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**INTERNAL EVALUATION OF THE STATE SUBSIDIES USAGE
EFFECTIVENESS**

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Abstract

This paper considers the efficiency of state subsidies from the point of view of the recipient organization. An analysis of scientific and practical literature on this topic reflects multiple challenging aspects that complicate the attraction of subsidies by an agricultural organization. We have found a number of opinions how subsidies influence the results of activity of economic entities. The issues of subsidies efficiency become especially relevant in the situation when subsidies have little impact on the company's economy. An in-house assessment is an issue of particular interest, as such an assessment enables the recipient organization to determine the real efficiency of its operations. In-house assessment of state subsidies approach suggested in this paper is based on structuring the subsidy's funds. Structuring is made in terms of costs and losses which are under control or beyond control of the economic entity. The approach suggested is mainly recommended for an assessment of subsidies which are not output-based. This type of subsidies is poorly related to any specific performance indicators which increases the risk of inefficient use of the subsidy. This paper offers indicators that enable assessing the efficiency of using budget funds by an agricultural organization. For informational support of such assessment, this paper offers implementation of specific organizational and methodological activities that deal with accounting and administration of the company. The provisions of this paper are focused on the development of scientific and practical issues of control and efficiency of state subsidies.

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Keywords: State subsidies, agricultural company subsidizing, efficient use of a subsidy, assessment of a subsidy use.



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1. Introduction

State subsidies are common international practice of support for agricultural producers. Subsidy (from Latin *subsidiūm* meaning help, support) is an in-kind and/or financial support for an economic entity financed from national or local budget. Dedicated agricultural policy together with efficient mechanism for financial support of agricultural companies by the government make it possible achieve higher performance of the agricultural business (Bruckner, 2016; Prokofev & Sibiryaev, 2019). An analysis of international experience of financial support of the agricultural sector provides for a conclusion that there are no significant differences in approach for such support in different countries. Nonetheless, it is important to identify specific peculiarities of using the tools and types of the support for agricultural business. Researches note that in the Russian practice of state support of agricultural business, direct payments are more common, having rather compensating than stimulating nature (Prokofev & Sibiryaev, 2019). European countries mostly use indirect government support with price regulation as a main tool. Development of a commercially viable agricultural sector is the main focus of subsidization in the EU (Cillero, Thorne, Wallace, Breen, & Hennessy, 2018).

In general, the positive role of state subsidies for the performance of agricultural producers is inarguable. Amounts of state subsidies in agricultural business reach significant values. E.g., according to 2019 Russian official statistics, the total amount of subsidies in the Russian Federation allocated from the Federal Budget for support of agricultural business was 128,152 million RUB. This makes the issues of monitoring of purposeful allocation of budget funds and assessing how efficiently these funds of recipients utilize these funds even more relevant.

2. Problem Statement

Increasing challenges of the operational environment of agricultural companies make it necessary to pay closer attention to the provision of state support. As it has been noted earlier, subsidies in general make a positive impact on the performance of agricultural producers. Yet, a more detailed research of this area reveals a series of problematic aspects. Studies of subsidizing processes conducted by specialists in different aspects show controversial results. Here are some of them.

Subsidizing of agricultural companies does not necessarily result in successful performance of these companies. Researchers note that there is no significant statistical correlation between the level of concentration of state support and the percentage of loss-makers in agricultural sector. There is no comprehensive answer on how the structure of governmental support for Russian agricultural companies impacts the performance of agricultural production sector (Zakharova & Davydov, 2017).

Studies show that imperfect structure of state support may result in unexpected effects by encouraging the agricultural producers to utilize methods which are sub-optimal for the national economy. For example, Bruckner (2016) shows an instance when USA legislation on 2014 U.S. Farm Bill encouraged plowing fragile soils.

Naglova and Gurtler (2016) note differing impact of subsidies to agricultural companies of differing scale. According to them, subsidies make significant and positive impact on average and large companies; but they negatively impact gross and net income of smaller companies.

Russian authors note the trend of increasing differentiation in the distribution of subsidies among agricultural companies of differing scale. State subsidies are mainly granted to fund large and economically efficient companies and agrobusiness groups of companies, which is associated with growing concentration of commodity production (Bershitsky, Saifetdinov, Saifetdinova, & Tyupakov, 2017; Kostyaev, & Yakhnyuk, 2017). This enables large agricultural companies to introduce advanced technologies and administration methods and to achieve good financial results (Vozhdaeva, Volkov, Kozlov, & Pavlov, 2019). Bruckner (2016) considers US subsidizing practices providing for owners of large-scale farms to receive unexpected profit.

In their study of technical efficiency of an agricultural company (Latruffe, Bravo-Ureta, Carpentier, Desjeux, & Moreira, 2017) found that this impact can be both positive and negative. The authors mentioned above describe the observed trend of the decreasing impact of subsidies on technical efficiency of agricultural companies.

Russian authors raise the issue of differentiated governmental support for the agricultural companies depending on their production output and technical equipment level (Bershitsky et al., 2017). The most efficient companies are first candidates to receive subsidies. This trend was confirmed by the study Bekkerman, Belasco and Smith (2019): the largest and the most efficient farms obtain the largest amounts of state subsidies. It must be considered as impairment of free competition in the agricultural market (Bekkerman, Belasco, & Smith, 2019).

The problematic aspects specified above confirm that further improvement of the process of state subsidies provision is necessary. We also consider the position of the agricultural company as the subsidy recipient to be important as well. A company receiving funds from the state budget must be capable of correct assessment of its chances to obtain governmental support and to analyze the efficiency of such support and financial outcomes of its operations.

3. Research Questions

The problematic aspects described above complicate in-house economical assessment of results of subsidies use for agricultural organizations. Improvement of organizational and methodological basis of such assessment requires finding answers for the following questions:

- When the use of subsidy funds can be considered rational and efficient?
- How the efficiency of subsidy use can be assessed?
- What advantages does an in-house assessment of subsidies use efficiency provide for an agricultural company?

4. Purpose of the Study

The aim of the study is to expand scientific knowledge in assessment of state support for agricultural producers. In terms of this aim and according to the questions of the study, the following goals were determined:

- To identify efficiency criteria of subsidies use;
- To offer rational methods of subsidies use efficiency;

- To identify fields for application of assessment results in economical practice of an agricultural company.

The subject of the study in this paper is the procedure of an in-home assessment of non-output-based subsidies use in the agricultural sector. The distinctive feature of such type of subsidies is that its provision is not based on any specific output indications.

5. Research Methods

Scientific papers by Russian and foreign authors on state support for agricultural companies are used as the basis for the study. The following methods have been used to accomplish the goals stated in this study: general scientific approaches: induction and deduction, analysis and synthesis, system approach, dialectical approach for the study of the processes and events; horizontal and ratio methods of financial analysis in relation to an agricultural company performance. Information support of the study is represented by secondary qualitative (scientific study research) and quantitative information (accounting and administration reports of agricultural companies) and by results of the author's own studies.

6. Findings

First, for purposes of this study, the term “efficient use of budget funds received as non-output-based subsidies” is to be clarified. Generally, authors do not emphasize this issue, as this kind of subsidies is not based on any output indicators and provided to compensate losses born during implementation of agricultural works, to increase environmental safety of the agricultural production and to improve soil fertility and quality. The subsidy amount is calculated on the basis of an established ratio per area unit of the agricultural land lot. From the government’s point of view, the positive impact on the agricultural company’s financial results is effective by itself. In our opinion, such impact should be characterized as compensating, but not necessarily “efficient”.

More consistent approach is the one when efficiency of a non-correlated subsidy is assessed on the basis of costs it is to compensate. A subsidy makes it possible for an economic entity to compensate not only factors beyond its control (such as negative weather and climatic impact, epiphytotics, man-induced factors) but also the negative deviations resulting from unsustainable business practice, non-production losses, thievery, i.e., reasons under the entity's control. The author will consider the use of a subsidy to be “efficient” if it is used to cover costs and losses resulting from factors beyond the entity's control.

Second, methods of in-house assessment of non-correlated subsidy use efficiency are offered. It should be noted that these methods correspond to principle of economical entities accounting procedure rationalization. Russian agricultural sector is represented mainly by small companies utilizing simplified accounting and special tax treatment. These companies are interested in effective and simple economical methods of assessment.

Long-term, annual and consistent subsidizing causes managers of an agricultural company to conceal their real performance to a certain extent. The result obtained using state support must be analyzed differentially: a) profit from the company activity with no account for the subsidy; b) profit with account for the subsidy. Such approach is quite simple to implement by means of analysis of accounts for financial results. In particular, account “Other profits and losses” shows increased financial results of the company due to deduction of the obtained subsidy amounts from the account for target financing accounting. This

approach provides for assessing the total result of the subsidizing independently from its relation to the subsidy recipient. Table 01 demonstrates such approach.

Table 01. Dynamics of profitability ratio in “Kuptsovo” agricultural production cooperative in 2017-2019

Indicators	UoM	2017	2018	2019
Revenue	thousand rubles	25,986	17,406	20,601
Prime cost	thousand rubles	17,444	15,587	19,363
Sales profit (no subsidies)	thousand rubles	8,543	1,819	1,238
Sales profit (with subsidies)	thousand rubles	9,935	3,358	2,026
Sales profitability:				
- no subsidies	%	32.87	10.45	6.01
- with subsidies	%	38.23	19.29	9.83

Source: author.

Comparative information on the growth of profit due to subsidies which is submitted to the management staff is useful for purposes of management. But this method uses consolidated financial values and does not allow for tracking relationship and correlation of the subsidy received and individual indicators of the company economic performance. For more detailed study of non-output-based subsidy use efficiency, we offer to use elements of calculating method. Currently, a negative trend of reduction in calculation method application can be observed in Russian accounting and analysis practices. The offered approach confronts this trend to the certain extent and shows expansion of the calculation possibilities.

For assessment of non-output-based subsidy efficiency, we offer to use management format of the calculation. Its distinctive feature is introduction of item reflecting the subsidy share distributed to the cost accounting and calculating subject. In case of non-output-based governmental support, cultivated area shall serve as basis for distribution of subsidies among the cultures. "Subsidy" indicator is a result of distribution of the total subsidy amount throughout the area of respective cultures (Table 02). Source of information on the actual costs shall be the Production Report of the company.

Table 02. Management calculation of the spring wheat grain primary cost in agricultural production cooperative "Kuptsovo" in 2019

Indicators	Planned indicators	Actual indicators	Deviations
Labor costs with social security contributions	86,300	76,450	-9,850
Seeds and planting material	36,000	44,587	8,587
Organic and mineral fertilizers	15,160	24,150	8,990
Crop protection agents	7,000	24,320	17,320
Maintenance of main assets	21,000	26,720	5,720
Works and services of auxiliary production facilities	28,040	34,178	6,138
Production arrangement and management	3,500	4,789	1,289
Other costs	1,560	0	-1,560
Total costs	198,560	235,194	36,634
Total subsidy, including for:	(38,546)	(38,546)	-
- covering costs incurred by non-influenceable factors	(38,546)	(16,778)	21,768
- covering costs incurred by influenceable factors	-	(21,768)	(21,768)

Source: author.

The information given in Table 02 shows that the subsidy related to “Summer Wheat” crop can be considered as covering costs: non-influenceable costs: 16,778 RUB, influenceable costs: 21,768 RUB. Using subsidies for covering the influenceable costs on the expenditure side can be deemed as non-efficient use.

When assessing the efficiency of the subsidy use, one must consider the availability of such source of funds. Subsidy itself requires certain financial and resources expenses from the agricultural company. Hence, such expenses must be stated individually in the company management report. The efficient share of the subsidy (C_{eff}) will be determined as following:

$$S_{eff} = S_{total} - C_{prod} - C_{non-prod} \quad (1)$$

where S_{total} is the total amount of the budget funds received;

C_{prod} is the costs incurred by the agricultural company when attracting the budget subsidies;

$C_{non-prod}$ is non-production influenceable costs and losses which were covered with subsidy funds.

Efficiency of subsidies use can be assessed using the respective coefficient (K_{seff}) calculated as a proportion of the efficient subsidy share to the total amount of the budget funds received. Increase of this coefficient reflects positive dynamics and indicates increasing efficiency of the use of budget funds received by the company: $K_{seff} \rightarrow 1$.

Besides the direct economic effect, attraction of subsidies results in certain signal effects. Subsidies are considered to be a kind of the governmental warranty indicating on a sufficient status of the agricultural company. In particular, Yan and Li (2016) note the signal effect of subsidies for credit companies: banks pay more attention to approval effect of the state subsidies when making decisions on credits.

Assessment of subsidies use efficiency provides for implementation of certain organization and methodological activities. The company is required to implement system for analytical accounting both for subsidies and costs for which they were allocated. In order to form accurate and relevant information on the received subsidies, the company accounting department must provide respective analytical items in accounts schedule, and initiate the development of primary accounting documents reflecting the receipt and use of budget funds, forms of in-house management documentation on movement and use of budget subsidies.

In addition, an implementation of the subsidies efficiency assessment procedures provides the agricultural organization with certain management advantages. Actual assessment of the subsidy effect on the performance results provides the managing staff with a more reasonable way to determine more target indicators, to make decisions suitable for the company’s local features. Subsidies attraction management must provide mutually conditioned efficiency of budget funds use and the achievement of overall efficiency of the agricultural business.

7. Conclusion

The paper reflects challenging aspects of attraction of state subsidies by the agricultural companies. Ensuring the efficient use of the subsidy funds is a systemic economic issue for an agricultural company. The provisions of this article define the term “efficient use of the subsidy funds”. According to the approach offered by the author, “efficient” use of a subsidy must cover costs and losses caused by factors beyond the agricultural company’s control. In order to assess efficiency of state support, the paper offers profitability

indicators calculated with and without the subsidy funds, as well as the use of management calculation and calculation of the subsidy efficient share and the coefficient of efficiency of budget funds use. Implementation of the assessment methods must be reasonable and based on complex of organizational and methodological procedures providing required management information. Implementation of the paper provisions increases subsidizing performance at the company level.

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