The use of crisis management in ensuring sustainable food production by organizations of border areas

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Abstract. The article substantiates the relevance of the practical application of the concept of sustainable development and production. The peculiarity of doing business in the border areas is considered in details. Factors affecting sustainable food production by organizations in border areas are also analyzed. The role of crisis management in ensuring sustainable production is reviewed.

1. Introduction
The concept of sustainable production emerged within the framework of a broader theory. The theory of sustainable development determines the need for a transition to a qualitatively new level of economy. This is the level of economy that “satisfies the need of the present but does not jeopardize the ability of future generations to meet their own needs” [1]. The theory is developed in response to the challenges posed by the increasing pressure on the environment from the growth of the world’s population, the rapid pace of development of environmentally dirty, high-cost industries, leading to a catastrophic depletion of natural resources. Within the framework of the “sustainable development” concept, the models of production and consumption of goods should be qualitatively changed. In particular, the concept of sustainable production arose. On the one hand, it is aimed at saving and restoring nature; on the other hand, it focuses on increasing the volume of material benefits being created and more fully meeting the needs of the population, improving the quality of every person’s life. Finding a balance between these contradictory trends is achieved through the intensive use of all types of resources, the widespread use of their renewable types, powerful protection and restoration of the environment. [2] Concepts of sustainable development and production are widely used in research of both domestic and foreign scholars [3, 4, 5, 6].

Ensuring sustainable production is particularly important in the border areas, which are the parts of the territories of the administrative-territorial units of the state, with administrative border coinciding with the state border line [7]. This particular importance is determined by the fact that, on the one hand, sustainable production should provide an economic basis for unconditional compliance with the border regime, the procedure for protecting the state border, compliance with customs, sanitary and other types of control, the procedure for entry and exit of citizens, which is strategically important for the country. On the other hand, the socio-economic development of most border regions is at a lower level than the socio-economic development of Russia’s internal regions [8].

Solving the issue of ensuring sustainable production in the border areas, the researchers identify the following development factors: (1) cross-border cooperation, which provides additional access to commodity, financial, and transport flows in the local market; (2) price differences for industrial and
consumer goods, which determine the expansion of the sales market for some and the production of cheaper goods and services for others; (3) the ability to import cheap labor and reduce production costs; (4) interstate development programs for cross-border territories [9, 10, 11]. In our opinion, modern scientists do not pay enough attention to crisis management, which is able to largely ensure sustainable production in the border areas. A. T. Zub notes, “Crisis management is a set of organizational measures to prevent the development of the crisis, minimize the damage caused by the crisis and post-crisis restoration of the normal functioning of various socio-economic systems” [12]. In our opinion, it is precisely crisis management that is especially important for ensuring sustainable production in border areas, which economic situation is most often characterized as a pre-crisis or crisis situation.

The purpose of this research work is to study the role of crisis management in ensuring sustainable food production by organizations of border areas. The research object is the economic processes occurring in the Agricultural Production Cooperative “Kolkhoz Rakitovsky” located in the Mikhailovsky district of the Altai region.

2. Materials and Methods
The research methodology is based on a systematic approach to the objects and processes under study. In addition to general economic research methods such as vertical and horizontal financial analysis, synthesis, specific research methods were used. These specific methods are used in crisis management, as provided for by the Government Decree on Approval of the Rules for Conducting Financial Analysis by an Arbitration Manager, Order of the Ministry of Finance of the Russian Federation on Approval of the Procedure for Determining the Value of Net Assets, Order of the Ministry of Industry and Energy of Russia and the Ministry of Economic Development of Russia on Approval of Guidelines for Drawing up a Plan (Program) for Financial Recovery [13, 14, 15].

3. Results
In the course of the study, the economic activity of the agricultural production cooperative “Kolkhoz Rakitovsky” is studied, which is located in the Mikhailovsky district of the Altai region and has a border with the Republic of Kazakhstan. This organization produces food of both plant and animal origin. The production cooperative is one of the leading farms of the region. Consequently, the supply of food for the border area depends largely on the level of its sustainable production.

The average annual production capacity of a production cooperative is:

- Milk production – 1,070 tons;
- Meat production – 90 tons;
- Horse rearing – 35 heads;
- Wheat production – 2,500 tons;
- Sunflower production – 870 tons;
- Oat production – 180 tons;
- Barley production – 190 tons;
- Buckwheat production – 200 tons.

Since 2015, due to unqualified management, unfair performance of their duties as a manager, the activities of the cooperative have been unprofitable (Table 1).

| An indicator                        | 2015       | 2016       | 2017       | 2018       |
|-------------------------------------|------------|------------|------------|------------|
| Total assets (liabilities)          | 166,439    | 157,283    | 153,700    | 146,867    |
| Adjusted non-current assets         | 66,240     | 63,949     | 41,835     | 42,563     |
| Current assets                      | 100,199    | 93,334     | 111,865    | 104,304    |
| Liquid assets                       | 114        | 863        | 106        | 406        |
| The most liquid current assets      | 82         | 624        | 56         | 56         |
| Receivables                         | 6,308      | 5,820      | 3,151      | 8,774      |
In 2018, the proceedings commenced on the case of declaring the debtor bankrupt, the monitoring procedure was introduced. The debt on the register of creditors’ claims amounted to more than 47 million rubles. When the company was on the verge of closure, food production in the border area was jeopardized. The bankruptcy of the cooperative would lead to the loss of work for its employees, the deterioration of the socio-economic situation in the region.

As part of crisis management, we have developed a financial recovery plan for this organization. A feature of developing such a plan was that the enterprise was located in the border area and was subject to the influence of a mass of specific impacts that are not found in territories remote from the state borders. The implementation of the financial recovery plan should lead to the achievement of the financial indicators presented in Table 2.

4. Discussion
The creditors of the production cooperative, employees of the tax inspectorate, the court, where the bankruptcy case of the organization under investigation is considered, acknowledge the data obtained as a result of the study as reliable. Therefore, we can talk about the objectivity and completeness of the study.

The results of the work confirmed the conclusions made by previous researchers about the special complexity of doing business in the border areas, often leading enterprises to bankruptcy. Considering the issue of preventing the bankruptcy of these organizations, following other researchers, we highlight...
such factors as the favorable opportunities for cross-border cooperation, the difference in prices for similar goods, and intensive traffic flows through the territory. But at the same time, we believe that the use of favorable factors, the prevention of negative impacts will be much more effective when applying crisis management. It is the crisis management that allows one to comprehensively study the current situation, make a reliable forecast of its development, comprehensively use all the methods of influence on the managed object, using the whole system of favorable factors and obtaining a synergistic effect, and thus prevent the bankruptcy of organizations and ensure sustainable production.

5. Conclusion
The research results clearly show the following:

- High relevance of practical application of concepts of sustainable development and production;
- The presence of objective factors that impede economic activities, including food production, in the border areas;
- The relevance of using the crisis management in ensuring sustainable food production by organizations of border areas.

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