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## Approaches To The Valuation Of Biological Assets At Fair Value.

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### ABSTRACT

The existing agricultural activity differs significantly from other types of economic activity and often requires special reporting information. In this article, the main current trends in scientific research of problems related to the assessment of biological assets in the accounting of agricultural organizations are analyzed.

**Keywords:** accounting, valuation, fair value, biological asset, agriculture.

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**INTRODUCTION**

Valuation as a measurement of the value of accounting objects plays a key role in ensuring the principle of reliability / fair presentation, both in the reflection of the facts of economic life in the accounting system of the economic entity and subsequently in the formation of its financial statements to meet the demands of its users. The choice of the measuring base affects all accounting information necessary for decision-making by investors, creditors, suppliers, owners, employees and other entities to implement their plans. The share of information generated in the accounting system accounts for up to 80% of the total volume of information analyzed by the management of the economic entity [13-19].

For the Stavropol Territory, the agricultural sector is an important part of the population's economic activity, the main point of growth and investment. To successfully implement the investment projects and, in general, the effective development of the agro-industrial complex of the Stavropol Territory, it is necessary to create such a system for the formation and disclosure of accounting information on the activities of each agricultural organization that would allow management to make effective management decisions and maximize the use of all available resources.

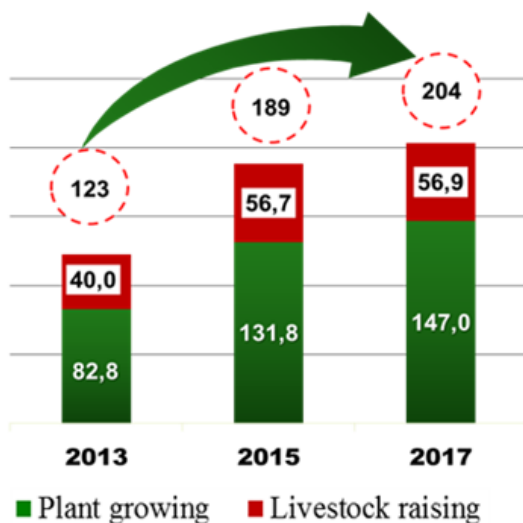


Figure 1: Gross output, billion rubles\*

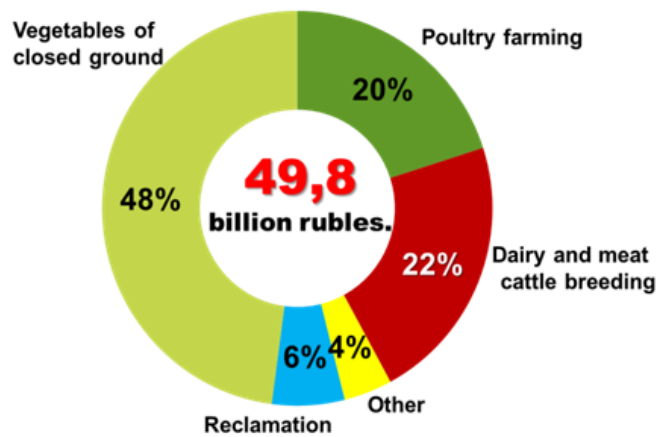


Figure 2: Implementation of 50 major investment projects for 2013-2017.\*

\*Source: Ministry of Agriculture of the Stavropol region

The activity of agricultural organizations definitely has its own specifics, being a region of a "lively" economy, which, in turn, determines the specifics of recognition, the organization of accounting of objects of observation and reporting. It should be noted that the financial statements of the general economic entity, as well as the procedures for its formation, do not reflect the biological nature of the agricultural business. In the practice of accounting and the formation of financial statements of agrarian economic entities, various types of assets are qualified. A special category is also singled out - "biological assets". Biological assets and products received/collected from them are the main source of income, and therefore a condition for the successful operation of these economic entities. The practical importance of solving problems of improving the methods for assessing biological assets determined the choice of the topic of this study.

**MATERIALS AND METHODS**

The development of the country's agro-industrial complex in the context of integration into the world economic system, increasing the attractiveness of agricultural organizations for investors objectively dictates the need for the accounting system to transition to the requirements of IAS 41 "Agriculture".

Today, the profits of agricultural organizations should be objective, formed not only from income from production and income to capital but also as a result of skillful managerial and intellectual activity. Such a

value of the final result is proposed to be qualified as "fair profit". In the opinion of the authors Khoruzhy L.I., Deutsch U. Yu. [10] fair profits "as future economic benefits at fair value will reflect the acceleration of economic growth, correspond to market realities and fully meet the needs of various users." The reflection of fair financial results is possible today only through the application of the concept of fair value, that is, the application of a fair valuation of assets. This cost has a purely individual approach and is very important in the formation of balance sheet items and determining the final financial performance of the agricultural organization. According to Katkov Yu.N. [4], it is the fair value that characterizes the profitability of the object.

IAS 41 "Agriculture" requires that an entity's biological assets be valued at the time of initial recognition and as of the closing date of each reporting period "at its fair value fewer costs to sell." The exception is cases where "the fair value of a biological asset cannot be measured reliably". "In such a case, the biological asset should be valued at its historical cost; less accumulated depreciation and accumulated impairment losses" [6]. The necessity and advantages of accounting for biological assets at fair value are considered and argued by many scientists [1, 3, 8], proposed ways to justify them and options for calculations. A detailed analysis of the results of the research of Russian and foreign scientists showed a lack of consensus on this issue and a fairly wide range of approaches to a fair assessment of accounting [2, 5, 11, 12].

In accordance with IAS 41 "Fair value is the price that would be received upon the sale of an asset or paid when transferring an obligation in the ordinary course of business between market participants on the valuation date". The standard describes general approaches to the estimation of assets at fair value, on the basis of which the entity must independently develop a methodology for calculating fair value, which must satisfy the requirements of reliability, objectivity, comparability, reliability. However, it should be borne in mind that agricultural organizations have certain specific activities and technological characteristics that must be taken into account when assessing biological assets. It is more convenient to estimate the fair value of a biological asset if the biological assets are grouped according to their basic characteristics (age, quality). The economic entity chooses such characteristics that are correlated with those on the basis of which prices are formed in the relevant market.

Thus, in relation to biological assets due to changes in their physical characteristics (the result of biotransformation of bioresearches), it becomes necessary to estimate such indicators as the fair value of one center of the increase in the live weight of animals, the live weight of the head of the litter, the live weight of all animals by technological groups, growth / fruiting.

IFRS 13 Fair Value Measurement proposes the following approaches to determine fair value: market, cost, revenue. The economic entity must choose a sequence of procedures that will be compatible with one of these approaches.

Calculation of the value of livestock (cattle and sheep) on the basis of various approaches were made on the basis of the information base of the agricultural organization "Krasny Manych" of the Turkmen district of the Stavropol Territory.

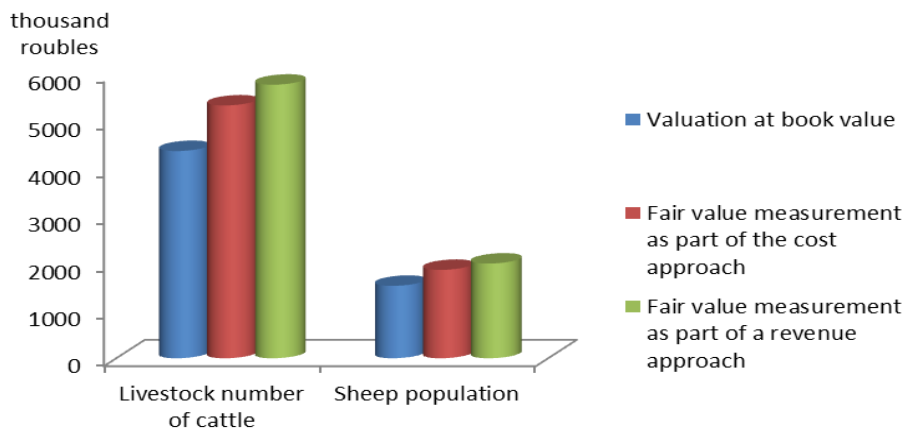


Figure 3: Comparison of options for estimating the livestock population

The study shows that the fair value of animals, calculated as part of the cost approach, is less dependent on internal or external factors. The results of calculations with a revenue approach depend on the profitability of the industry, which should not vary significantly from one reporting period to another. In addition, it should be noted that as a result of the lack of currently available information in the region under consideration about the market value of this species of animals, it is not possible to estimate the sheep population within a market-based approach.

## RESULTS AND DISCUSSION

Based on the results of earlier calculations, the authors concluded that under the current conditions of management of the agrarian sector, the fair value of the biological asset includes, in addition to the cost of production, the amount of profit. Therefore, the reported data does not correctly represent the value of biological assets, reducing it by the amount of possible profit.

In agriculture, the useful life of a biological asset can last several years. If the revenue is recognized at the time of the completion of the biotransformation, and the expenses incurred - within the period evenly, then the principle of correlation of income and expenses is violated and, consequently, the financial result is distorted.

## CONCLUSION

The information capacity of almost all the key indicators of an economic entity reflected in financial statements based on accounting data depends on the method of assessing its objects, including assets used in the accounting system. The application of the methodology for estimating biological assets at fair value is of great value to agricultural organizations, since their financial statements, prepared with adjustments to biological assets at fair value, provide more accurate and objective information about activities, potential economic benefits in the future.

The presented materials will be useful in making decisions on the possibility of applying various methods of assessing biological assets in accounting practice and determining the most relevant areas for further scientific research.

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