavorable. The university graduates are just 3.62%, secondary school – 24.21%, high school graduates – 27.83%, persons with uncompleted primary, primary and elementary education – 63.25%.

The people who have completed or not their primary education (25.10%) are actually semi-literate, and the people who have not completed primary education, or without any education (9.51%) are considered illiterate.
The age and education structure of the rural population obstruct the creation of a highly productive, competitive labor potential, incl. the agricultural production.

3. Change of the working population in the villages and its labor potential

The status of the rural population has a strong effect on their labor potential, as well as on the labor potential of agriculture.

The worse age structure of the rural residents has limited their capability to reproduce inhabitants with normal structure of working capacity. There is a continuous decrease in the population below and at working age. In 2004 compared to 1970 the population below the working age has been decreased by 66.67% and from 23.8 % has dropped down to 13.65% from the total population. The inhabitants at working age have been decreased compared to 1970 by 43.76% and their relative share was decreased by 2.08%. However for the same period of time the population exceeding the working age stepped up by 12%, and its relative share has been increased almost twice.

The average household has more than 3 times less members. Meanwhile men at working age are about 1,7 times less, and women – about 1,72 times less. Both men and women above the working age are more. At the end of the research period a trend is apparent, that the ratio: persons able to work against persons unable to work in a household is 1:1.

The rural population capable to work was reduced by 259 thousand after 1997. The conditions offered by the labor market have resulted in less economically active inhabitants. They have dropped down by 115 thousand persons. The employment ratio of the rural population is too low – between 30-37%(average 12.5%). Such extreme negative events are rather unfavorable for the ability of the village to reproduce labor potential for agriculture.

The reasons for the less employees in the villages after 1997 are demographic – less people at working age.

3.1 Labor market and the working population in the villages

Another explanation is the labor market fluctuation. The rural unemployment peak was in 2001. Later it was gradually reduced, reaching 97 thousand people. In 45 municipalities in Bulgaria the unemployment exceeds 20 %. In 10 municipalities with prevailing rural population, it exceeds 30%. More than 1/3 of the economically active population in 66 rural municipalities is unemployed. Moreover the unemployment there is continuously rising, more than in the beginning of the post 1989 period of changes.

Further reason is the reduced active labor demand on the account of hidden employment either in the gray economy or in the family farm. A conclusion could be made that the economic activity of the rural population has been blocked at a very low level. The economic inactivity of the rural households is too high. The highest being for the two-member households, who are almost half of all the households, followed by the one-member households - exceeding 1/3, the four-member – about 1/8 and the three-member households – about 1/10.

The number of unemployed in the villages has risen. The persons who have been looking for a job for three and more years represent an extremely large share of all the unemployed.

They are more than 1/3 of all the unemployed. This fact emphasizes the conclusion, that the economic activity of the rural population has been blocked for a long period of time. A significant part of the unemployed see no hope at all for the future. Ceteris paribus it affects the labor potential in agriculture and its reproductive and economic capabilities.

There is an economic paradox in the villages in Bulgaria. On the one part – high unemployment, on the other part – about 1/3 of the land is not utilized for production where the unemployed could find jobs. There is something more serious than the lack of motivation to work in agriculture, being stronger than the impossibility to find a job for a long period of time. It could be a subject of a detailed and considerable sociological study.

As a result of the trends revealed in the labor potential of the rural population it could be assumed, that the lower quantity characteristics of labor efficiency reproducibility and economic activities do not create the basis required for reproduction of the necessary labor potential of agriculture and ceteris paribus (labor equipment) for its better and higher productivity, resulting from higher physical and intellectual abilities.

4. The employed people in the agricultural production and its labor potential
The number of farmers has been reduced after the year 2000. If in 2000 the persons engaged in agriculture were 1422.1 thousand, now they are 1075.9 thousand. - i.e. 346.2 thousand persons less. This cutback is mostly due to the elderly farmers, who leave the field for biological reasons, working mainly in the small farms with predominant manual labor. The relative share of the farmers above 55 years of age is 54.3%. However there is another trend of strong drop down of the farmers aged up to 35 years – by 35%, or by 44.2 thousand for 2 years. Nevertheless the lower number of farmers is not due to the better technical equipment and replacement of the manual labor by machines, but to the factors mentioned above.

The reduced quantity of the farmers should not be characterized only as a negative trend, as it corresponds to the trend in the agriculturally developed countries. Pursuant to official statistic data, the relative share of the persons engaged in sector Agriculture in Bulgaria has been fluctuating between 7.9 % - 13% in the last few years.

The number of the farmers does not present the real labor potential of production. The real labor potential could be determined only by means of a coefficient of equalizing the age groups to the age group with the top working capacity - 35-44. According to the data, the labor potential of the Bulgarian agriculture, determined by the equalizing coefficient is 33-36% - less than the actually engaged persons.

4.1 The age structure of the labor potential

The labor potential of agriculture would have been higher, if the age structure were better, i.e., if the relative share of the persons within the age groups 25-34, 35-44 and 45-54 were more significant and improving. The worse age structure of the engaged persons and the reduced potential of each group resulted in 20,2% lower potential of agriculture. The basis for development of the labor potential of agriculture is rather regressive. It depends on the impact of two simultaneously acting factors – considerable drop down of the employees and their aggravated age structure. The relative share of the younger age groups with better working capacity is decreasing and the share of persons of the age groups with less working ability is increasing.

4.2 The education structure of the labor potential

The education structure of the farmers is quite unfavorable nowadays. The relative share of the persons with elementary and lower education is very large – between 57.8% - 67.7%. The share has been decreasing by 2003, followed by a slight increase. The relative share of the secondary school graduates is 29.11% - 37.5%. The share of the university graduates is extremely low: 3.2% - 5.32%.

5. Conclusions

The following conclusions could be derived out of the trends in the status of the labor potential in the agriculture sector: First, the real labor potential is much lower, than the potential, identified with the number of the employees. Second, the age structure of the labor potential is a prerequisite for a lower productivity of labor, ceteris paribus. Third, the education structure of the labor potential reveals, that the agricultural producer is not qualified and does not meet the latest requirements for competitiveness based on innovative efficient production. Fourth, the quality of the labor potential of farming is disastrous.

The established status of the labor potential of the rural areas and of the agricultural production demonstrates, that they are mutually dependent and have changed each other. The labor potential of the village, and of the agricultural production has emerged and changed in a certain milieu, determining the directions and the intensity of the changes therein during the research period.

5.1 Medium of generating and changing of the working population and labor resource of agriculture

The factors focused below are typical for the generation and the changes in the potential of the village to reproduce population capable to work and labor resource for the agricultural production. The intensity and the direction of these factors have been different throughout the history: modernization (industrialization of production in Bulgaria and urbanization of the state) in 1978; total nationalization and industrialization of the production after 1945 and collectivization of agriculture after 1947; speedy urbanization between 1970-1980; privatization of production, destructing entire industries and their organization structures; abrupt lower incomes of the rural population and the farmers throughout the period after the liberation; less favorable social infrastructure in the villages compared to the cities (healthcare, education, culture, utilities, transport, sports, housing). The impact of the environment on the current labor potential has been elucidated in this lecture.

Problems were encountered in view of the formation, status and utilizing the labor potential of the Bulgarian agriculture. Along with other factors they determine the stagnation and threaten the agricultural development according to the national traditions, the European practices and the current global trends. The demographic crisis of the village and rural areas hinder the reproduction of the labor potential and farming in scale and quality, meeting the state-of-the-art requirements. The fallow land is the immediate result of the rural
demographic crisis. It is no more cultivated, because there is no one to live and work there. The formation and the status of the labor potential in agriculture – its quality and quantity characteristic features, do not comply with the requirements to become competitive both on the domestic and international markets; the efficient use of the available labor potential is obstructed by integrated organizational, structural, technological, economic and management factors.

5.2. Policy for overcoming the unfavorable development of the labor potential in agriculture

The policy for overcoming the deep crisis and the status of the labor potential of the Bulgarian agriculture should be complete and radical. Obviously the specific approaches, ways and methods of implementing such a policy should apply to the theory of motivating the individuals to act. The lack of motivation and interest, that used to be typical for more than 60 years for the people working in agriculture, living in the rural areas and bearing and bringing up more than one child, should be overcome. It is difficult to settle such interrelated problems, requiring a strategic approach in the intentions and the practical activities of the state in the next decade and in the long-run. The village and agriculture related policy should be amended. The specific measures for such a change and implementation of the national strategy should provide conditions for: proper and profitable employment and activities in the village and farming; proper life in the rural areas, creation, care and education of children; the reproduced potential of the agricultural farm should merge in an organic unit with the reproduction of the household of the farmer. It is impossible to be achieved without overcoming the present ‘dichotomy’ i.e without eliminating the particular approaches in the division of their development. It means a new regional policy, incorporated in practice in the overall development of the micro-regions, where farming is concentrated and could be developed. The specific historical development and the traditions should be taken into consideration in such a policy. One of its basic objectives should be to reduce the power of attractiveness of the large cities and the industrial centers.

5.3. The role of the EU membership of Bulgaria

The opportunities for changes are enhanced by the EU membership of Bulgaria by using money from the EU funds for rural development and agriculture. These prospects could not be used, if the state fails to create the necessary conditions for their application and fair allocation among the small, medium and large farms.

5.4 Unitary strategy for development of the national economy

The problems encountered in the personal motivation in the above directions could not be settled by means of adoption and implementation of single strategies, plans or programs only for development of the villages, the rural areas or agriculture. A new environment is required adequate to the changes. A strategy for development of the national economy, where the place of the addressed interrelated problems of the village and agriculture should be found in the course of resolving the other national problems. Therefore no private agriculture development strategy has been implemented successfully.

The top priority of the strategy for development of the national economy should be the recovery of the usual reproduction of the population and the generation of a high quality labor potential of the nation. Without labor potential of the required quality and quantity no national task could be successful. It should be highlighted, that the approaches, methods and measures should be applied to resolve the problem of the labor potential in agriculture, as it is now, and as it should be in the future following the changes, neither only of general or particular significance, nor on the large scale, nor executed by a single public, regional, nor any government authority. Some measures apply for the government and the resources of the state in general. Others are subject of the activities of some ministries or institutions, of regional or municipal authorities. Other problems should be resolved by the business structures and their sector organizations, or by the entrepreneurs themselves.

The approaches, methods and measures to improve the status and the utilization of the rural and agricultural labor potential ensuing from the national strategies could be successful, only if tackled jointly and consecutively. A lot of funds are required to find a solution to the problem. They should be allocated differently, in line with the specific status of the labor potential and the environment for its development in each of the 264 regions (municipalities) in Bulgaria. A restructuring of the settlement structure of the country may be needed as well.

5.5. Approaches, methods and measures for the labor potential to come out of the crisis

The approaches, methods and measures to be applied for the labor potential in agriculture to come out of the current crisis could be divided provisionally in several groups.
5.5.1. Stimulation and motivation for living in rural areas and villages

First group – stimulating and motivating the people to live in the rural areas and the villages, by launching initiatives for normal reproduction of the rural households; by creating and maintaining an up-to-date living environment. It might be achieved by resolving the complicated problem as follows:

- reconstruction and rehabilitation of the available infrastructure – establishing a new modern infrastructure – housing, utilities, transport, healthcare, education, culture.

In practice it could be achieved by joint efforts of central, regional and local government authorities, as well as of interested private entrepreneurs. The state, public and private financing of the investments in infrastructure could be facilitated, if projects are developed and approved under the EU rural development measure, providing for EUR 733 mln from EU for the period 2007-2009. In addition to this measure other funds from the regional development programs could be attracted as well;

- reconstruction and rehabilitation of the houses of young families from the rural areas, engaged or intending to be engaged with farming. The state could be involved or could assist them to obtain preferential housing credits from private commercial banks, for instance to guarantee for them;
- state and public facilities for the children, born, fostered and educated in the rural areas;
- improving the healthcare, education and child-care facilities for children brought up in the rural regions;
- setting up contemporary utilities (water-supply, sewage, systems streets and transport, network);
- improving the interregional links by means of up-to-date communication systems. The EU funds could be allocated on multiregional level for construction of energy, transport, education, cultural, tourist and utility facilities.

5.5.2 Development of diversified interregional industrial structures

Second group – developing diversified interregional industrial structures, employing the population, not engaged in farming.

5.5.3 The country and municipality at the establishment of entrepreneurs and competitive farms

Third group – assistance by the central and local government authorities for entrepreneurs to establish and run competitive farms, by means of:

- eliminating the current land fragmentation for farming purposes, by amending the current legislation and the regulatory set up, facilitating it;
- land consolidation by adopting a special law;
- consolidating the farming parcels by stimulating land lease and appropriate facilities thereto;
- amendments in the current assistance provisions for the farms from the EU funds and the national state funds, facilitating only the large entrepreneurs now. Therefore insistence is required before the European Commission;
- prospects and facilities for young families to purchase and lease land;
- setting up a special authority to control and regulate the farm land market in Bulgaria, functioning on the principle of the joint liability among the state, municipalities, associations and chambers;
- developing opportunities and stimuli for establishment of various types of farm cooperatives – for private production, for facilitating the production and for complete production on demand of the owners;
- support in financing, marketing and management of farms.

5.5.4 Renegotiation of the agreements with the EU

Fourth group – Reconsidering the rules for financial assistance to Bulgarian farms by the EU authorities from the structural funds, which were unfair and less effective in the first period.

5.5.5 Co-financing of agricultural production by the country

Fifth group – Reconsidering by the government of the applied current scheme of co-financing the farms by means of additional national payments in order to eliminate the injustice.

5.5.6 Market regulation for farm and food products
Sixth group – more efficient market regulation for farm and food products by means of:
- regulating imbalances in the supply and demand of food products on the domestic market through the National Intervention Agency;
- better and targeted use of the arrangements for implementing the WTO Customs and Tariff Policy on imports and exports of agricultural products, as they are not utilized efficiently.

Seventh group – applying a specific financial and insurance policy and consolidating the role of the state therein. Establishing a special national loan and insurance institution to take into account the specific requirements in agriculture.

5.5.7 Establishment of conditions for the technical renovation of the farms

Eight group – improving the technical facilities of the farms by means of:
- promoting the production of agricultural machinery in Bulgaria;
- promoting and assisting the activities of the agricultural institutes and experimental farms for development of high-yield varieties of farm crops and highly productive livestock breeds in conformity with the natural conditions in Bulgaria;
- strengthening and expanding the public involvement in the distribution and production of high quality plant varieties and animal breeds;
- improving the consulting services to farmers by including the institutes and stations of the Agricultural Academy therein;

5.5.8 Incentives for the enhancement of education of the farmers

Ninth group – upgrading the agricultural education in production and management on all levels through the secondary and higher education system. Introducing incentives for further education and qualification of farmers.

Genişletilmiş Özet


Hali hazırda yaklaşımlar çok kapsamlı bir şekilde yapılmakta. Öncelikle araçlar ve önlemler kırsal bölgelerde ve köylerde yaşamı destekleyici ve teşvik edici girişimlerin yaratılması (ulaşım, sağlık, eğitim gibi alanlarda altyapının yenilenmesi ve rehabilitasyonu) amaçlanmaktadır. İkincisi, kırsal bölgelerde nüfusun istihdamı edilmesi için çeşitli bölgelere yönelik uygulamaların oluşturulması ve uygulanması olmaktadır. Üçüncüüsü, rekabetçi çiftliklerin oluşturulması ve üretime open ve belirli değerlere eşitlik sağlamak için uluslararası odaklanma en fazla pay alınması içermektedir. Ayrıca işgücü piyasasına düzenlenmesi ve tersine yeni teknolojilerin kullanılmasını sağlayacak şartların oluşturulması da (örn. çiftçilere Tarım Akademisi tarafından hazırlanmış hizmetler gibi) önemli olmaktadır. Dahasi bu yeni yaklaşımlar, işgücü kalitesinin artırılmasını sağlayacak girişimleri ve de AB’nin yeni finansal ve ekonomik şartları doğrultusunda AB bünyesindeki anlaşımların yeniden müzakere edilmesini de içermektedir.


Tarımsal üretim potansiyeli Bulgaristan’ın stratejik hedeflerine ulaşmasında hayatı önemine sahip bir rol oynamaktadır. Tarımsal üretim yeniden canlandırmada ve artırılmasında modern teknolojilerin kullanılmasıyla üretim daha verimli ve çevresel durayılgı aşıb bir şekilde gerçekleştirilmesine gerekli kılmalıdır. Ancak yalnızca mali ve maddi kaynaklar yerli düzeyde insani ve doğal kaynağa sahip olmasının gereklidir.

Tarımsal işgücü potansiyelindeki eğilimlerin durumu hakkında şu sonuçlara varılabilir. İlk olarak, çalışanların sayısına bakıldığında reel işgücü düzeyi olabilecek potansiyelinin altındadır.İkinci olarak, diğer tüm koşullar aynı olduğunda (ceteris paribus) işgücü piyasasının çalışma yapısı, işgücünün düşük üretimi olmasında rol oynamaktadır. Üçüncü olarak, işgücü potansiyelinin eğitim yapısı göstermektedir ki üretim kalitesi bir şekilde yapılmamakta ve inovatif üretim gerektirdiği en son standartları karşılamamaktadır. Dördüncü olarak ise çeşitlilikleri düşüktür işgücü potansiyelinin kalitesi oldukça düşük bir seviyede olmaktadır.

Kırsal alanlardaki işgücü potansiyeli ve üretim birbirleriyle yakından bağlı olmakta ve birindeki değişiklik diğerini etkilemektedir. 1990 yılından sonra serbest dolaşımın uygulanmaya başlanması ile yabancı ülkelerdeki legal ve illegal iş olanakları hem şehirlerden hem de köylerden bu ülkelere olan güçlü artmıştır.


Ulusal strateji, yeni bölgesel politikaların geliştirilmesi anlamına gelmelidir. Çiftçiliğin yoğun olduğu tüm mikro bölgelerin kalkınmasını içermelidir. Bu stratejinin temel amaçlarından bir tanesi büyük şehirlerin ve sanayi merkezlerinin ekonomik gelişmesidir.

Bulgaristan’ın AB üyesi olması kırsal kalkınmada ve tarımsal üretim ve输入lumasında fırsatlar sunmaktadır. Özellikle AB fonlarının bu amaçlara yönelik kullanılması büyük bir fırsat olmaktadır. Ancak eğer devlet bu kaynakların küçük, orta ve büyük çiftlikler arasında adil bir şekilde kullanılmaması durumunda bu şanslardan yararlanamayacaktır.


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