

# THE LESSONS FROM THE DEVELOPMENT AND PROBLEMS OF PRODUCTION COOPERATIVE IN BULGARIAN AGRICULTURE

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# THE LESSONS FROM THE DEVELOPMENT AND PROBLEMS OF PRODUCTION COOPERATIVE IN BULGARIAN AGRICULTURE

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## **Abstract**

In the paper are depicted the lessons and the problems of functioning and restructuring of cooperative structures in agricultural sector in Bulgaria during the pre-accession period (1995-2006). The unsolved institutional and legislative problems of these structures are shown in details.

The purpose of the paper is to analyze and assess the status of the cooperative structures active in the agriculture and to offer concrete suggestions for their further adaptation to the EU legislation implemented in this area.

## **Key words:**

agricultural cooperatives, EU accession, CAP implementation

## **1 Introduction**

During the last 17 years the agricultural productive cooperatives are the most arguable form of organization of production in Bulgaria. The reasons are linked with:

- The vast widespread of the cooperatives and their significance for the production of several main agricultural crops;
- The ceaseless changes in their number and significance in terms of territory in the rural regions in Bulgaria;
- The specific characteristics of the agricultural cooperative as a form for organization of production and the peculiarities of the Bulgarian variant of agricultural productive cooperative.

In the paper are depicted the lessons and the problems of functioning and restructuring of cooperative structures in agricultural sector in Bulgaria during the pre-accession period (1995-2006). The unsolved institutional and legislative problems of these structures are shown in details.

The evaluation of the changes in the distribution and characteristics of the productive structures is based on the Census of agricultural holdings carried out in Bulgaria in 2003 and the results of two scientific projects done by the authors.

## **2 Methodological problems of the cooperative**

In the cooperative theory there exist number of tested and proven research hypotheses for the preconditions agricultural owners to participate in the cooperatives and their relation to the efficiency, compatibility and stability of the cooperative organizational form.

The cooperative as a voluntarily created organization which on the basis of collaboration and mutual aid between its members carries out an activity for satisfying their interests, poses in front of the researchers several challenges linked with: the motives and reasons which drive the person to prefer the collective way for realization of its aims, the specificity of the cooperative regulatory mechanism and cooperative distribution problems and etc.

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The discussion for reasons of the individual choice of the collective activity is more than 100 years long. Whereas among the researchers from XIX century and the first half of XX century dominate the idea for compulsion, for the impossibility particular result or profit to be obtained via another way than through cooperation, during the last decades is the tested the opposite hypothesis. According to the second group of authors of the voluntary organizations, including the cooperative leading is the role of the future strategic aims and for obtaining then the individuals with common interests are inclined to sacrifice means from different character.

As with other similar researches testing of the final alternative “threat-prospect” by different authors do not leads to synonymous empirical results. The final research hypotheses in this case are not backed up which allows to be formed a third opinion. According to the third opinion the individuals become members of different voluntary structures by different reasons not only due to “threat” or “attractiveness of the chosen stimuli. Moreover, the individual motivation can be based on personal stimuli and on collective aims as well (HAGEDORN 1999).

While looking for the essential characteristics of the cooperative, some researchers DOUMA and SCHREUDER (1998) assign it to the forms of non-market horizontal coordination in which the leading regulatory mechanism is related with the mutual regulation or standardization of values and norms. On this basis are built the confidence, the commitment which is a precondition for combination of the formal organizational norms with the informal one, which help for their development and thus decrease the expenditures for surveillance, control and compulsion. Often the informal structure and relations created spontaneously during the period of establishment of the cooperative regulate the activity, despite the built on a later stage formalization of the procedures and relations.

The cooperative as a democratic managed structure for economic transaction is an object for several researchers. In the centre of their interest is the way of achieving coordination of the group economic activity. Is depicted the mechanism for coordination of the individual aims for obtaining the common aim. Supporting the advantages of the participation of all members /directly or indirectly/ in the managerial process, the authors think that the problems and difficulties are due to the necessity of constant efforts for supporting the cohesion and unanimity of the organization. For this purpose two strategies are proposed which differ diametrically in terms of the applied approaches and means. The first is based on the commitment of the group members, on their loyalty and on the leadership of the chosen by them leader. It presupposes altruistic behavior by the members, readiness to give priority to the collective interest more than to the private one, which greatly decrease the necessity of orderly institutional pattern.

The second strategic trend operates with the terminology of the organizational theory and includes the establishment of rules, frame, coordinative mechanism which differentiate rights, responsibilities and obligations. Their establishment should take into consideration the individual motivation of the members and the same time act as a defense against the opportunistic behavior and the insufficient member loyalty.

Not making absolutist these two alternatives, they find their specific, individual and unique proportion in every cooperative, because the voluntary and free participation can not be not combined with an impeccable organizational structure which does not exclude the altruistic behavior models, particularly in crisis for the functioning of the cooperative situations.

In conformity with the main economic rules, some authors (COBIA, 1989) with good grounds look for the relations between the essence of the cooperative organization and the economic principles in which it is based and functions. Moreover the success of the cooperative, its productivity and efficiency are directly related from the achieved member consensus toward the limitedness of the resources and the rational usage.

Strong debatable problem in the cooperative theory is the correlation between the democratism of the cooperative as a form of business organization and its efficiency. This problem reflects the fact that is not sufficient through the cooperative to establish opportunities for increase of the members' benefits. To survive in the competition with the other organizational structures, the cooperative should be effective. To satisfy this requirement are elaborated such "rules of the game", such frame of activity for each member in order to motivate him/her to participate. In care there are constant losers, is logical to expect that they will quit the cooperative, thus, the so call by some authors "principle of the relative justice" requires adequate solutions in all areas of the common activity. For that reason the ability of the cooperative to survive depends on finding fair solution of the main debatable problems. According to some researchers (OLSTROM 1998, VON PISCHKE 1996) the solution of the problem of with fair distribution is the main condition for cooperative survival. Only via through looking for balance, constant equilibrium between the incomes and expenses could be supported the long-term voluntary cooperation and coordination.

Numerous researches of the distribution mechanisms in the cooperative allow the applied solutions to be summarized in several directions. Part of the cooperatives applies short-term solutions and via negotiations and consent solution of the problems is achieved. Besides this the obtained contract reflects the influence of the numerous factors linked both with the positions of the different groups of cooperative members as well as with characteristics of the concrete situation. This limits the opportunities for application of such approach for a short period of time of for emergency situation in the cooperative activity.

Another practice is the inclusion of a neutral individual – mediator who solves the distributions problems in the frame of the rules accepted by the General Assembly of the cooperative. This variant creates preconditions to increase the possibility for fair decisions.

In several cooperatives the distribution is based on the "golden rule" of reciprocal distribution, on the voluntary self-limitation regarding the used welfare, on the "sacrifice" of current benefits at the expense of future ones and etc. In these cases the individuals accept that they themselves can get into risk situations /similar to their partners/ and they desire to limit the unfavorable results of a similar event.

Another used in the practice decision is the one of equal benefits distribution. The history of the cooperative movement shows that the development of the cooperative is accompanied by evolutionary transition from equal to proportionally distribution, which takes into account the relative inequality of the participation of the cooperative members. Thus, ways for an increase of the stability of the organizational establishment are looked for.

The depicted theoretical positions and hypothesis reveal only small part of the immanent specific characteristics of the cooperative which are in the bottom of the choice by many land owners.

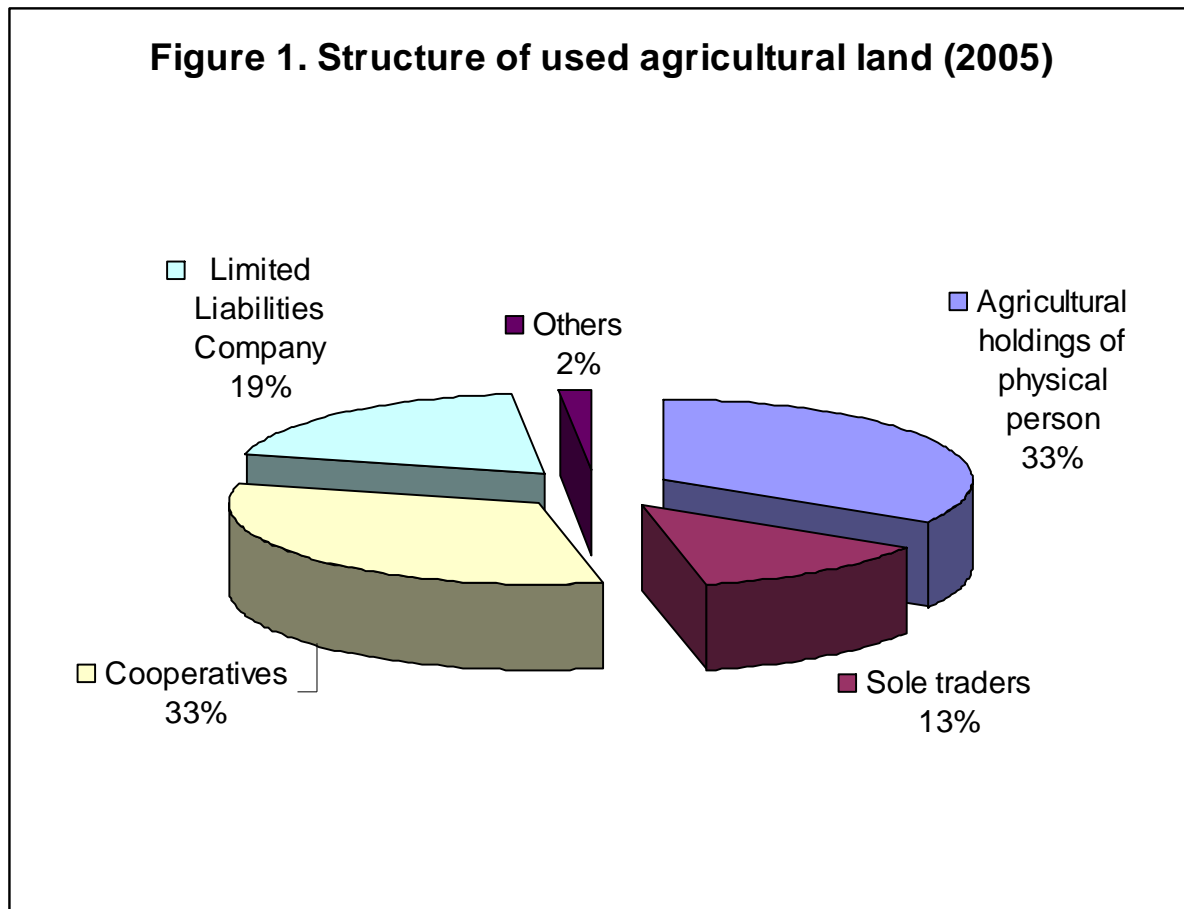
### **3 Distribution and significance of agricultural productive cooperative**

The agricultural productive cooperative is among the main organizational forms in Bulgarian agriculture. During the years of radical changes in the structure of land ownership and economic parameters of agricultural business environment, the productive cooperative turned out to be an appropriate for combination of the small land ownership with its use in relatively large in terms of size holdings.

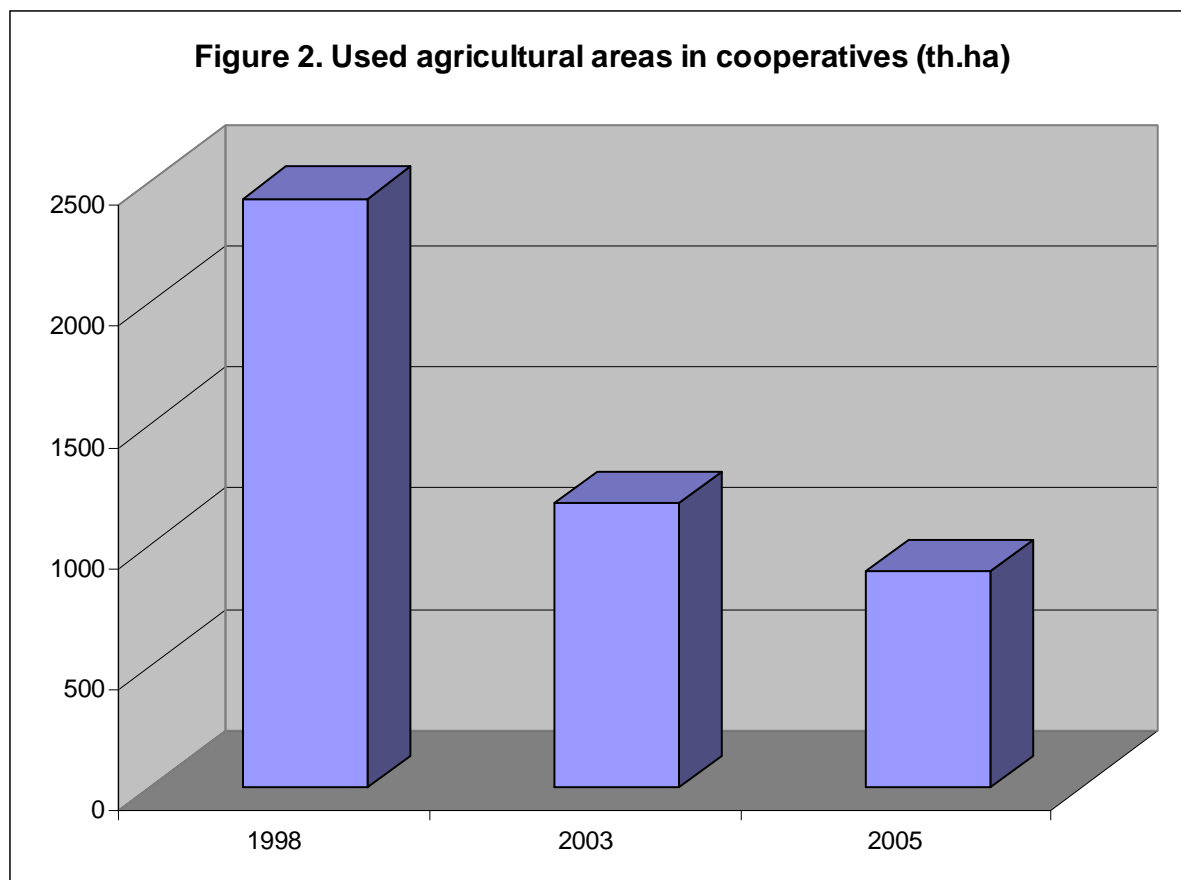
The main reasons for preferring the cooperative as an organizational productive form were linked with the migration in towns of the prevailing part of the land owners, with the low average size of the land property and the limited possibilities to organize a production over this property, with the economic crisis and etc. Moreover the Law for Cooperatives created and easy procedure for becoming a member and quitting the cooperative, thus converting this form in an attractive, though temporary solution for biggest part of the land owners. The membership in cooperative

allowed to most of them to wait until the land market develops and only on a later stage to take a final decision what to do with their property.

After a long period of changes in the organizational structures in the agrarian sector, the 2003 Census of agricultural holdings depicted that in the country function 1991 agricultural cooperatives which cultivate 40.16 % of the used agricultural area (UAA). Two years later (in 2005) they cultivate 33 % (figure 1).



Data showed that after 1998-1999 annually between 150 and 600 agricultural cooperatives stopped their activity. As a result in 2003 and 2005 compared to 1998 were noticed considerable differences in their significance and distribution (figure 2). The relative share of the used by them lands for the whole country decrease twice, and for several regions – more than 4-5 times. The least decrease in the cultivated land was noticed in North Central and Northeastern regions of planning and the biggest were in South Western and Northwestern regions. In practice in some areas the significance of the cooperatives is minimal and they cultivate between 5 and 14% of the land which they used to cultivate five years ago.

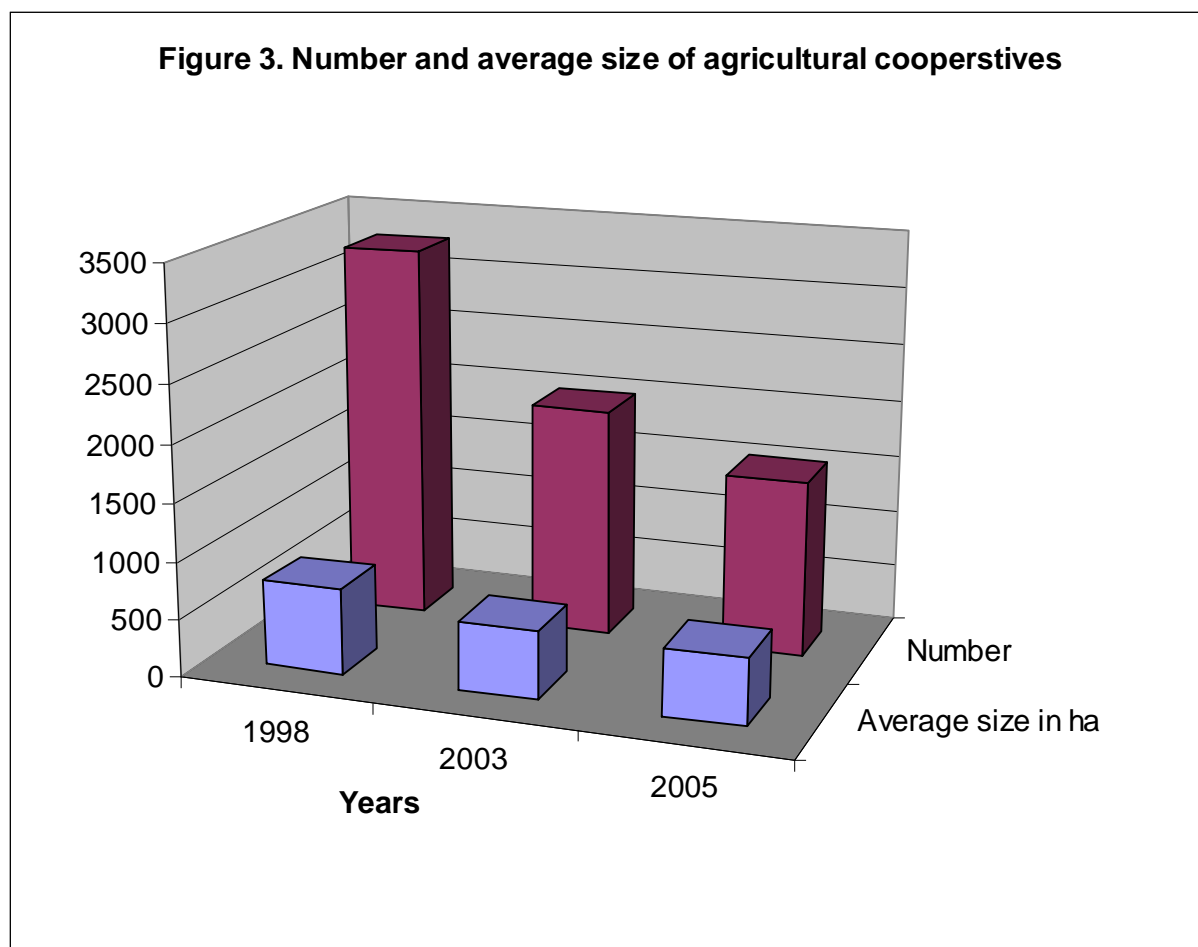


Data show that in 2005 were functioning 1534 units only around 56,9 % of the existing in 1998 cooperatives (Figure 3), and in some regions more than 50% of them ceased their activity. Should be underlined that the decrease in number of the cooperatives was accompanied by increase of the average size of the used land only in one of the regions. The changes in all those indicators show that the agricultural productive cooperative has a constantly decreasing significance for Bulgarian agriculture. Moreover have stopped their activity productive structures in all regions of the country and the liquidation are not linked with their size.

The prevailing part of the cooperatives (around 80%) use only agricultural land. The average size of the UAA in them is 592.7 ha, being the average for all cooperatives – 58.7 ha. In them are grown 45.2% of the mild wheat, 52.43% of the hard wheat, 47.2% of the barley, 48% of the sunflower, 29.5% of the vineyards and others. This data show that the productive cooperatives are of prime importance in corn and of some technical cultures production and have considerable participation in fruit and grape production.

From the total number of cooperatives largest if the number of those (1717) which grow wheat, followed by 1473 cooperatives which grow sunflower. The number of cooperatives with perennials is 457 (roughly 23% of the total number of cooperatives). Only 101 cooperatives grow vegetables, 11 – vegetables in greenhouses.

**Figure 3. Number and average size of agricultural cooperatives**



Animals are grown in 19% of the agricultural cooperatives which at the same time produce different crops as well. The largest part of cooperatives – 260 (13.05%) develop cattle breeding, followed by sheep-breeding (4.97%). In the cooperatives are bred only 4.56% of the cows (Table 1), 5.1 % of buffaloes, 1.45 % of sheep, 1,38 % of pigs and others.

Moreover the size of the bred herds is small for collective organizational structures. The average number of animals in one cooperative is 134 for buffaloes, 70 for milking cows, 240 for sheep, and 248 for pigs. These numbers are comparable with the animal number in the family holdings in several EU countries.

Only in the cooperatives are combines crop production and animal breeding which is a traditional decision in the sector for improvement of the financial management and economic results of animal production.

Only 1% of agricultural cooperatives are narrow specialized in animal breeding and do not produce their own fodder.

During the last couple of years in the agricultural cooperatives with relatively stable economic and financial situation were undertaken measures for equipment renovation. At the same time there still are large numbers of cooperatives which continue to use obsolete technical equipment. In 2003 in the cooperatives operated 19, 03 % of all tractors in the country, 35, 38 % of combine-harvesters, 48 % of fodder-combines and others. Data from table 2 depict that more significant is the share of high power tractors which in the cooperatives take around 42, 7 % of all used in the country.

**Table 1: Main animals breeding indicators in agricultural cooperatives**

Indicators	Number of cooperatives	Number of animals in cooperatives	Average number of animals in cooperative	Relative share of agric cooperatives in the total number of animals breeding holdings (%)	Relative share of animals in agricultural cooperatives from the total number of animals (%)
Cows	247	17214	69,7	0,12	4,56
Buffaloes	260	34832	133,96	0,12	5,1
Ruminants	96	196	2,04	0,03	0,07
Sheep-total	99	23932	241,7	0,04	1,45
Pigs –total	71	17625	248,24	0,02	1,38
Poultry-total	24	34284	1428,5	0,005	0,21
Beehives	11	1625	147,72	0,03	0,39

Source: Census of agricultural holdings in Bulgaria, 2003, Ministry of Agriculture and Forestry

In the cooperatives are engaged 26634 persons or roughly the average number of occupied persons per cooperatives is 13.5. From the total number occupied persons, the relative share of men is 74, 4 %, which is considerably higher than the average level for the agricultural sector – 54.4 %.

Calculated in Annual Working Units (AWU) they make 32656 or only 4, 11 % of the total volume of labor invested in agriculture. Thus, agricultural cooperatives do not have considerable signification for securing labor occupancy in the sector and in the regions where the cooperatives are active. The main reasons for this situation are their productive specialization (which presupposes seasonal activity) and the relatively low size, particularly in some under-developed rural regions.

**Table 2 Machines and equipment in agricultural cooperatives in 2003**

Types of machines and equipment	Relative share of machines used in cooperatives in %	Average number of machines in one cooperative
Tractors up to 40 KW	4.9	2,01
Tractors from 40 KW to 60 KW	21.46	4,04
Tractors from 60 KW to 100 KW	27.89	2,86
Tractors over 100 KW	42.66	1,72
Combine-harvesters	35,38	1,89
Silage-combines	48,02	1,17
Ploughs	13,91	3,64
Seed-drills	30,9	3,3
Fertilized-spreading machines	24,9	1,2
Machines for plant protection	26,58	1,52
Harvesting machines	17,32	1,79



Depending on the agro ecological and other conditions of the country in Bulgaria are applied several types of productive cooperatives:

- cooperatives oriented towards the productive activity of their members;
- market productive cooperatives, which produce competitive agricultural products with high extent of use of mechanized services;
- Vertical integrated productive cooperatives which apart from the production of agricultural products are specialized in processing and marketing activities.

Activity of a great part of the cooperatives in first group intent to meet consumption and production needs of their members. Production structure is determined according to requests of members in the beginning of each season as well as it depends on rural community demand for products and services. In most of the cases they rely on “inherited” out of date machinery and infrastructure. Their activity is usually financed by members and they have no income for investments and for distribution as rent and dividends.

In the second main group of production cooperatives the land and the rest of the production factors of the prevailing part of the population of the respective territory are united. These cooperatives produce mainly competitive production and are specialized in those products which required high degree of mechanization. Currently this group of cooperatives is mainly producer of wheat, fodder crops and some technical cultures. The majority of them reach optimal sizes leasing land as well. As well the land and part of the stake property of the former cooperatives given to heirs of their members is being bought.

The third group of productive cooperatives comprises those, which are highly market-oriented. In the majority of the cases their main line of activity is production, processing and distribution of agricultural products. Some of these cooperatives work successfully on the regional, national and even on the international markets with their own brand names and channels of distribution of the end-products.

The main differences in the statute of the cooperatives are due to the different extent of making common the land, the machines, the productive building and the labour of the members.

Unlike the previous period when most of the co-operatives have been created on a land given for a temporary use, after 1995 because of adopted and enforced plans for land division in some of the villages rearrange of the productive structure, changes in crop rotation took place. This led to a correction of the size of the co-operatives and in some cases to a merge of the co-operatives.

Bulgarian agricultural productive cooperative in the moment is by large a voluntarily organized private business, which is controlled by its owners, but the products and services from it are used only by limited number of owners who live in the territory of the cooperative. In practice only they are interested in the future successful development of this organizational form. The rest of the cooperative members, who are majority prefer to guarantee their income despite the obtained business results. As a result increases the negative effect from the combination of equal right for participation in management with the large number of members and this make the distributional mechanisms very complex and created problems.

The decrease of the significance of agricultural cooperatives in several regions of the country led to some negative consequences linked with the increase of the relative share of the non-used agricultural areas, worsening of social infrastructure and others. Particularly strong this affected the small villages where the cooperatives were the only one active business structure which supported several social activities.

At the same time with the liquidation of the cooperatives ceased several productive links between the agricultural structures linked with the use of mechanized services by the farms of physical persons, with fodder production for these farms and others.

Thus the results from the decrease in number of productive cooperatives are economic, organizational and social. The agricultural productive cooperatives do not use sufficiently the opportunities which created the existence of their union which will protect their interests on national and regional level. In some regions members of the National Union of Agricultural Cooperatives in Bulgaria are only limited number of cooperatives, although it is noticed and increase in their number.

#### **4 Lessons from the organizational changes of Bulgarian agricultural cooperatives**

On the basis of the analysis of the development of the agricultural cooperatives during the last years of the transition and pre-accession period to EU could be drawn the following main conclusions and lessons:

On the first place – Enterprises should not be established without a prior design of the needed links and proportions between the productive factors aiming at the realization of effective activity with high results. Several cooperatives have at their disposal not enough number of equipment, which is predominantly old whereas others can not use effectively their equipment. Moreover, there are annual changes in the size of the cultivated land and number of members which make difficult the preservation of the agro-technical requirements and etc.

On the second place – should not be established cooperatives with large number of members who do not participate with their own labor in the cooperatives and who in majority of the cases live on the territory of another inhabited place. In Bulgaria in the prevailing number of cooperatives the average number of members is of three digits and several near-to-towns cooperatives or in large rural territories – even of four digits. Their interests differ substantially from the rest of the members (who participate with their labor and/or live in the same territory). Due to the small size of their land plots and their residence in towns, they perceive their participation in the cooperatives only as a temporary decision with all stemming from these fact consequences – low degree of motivation for participation in the collective managerial bodies, lack of interest for the future development of the cooperatives and others.

On the third place – in the cooperatives should not be applied distributing mechanisms which do not comply with the meaning of the cooperative organization and do not stimulate the increase of the labor productivity, the high productive results, the long-term investments and others. Regardless of the fact that after 2000 the land owners conclude land-lease or rent contracts with the cooperative management, they continue to be full members of the cooperatives as well and can participate in the collective managerial bodies.

On the fourth place – should not be established cooperatives whose statutory norms do not allow guaranteeing stability of the organizational form. It is indispensable to exist a minimum time of being a member, established procedures for leaving the cooperative and etc.

On the fifth place – the cooperatives should not be placed in non-equivalent situation in comparison to other organizational structures in the sector (sole traders, agricultural producers and others) in terms of tax levels, accounting procedures, access to credits and others which was inherent to Bulgarian practice in large part of the last 17 years.

On the sixth place – should not function the cooperatives which do not use specialists for their management. The empirical data for the research executed by the authors in Bulgaria depicted that part of the Chairmen of the cooperatives do not have the needed qualification and experience to organize agricultural production and to realize trade with the produced products. Moreover, in

the prevailing part of the cooperatives do not work specialists in the area of technology and economy (excluding accountants).

## **5 Suggestions for successful adaptation of Bulgarian agricultural producers to EU requirements**

The successful development of agricultural cooperatives in Bulgaria is linked with enlargement of their object of activity and with overcoming the existing discrepancy of interests of their members.

The experience of the successfully functioning cooperatives depict that the productive specialization should be enlarged in direction to implementation of more intensive cultures as well as directed to integration of agricultural products production with their processing and trade. At the same time the agricultural productive cooperative should direct their efforts to develop several traditional and new animal products which will alleviate their financial management and will decrease the seasonality in the received incomes.

In the theory and practice are known two main approaches for solving the problems in management of organizations and distributions of the profits of their activity: through inclusion in the cooperatives as members only individuals with similar interests or through the choice of organizational statute which reflects the differences between the members. The first approach presupposes keeping the organizational statute, but including requirements for becoming a member and the second – combination of the cooperative with another form of partnership.

One of the possible solutions is to establish agricultural productive cooperatives with obligatory labor participation of the members. This variant requires the existing cooperative to pay to the members without labor participation the value of their share capital and to change its statutory norms for cooperative membership. The relations with the land-owners will be solved on rent or lease basis putting aside bigger amount of cooperative funds for this purpose in order to take into consideration the influence of the agricultural land market.

Other possibilities are limiting the relative share of the non-working members of the cooperative or differentiation of their rights in the cooperative management. Similar decisions are been successfully implemented in France and other EU countries where there are difference in the rights for cooperative management of the working members and those who retired.

Third possibility is to establish a cooperative or another collective structure with members only of land owners. They should use hired labor and their own or hired management. The Statutory norms of such structure envisage norms which regulate the relationships between the collective managerial body and members – owners of land and the hired managers and workers.

The implementation of single payment per ha will speed the decision of the land-owners to form primary productive cooperatives with kept private family holdings with land which will be used collectively for joint production or the land will keep its initial boundaries and will be united the other productive factors,

The current Law for Cooperatives do not creates obstacles for the offered solutions. Moreover some of them have been successfully tested in the practice in different periods.

Large part of the market oriented cooperatives will adopt a strategy for transformation of the cooperative in limited liability companies. For this purpose is needed the statutory capital of the cooperative to be divided in parts and to be distributed by partners on the basis their share. Are possible variants for transformation of the cooperatives in cooperative-joint-stock structure, where the share of the cooperative is 51% and the rest of the capital is divided in shares? This can speed the process of attraction of external capital which will support the quick equipment renovation.

After our acceptance in the European Union possibility for the development of the agricultural productive cooperatives become the transformation of their object of activity in terms of broadening their servicing functions. Securing input resources for the family farms of their members and for the rest of the inhabitants of the villages and via selling their production, the agricultural cooperatives will contribute for the increase of the incomes of the rural households. Besides this these cooperatives is possible to provide consultant services and market information to their members and to execute the functions as producers organizations via which will be carried out the distribution of European Union subsidies.

The defense of the cooperative ideas, values and interests requires further harmonization of our cooperative legislation with the EU one via including the specific characteristics of our cooperative practice and our current interests. Parallel with this process it is important to strengthen the integration links and cooperation with some national European cooperative structures via establishment of international cooperative unions and cooperative organizations. This will speed the inclusion of our country in international projects if building regional distributional centers and establishment of trade channels.

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