

Agricultural Cooperatives in Bulgaria during the Transition Period: A Case Study of ac “Plodorodie” in the Village of Glavinitza

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Abstract: As a result of the agrarian reform in Bulgaria, rapid agricultural restructuring occurs in the country, which contributes mainly to the creation of producers agricultural cooperatives. According to a number of authors, these cooperatives faced serious problems, such as: lack of interest to make investments; limited self-funding; difficult crediting; reduced manager's responsibility; ineffective control mechanisms; increased level of inter-group conflicts; participation of a large number of cooperative members with various interests; existence of old and insufficient farm machinery and equipment; parcelled-out land and ext.. In this paper we analyze the production activity of AC “Plodorodie”, the village of Glavinitza, and find out most of the problems described in the literature. However, in our case the internal control mechanism worked out, and this prevented eventual liquidation of the cooperative

Key words: agricultural cooperatives, transition, Bulgaria.

Introduction

As a result of the agrarian reform in Bulgaria, rapid agricultural restructuring occurs in the country, which contributes mainly to the creation of producer agricultural cooperatives. According to a number of authors, these cooperatives faced serious problems, such as: lack of interest to make investments; limited self-funding; difficult crediting; reduced manager's responsibility; ineffective control mechanisms; increased level of inter-group conflicts; participation of a large number of cooperative members with various interests; existence of old and insufficient farm machinery and equipment; parcelled-out land (Kaneva, 2000; Doichinova, 1997; Mihailov, 1997; Kovacheva and Videv, 1998). The objective of

the present work was to analyze the production activity of AC “Plodorodie”, the village of Glavinitza, as well as to show the way for its improvement.

Material and Methods

The study was conducted with AC “Plodorodie”, located in the middle of the Pazardzik plain. Its territory belongs entirely to the transitional-continental climatic sub-region. The relief, soil and climate are the most important natural conditions, characterizing the environment in which agricultural crops are grown and affecting to a different extent both the mode of their cultivation and the yields obtained. Thus, they ultimately determine the economic efficiency of their production. The temperatures, as well as the soils in the region are favorable for the development of crops grown in the cooperative. AC “Plodorodie” involves 492 cooperative members. At this stage of development, it has at its disposal a 2500 da. arable land, storehouses, a machinery fleet and farm equipment. To study the cooperative status, I used the following indices: net income, total income, economic return, and production costs.

Results and Discussion

The study was conducted over three consecutive years – 2000, 2001 and 2002. The crops grown in the cooperative were mainly wheat, barley and sunflower. During the 3-year period of the study, the total arable land increased, especially that cropped with sunflower in the year 2002. Against the background of the other crops, sunflower proved to be the most effective crop for growing by the cooperative. The mean yields (table 1) produced for all three years were low, due to non-compliance with production technologies and lack of sufficient fertilizer- and chemical applications.

Table 1: Mean crop yields, kg/da

Crops	Y e a r s		
	2000	2001	2002
Wheat	160	148	220
Barley	180	180	170
Sunflower	100	110	120

Source: The cooperative

Table 2. shows the mean realization prices and production costs. The price level in the years 2000-2001 was relatively constant, while in the year 2002 the price of wheat and barley dropped and that of sunflower increased. Taking into account the level of prices on the world markets, we could conclude that the cooperative was successful in realizing its production. As for the production costs, it is evident that they were high. Considering the fact that the cooperative did not apply any fertilizers, the level of costs showed also the shortcomings in its organization of other agricultural practices. It is also seen that a profit of more than 50% was realized only in sunflower, which allowed the assertion that it was an effective crop.

Table 2: Mean sale prices and production costs, leva/ton

Crops	Production costs		
	2000	2001	2002
Wheat	319.15	385.54	166.27
Barley	221.70	240.00	236.18
Sunflower	167.00	176.81	125.26
Crops	Sale prices		
	2000	2001	2002
Wheat	200	220	170
Barley	200	200	170
Sunflower	360	360	400

Source: The cooperative

The income 1 (table 3) is the difference between the total revenue and material cost (labor cost plus profit), and income 2 is the difference between the total revenue minus material cost, minus labor cost (profit). The data in the table showed also the effectiveness of sunflower production. The cause for considering wheat and barley ineffective crops was the low level of their average yields and as a result, the significant increase in the production costs per ton.

Table 3: Income 1 and income 2, leva/da

Crops	Income 1 (Labor cost+profit)		
	2000	2001	2002
Wheat	-9.01	-11.00	9.3
Barley	3.69	2.00	-1.23
Sunflower	21.79	21.56	36.74
Crops	Income 2 (profit)		
	2000	2001	2002
Wheat	-19.06	-24.5	0.82
Barley	-3.90	-7.2	-1.25
Sunflower	19.30	18.5	32.97

Source: Calculated with data from the cooperative

The next table shows the rate of return to income 1 and 2 of crops grown in AC "Plodorodie". The analysis of these indicators justified their strategy in the last years to increase the share of sunflower production. This strategy, however, had its restrictions and disadvantages. Firstly, the area cropped with sunflower could not be increased infinitely as at some moment the crop rotation requirements will be disturbed. Secondly, the cooperative will become strongly dependent on sunflower production and any change in the market conditions could lead to financial difficulties. Therefore, the cooperative should direct its attention toward optimizing the production of the other two crops, too.

Table 4: Profitability and rate of return, %

Crops	Rate of return -Income 1		
	2000	2001	2002
Wheat	-17.64	-19.28	24.69
Barley	9.27	4.63	-3.05
Sunflower	130.49	120.70	244.42
Crops	Rate of return-Income 2 (Profitability)		
	2000	2001	2002
Wheat	-37.33	-42.94	2.24
Barley	-9.79	-16.67	-28.02
Sunflower	115.57	103.61	219.34

Source: Calculated with data from the cooperative

An important moment in our study was to evaluate the prospects of the cooperative to cover the debts that had been left by its former administration. That is the reason for the general meeting to want auditing in order to detect the violations on the part of book-keepers and a lack of interest shown by the former president. Table 5 shows all current debts of the cooperative, amounting to 32 500 leva. The ration of debt/profit is 1,09 showing that the debt is equal to nearly the year profit. Therefore, the cooperative could pay these debts within 1-2 years from the production activities profit, without selling of buildings, as planned by its present leaders. Therefore the new management can stabilize the cooperative financial status in relatively short period.

Table 5: Assessment of possibilities for paying back the debts

Indices	Amount, leva
Total Debt	32 500
• liabilities to the National Labor Insurance Institute	14 000
• unpaid salaries	5 500
• taxes	13 000
Profit from production activities	29 793
• incomes from rented out land	15 750
• annual profit from crops in the year 2000	14 043
Debt /profit	1,09

Source: Own calculation

Conclusions

Our case confirms to large extend what was found in the literature by other authors. However, we demonstrate a case where the internal control mechanism worked out (the General Assembly removed the old manager), and an attempt was

made by the new management to use an external control mechanism (auditing by state body was requested by the new management).

The economic results can be improved by increasing the mean crop yields, decreasing the production costs, by production intensification and specialization, improving the qualification of workers and managers, as well as by most rational use of the main production factors – land, labor and capital.

One of the ways for the cooperative to overcome its difficulties is either to sell farm buildings, or to use the profit from the current production activities, which is recommended in this study. This means that the cooperative is able to stabilize its financial situation in relatively short terms.

References

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**POLJOPRIVREDNE ZADRUGE U BUGARSKOJ U TOKU
PERIODA TRANZICIJE: STUDIJA SLUČAJA POLJOPRIVREDNE
ZADRUGE “PLODORODIE” U SELU GLAVINICA**

-originalni naučni rad-

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Rezime

Kao rezultat agrarne reforme u Bugarskoj, počelo je rapidno poljoprivredno restrukturiranje u zemlji, što uglavnom doprinosi stvaranju poljoprivrednih zadruga. Prema nekim autorima, ove zadruge suočavaju se sa ozbiljnim problemima, kao što su: nedostatak interesovanja za investiranja, ograničeno samo-finansiranje; otežani uslovi za kreditiranje, smanjenje odgovornost direktora, neefikasni mehanizmi kontrole, sve izraženiji konflikti između radnih grupa, učesce većeg broja članova zadruga sa različitim interesovanjima; stara i nedovoljna oprema i mehanizacija; parcelisanje zemlje itd. Ovaj rad analizira proizvodnu aktivnost poljoprivredne zadruge Plodorodie, selo Glavnica i konstatuje većinu problema opisanih u literaturi. Međutim, u našem slučaju, mehanizam unutrašnje kontrole je razrađen, što je sprečilo eventualnu likvidaciju zadruge.