Institutional approaches to internal audit in agricultural organisations

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Abstract. Substantiation. The internal audit system is an integral part of business management in agribusiness organisations. It allows to identify deficiencies, improve processes and increase the quality of agricultural products. Objective. The purpose of the study is the formation of an institutional approach to the implementation of internal audit of agro-industrial organisations. The work is theoretical in nature and aims to develop methodological approaches of internal audit of the organisation. Materials and methods. The study predetermines the study of the regulatory and legal framework, as well as a review of the opinions of different authors on the problems of internal audit. The methodological basis of the study was the methods of analysis, induction, deduction, abstraction in the organisations of agro-industrial complex. Results. In terms of the institutional approach, awareness about the internal audit system requires an assessment of the interrelationships between the so-called "institutions" of the agro-industrial complex organisation. The relationship between them is determined by a set of institutional mechanisms that determine the way the system functions. In this context such institutional mechanisms as ensuring the independence of internal auditors, the use of analytical procedures at different stages of internal audit, as well as the use of risk-oriented approach are considered. The article considers the peculiarities of planning and conducting internal audit. The main stages of internal audit of agro-industrial complex are formed.

1 Introduction

Internal audit in agribusiness organisations is an important tool for assessing production efficiency, managing production resources, analysing financial performance and identifying potential risks. This type of audit also helps to ensure compliance with legislative and legal regulations, maximise business profitability and improve competitiveness in the market. With rapidly changing technology and regulatory markets, the relevance of agribusiness internal audit is undeniable.

Agro-industrial internal audit is of great importance to businesses involved in the agriculture and processing industries. This process allows to detect potential deficiencies in

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the management system, identify opportunities and risks associated with the company's activities, and ensure compliance with regulations and legal requirements.

Audit allows analysing financial performance, assessing the efficiency of production and financial resources, as well as identifying non-economic factors that negatively affect the activities of agricultural producers. Thanks to audit, it is possible to determine how to improve the efficiency of production and increase competitiveness in the market. Without audit, the agro-industrial complex cannot function effectively and compete successfully in the market in a rapidly changing economic and competitive environment.

2 Objective

The research is aimed at developing an institutional approach to the internal audit of organisations in the agro-industrial sector of the economy. The work is theoretical in nature and is aimed at developing methodological approaches to the audit of an agricultural or processing organisation.

3 Materials and methods

The research predetermines the study of the legal framework that regulates the standards of audit procedures, particularly in the context of audit procedures for agricultural or processing organisations. Analytical review of different authors' opinions on the problems of internal audit within the framework of: risk-based approach [1-13], ensuring the independence of internal auditors [6, 8], application of analytical procedures at different stages of internal audit [4, 5, 9-12, 14].

The methodological basis of the study was qualitative and quantitative methods, which include the techniques of analysis, induction, deduction, abstraction in the organisations of the agro-industrial sector of the economy.

4 Results of the research

The audit of agro-industrial organisations is a process by which auditors examine the financial statements and accounting policies of agro-industrial organisations and assess the effectiveness of their activities.

It should be noted that the institutional approach of internal audit of agro-industrial organisations is defined as a set of interrelationships between the audited structures of the organisation and the auditors and internal audit departments. Moreover, this structure includes managers of different levels of management.

From the point of view of the institutional approach, understanding how the internal audit system functions requires an assessment of the relationships between the so-called "institutions" of the agro-industrial organisation. The relationship between them is determined by a set of institutional mechanisms that determine the way the system functions. In this context, we will consider such institutional mechanisms as ensuring the independence of internal auditors, the use of analytical procedures at different stages of internal audit, as well as the use of risk-based approach in the audit process.

The purpose of the audit of the agro-industrial complex is to verify the reliability and completeness of the financial statements of agricultural organisations, to conduct analyses of risks and vulnerabilities, as well as to provide recommendations to improve management and increase the efficiency of enterprises.

During the audit process, auditors examine companies' compliance with legislation, accounting and financial reporting standards and rules, and evaluate the company's control
and management systems. Auditors may also check the correctness of the organisation of the accounting process in relation to crops, animals and other resources used in agrarian activities.

Thus, the internal audit of agribusiness organisations is a necessary means of assessing the financial stability and efficiency of companies engaged in agriculture, and makes it possible to learn about possible vulnerabilities and problems that need to be addressed for the further successful development of companies in the agribusiness sector.

The objective of internal audit of agro-industrial organisations is to assess the financial and economic activities of an agricultural producer and its compliance with legal requirements.

The tasks of internal audit of agro-industrial organisations are presented in Figure 1.

![Diagram of Internal Audit Tasks](image)

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**Fig. 1.** Internal audit tasks of agro-industrial organisations

1. Assessment of accounting and reporting of agricultural enterprises
2. Assessing the efficiency of resource utilisation, including financial, production, technology, information and human resources
3. Assessment of product quality and compliance with all relevant regulations and requirements
4. Assessment of planning and forecasting of agricultural organisations
5. Assessment of the organisation's control and risk management system
6. Assessment of enterprises' compliance with environmental legislation and labour protection requirements

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[3]
separated from auditors' professionalism, objectivity, confidentiality, integrity and competence. The issue of independence of internal audit has been considered in detail by many scientists and researchers, such as: Kevorkova J.A. [6], Piven I.G., Grabivchuk V.Ya. [8] and other authors. From the point of view of legislation, audit is an independent verification of the accounting (financial) statements of the audited entity in order to express an opinion on the reliability of such statements. Thus, it is possible to identify an integral and key parameter of internal audit quality, namely, independence. In accordance with Article 8 of the Federal Law "On Auditing" the auditor cannot realise his services being in any dependence (economic, related, etc.) [1].

In general, it is independence that is the main link in the formation of objective conclusions and the auditor's report on the results of the audit. Thus, in accordance with the standard, in order to achieve the maximum degree of independence during the audit, the head of the audit must have open access to senior management, as well as be accountable to the body that will allow the auditor to fulfil his direct responsibilities without breach of accountability [3].

The independence of internal audit is formally described in GOST R ISO/IEC 17021-2012. In accordance with the Code of Professional Ethics [2], the definition of independence includes two areas: independence of thinking and behaviour of the auditor in the performance of his/her duties. The rules of independence in this case emphasise that the auditor should be able to identify threats to independence, assess their significance and take measures to reduce the risks and completely eliminate them. It is important to recognise that it is not possible to reliably identify and describe all circumstances in the external and internal environment that reflect a threat to the internal auditor's independence, nor is it possible to prescribe every possible precautionary measure.

Internal auditors, within the scope of their official duties, must also predetermine and assess the existing circumstances and relationships that form threats to their independence, and using precautionary measures, take appropriate decisions to eliminate them or reduce them to an acceptable value.

The main reasons that may affect independence include:
- labour relations with the audited person;
- affinity with other employees of the company or close relationships;
- economic interest;
- availability of loans and/or sureties from the audited entity.

In general, these criteria are easy enough to trace if the independence of the internal auditor is analysed in a timely manner. In her works Kevorkova Zh. A. notes that internal auditors are independent only when they perform their duties impartially, freely and objectively [6]. The achievement of these criteria is directly influenced by the organisational structure and hierarchical subordination of internal auditors in it. Thus, in order to achieve independence, it is necessary to eliminate the system of reporting directly to the executive bodies, because in the existence of direct reporting the auditor will be, in fact, in direct dependence.

It is also important to understand that the concept of independence includes independence of behaviour and independence of thought. Thus, the first concept implies behaviour aimed at avoiding situations that third parties may perceive as compromising the internal auditor and his/her work process. Independence of mind, in turn, the internal auditor's way of thinking, which contributes to the expression of a reliable and objective opinion, and also contributes to the exercise of professional scepticism in carrying out audit procedures.

The auditor should be as independent as possible of the persons and departments whose activities he audits, and should be accountable solely to persons at a level that does not affect the auditor's performance of his work responsibilities. Furthermore, the auditor should not audit those business processes in the agribusiness organisation for which he or she is currently or has previously been responsible, as this would violate the principle of independence.
It is also important that there is no pressure within the organisation, including from other employees. To avoid doubts about the independence of the internal auditor, the company should have preventive measures in place that, as a precaution, help to reduce the risk of a breach of the auditor's independence. These measures may include segregation of duties among several internal auditors. There may also be a documented prohibition on the involvement in audit procedures of employees in the departments where they work. As a preventive measure, a system such as a hotline may be introduced, which employees, including internal auditors, can contact in case of signs of violation of the independence principle, as well as in case of pressure on the auditors themselves. If the auditor's independence is questioned, it is important to immediately inform management that there are negative factors. It is also important to consult with both the internal auditor and management. It can be concluded that a client receiving an audit report should have confidence in its objectivity and reliability, and consequently in the auditor's independence. The audit procedures themselves can only be effective if the principles of independence are observed.

The internal auditor must also comply with a whole system of norms, rules and standards in the course of fulfilling his/her duties. In accordance with the International Framework for the Professional Practice of Internal Auditing, this framework includes mandatory and recommended guidelines.

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<tr>
<th>Stage of Internal Audit</th>
<th>Description</th>
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<tr>
<td>Preparatory Phase</td>
<td>Within the framework of this stage, a list of tasks is drawn up, a group of auditors is determined, and the organisation's documentation to be tested is analysed.</td>
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<tr>
<td>Evaluation Phase</td>
<td>In this stage the important aspects of agro-industrial complex organisation are assessed, these aspects are key for successful development.</td>
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<tr>
<td>Analysing Performance</td>
<td>At this stage, all the information obtained is analysed to help formulate the audit conclusion.</td>
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<tr>
<td>Report Drafting</td>
<td>At this stage, the audit conclusion is formed and decisions are made on further actions of the organisation.</td>
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<tr>
<td>Implementation of Action Plan</td>
<td>At this stage, practical actions are taken to monitor the implementation of the recommendations made during the audit.</td>
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![Fig. 2](image-url)
The most important step in risk-based internal audit approach is risk assessment. Risk assessment is a work that should be seriously considered as a component of an enterprise's internal control and risk management reports. It is incorrect to characterise risk assessment as a separate activity. It is a systematic process involving the steps of identifying risks, measuring in terms of impact and likelihood, and then creating a risk matrix by prioritising.

When conducting an internal audit of an agro-industrial complex, auditors usually check the following documents:

- financial statements: balance sheet, statement of financial results, notes to the accounts and other financial documents;
- documents related to procurement: contracts with suppliers, delivery notes, invoices, bills, invoices and other documents related to procurement;
- documents related to production: flow charts, product acceptance and shipment certificates, documents related to storage, transport and processing of products;
- HR-related documents: labour contracts, reports on social benefits, medical examination reports and other HR-related documents;
- documents related to product quality: certificates of conformity, protocols on product acceptance, registers of defective products and other documents related to product quality;
- documents related to occupational safety: activity certificates and licences, occupational safety instructions, reports on analysis of air, land and water conditions on the territory of the enterprise and other documents;
- other documents related to the organisation's activities that may be necessary for the audit.

The scope of the documents to be audited and their purpose depend on the audit objectives and the audit methodology, which is selected on the basis of the risks associated with the organisation's activities in the industry.

Auditing in the sector under review is characterised by the specifics of the industry, including unique items of record, such as livestock and fish, which require maintenance and are not guaranteed to be 100 per cent safe. Auditors should also consider the specifics of land records and analyse a number of factors, such as the depth of fertile soil and access roads, when estimating land values. In addition, the mismatch between calendar annual cycles and agricultural production cycles should be taken into account, which can lead to difficulties in analysing the financial performance of enterprises. It is also required to take into account the climatic factor, which can significantly affect the financial and economic performance of organisations of the agro-industrial complex.

The main features are summarised below:

1. Seasonality: in the agro-industrial complex, work is linked to the cycles of farming and animal husbandry, which may require the audit to be adapted to the seasonal characteristics of the organisation.
2. Product price risk: prices for agricultural products may change and affect the financial condition of the company, which requires special attention from the auditor.
3. Production resource assessment: the auditor should assess the extent to which the organisation spends its resources and makes efficient use of land and productive resources.
4. Verification of stock balances: agribusinesses often use seasonal storage of products and the auditor should check the stock balances against actual availability.
5. Evaluation of agricultural machinery and equipment: the auditor should review agricultural machinery and equipment for actual availability and efficiency of utilisation.
6. Verification of contracts: the agribusiness may have contracts for the sale of produce, the auditor should verify that they are valid.
7. Property valuation requirements: property valuation in agribusiness can be particularly challenging because property often cannot be accurately valued.
The general objectives of the audit conducted in the agro-industrial complex include confirmation of financial statements, identification of risks and deficiencies in tax accounting, as well as assessing the effectiveness of internal control and management of the organisation.

Conducting a basic analysis of international audit standardisation, we can meet in it the category of "analytical procedures", which is a set of expert actions aimed at evaluating and analysing the available information on the results of the economic activity of the subject of audit, including the establishment of relationships between various indicators and metrics identified by the audit team in the course of the audit.

In addition, institutional mechanisms, in our opinion, can be realised through the application of analytical procedures. As noted by domestic specialist N.V. Altukhova, analytical procedures are implemented not only de facto in the audit process itself, but can also be implemented by the audit team in planning and preparing for the audit process itself. In this case, the group or a particular auditor has the opportunity to independently choose those analytical procedures that will be applied by him in the expert assessment, relying solely on his experience and degree of qualification [4]. It is impossible not to agree with the position of N.A. Kazakova, who notes the increasing importance of analytical procedures at the current stage of development of audit practice - this, in her opinion, is mediated by the rapid development of business processes that require optimisation and efficient processing in accordance with expert assessment. In this regard, the significance of a properly developed set of audit procedures will be determined by time and quality indicators - for example, the speed of processing the information and data obtained during the audit, which will later serve as a support for strategic decision-making by the management of the economic entity [5].

In the framework of studying the practice of analytical procedures, it is important to note that the most promising direction in this issue is to analyse the introduction and implementation of the internal audit system. According to the representative of the Asian school of audit practice M. Cruz, who analysed the activities of Philippine and Korean companies and concluded about the importance of analytical procedures in the process of maintaining economic security of activity, the effective use of analytical procedures tools enables companies to increase their competitiveness by searching for and eliminating internal corporate activity problems [12].

No less interesting is the position of a foreign specialist A. Vickneswaran, who, studying the activities of companies providing educational services, made a conclusion about the significance of the results of analytical procedures of internal audit to improve the efficiency of employees. In his opinion, a properly developed plan of analytical procedures in this case allows to measure metrics related to the quality of the workforce - the degree of distortion of corporate documentation, assessment of economic damage during corporate fraud, as well as the level of abuse of authority of employees of financial departments. At the same time, the author emphasises that analytical procedures in this case help to expand the possibility of internal audit, which, of course, will only have a positive impact on the economic state of the company [11].

Let us move on to the substantive analysis of analytical procedures. Thus, according to domestic experts O.V. Syromyatnikova and Y.N. Galitskaya, analytical procedures are aimed at studying the financial information provided by the subject of audit for their further comparison with the following data [9]:

- current financial data with the results of the audited entity's activities for previous periods;
- up-to-date financial data with forecast indicators or assumptions of the audit team on the subsequent dynamics of economic activity;
- actual financial data of the audited entity with similar results on a particular market (comparison with the results of similar economic entities) to determine the company's position on the market.
It should be noted that the system of specific methods within the analytical procedure is determined by the degree of qualification of internal auditors and their professional experience in carrying out this type of assessments. In this regard, the importance of not only theoretical and methodological training of auditors increases, but also the practical component of their activities— as practice shows, experienced auditors, when carrying out analytical procedures, have a proven and tested tool, while novice specialists should strive to process their skills through the use of a wide range of methodological support, which will allow them to further determine a particular composition of methods of analytical procedure in the audit.

As stated earlier, analytical procedures are used to provide a more effective expert analysis of the performance of agribusiness organisations. However, within the framework of internal audit practice three key objectives of analytical procedures use have been formed, the essence of which depends on specific actions and stages of the audit, in view of which analytical procedures can be divided by the purpose.

Based on the research of S.N. Knyazeva and M.A. Popova, we have drawn up a differentiating scheme of analytical procedures depending on the objectives pursued (Figure 3):

Fig. 3. Types of analytical procedures by intended use

Let us consider each of the types of analytical procedures presented in the diagram in more detail:

1. Analytical procedures used in audit planning.

It should be noted that at the very stage of planning and developing the concept of expert study of the audited entity's activity, the audit team is highly recommended to use analytical procedures to form a specific audit concept—this includes determining the specifics of the entity's activity, identifying possible risks, establishing the time frame of the examination, as well as the total volume of procedures used by the auditor. In this case, as emphasised by American audit specialist Kerr D., Diaz M., the auditor should take into account not only financial, but also non-financial information about the audited entity.

2. Analytical procedures realised within the framework of conducting substantive audit procedures.

When conducting a substantive audit, the internal audit team runs the risk of encountering a situation of non-detection of certain financial results of the audited entity's activity. According to the expert of the international audit centre Wiley Flood J., this problem is the most common when conducting a substantive audit. In this regard, as the expert emphasises, the role of analytical procedures is increasing, which will allow, based on detailed tests of operations or a combination of other audit methods, firstly, to reduce the risk of non-detection of financial information, and secondly, to increase the efficiency and effectiveness of all audit procedures used.

It is also worth noting that in the course of carrying out analytical procedures in a substantive audit, the audit team should consider the following factors, which, according to A. Adilli, will increase the effectiveness of analytical procedures in general:
the auditor should consider in detail the aims and objectives of the auditor’s application of analytical procedures in order to identify the “confidence level” in the results of these procedures identified during the internal audit;

the auditor should pay attention to the specific characteristics of the audited entity, as this will enable the disaggregation and disaggregation of the audited information;

among other things, for the efficiency of analytical procedures, the audit team is requested to pay increased attention to non-financial performance indicators.

If all of the above factors have been considered, the internal audit team may perform analytical procedures as part of the substantive audit. In this case, the internal auditor chooses the following analytical procedures, shown in Figure 4.

**Fig. 4. Application of analytical procedures in substantive testing**

3 Analytical procedures used as part of the final stage of the audit.

As part of the analytical procedures at the stage of opinion formation, the auditor is obliged to perform additional analysis of the compliance of the financial statements with the information on its individual items in order, firstly, to substantiate the reasonableness of the opinion, and secondly, to verify the reliability of the analytical procedures performed. It is worth mentioning here that in case of rechecking the obtained information, the auditor may encounter deviations from the expected patterns and relationships of indicators.

Thanks to analytical procedures it is possible to talk about minimising the costs of control and accounting operations, as well as the quality of the auditor's report, which will be a support for the management of the audited entity in the framework of further strategic and managerial decisions.

The main problems associated with the internal audit of agro-industrial organisations may include the following:

- Insufficient understanding by auditors of the specific characteristics of the industry. One of the main challenges of the audit of agro-industrial complex is the need to take into account seasonal fluctuations, technologies used, changes in the quality characteristics of products, etc.

- Limited access to information. When accounting and financial reports do not comply with the standards and rules, as a consequence it creates conditions of limited access to information, which can lead to difficulties in the audit process.
Low qualification requirements for internal auditors. In order for audits to be more effective, auditors should regularly improve their qualifications, as well as implement comprehensive measures to improve the audit process.

Regarding the solution of these problems, the following measures can be suggested:

1. Developing a specialised set of financial and auditing standards designed for the agribusiness sector and disseminating information about them to auditors, including internal auditors.
2. Consolidation and optimisation of information on accounting in the agro-industrial complex, which would allow internal auditors to obtain all the necessary data for auditing.
3. Conducting targeted programmes to improve auditors' skills and specialisation in agro-industrial complex auditing.
4. Introducing incentives and rewards for enterprises managing the agro-industrial complex to improve the quality of accounting and financial reporting.

These measures will help to eliminate the shortcomings associated with the internal audit of agro-industrial complex organisations and ensure higher audit efficiency.

Recommendations for committing the audit of agro-industrial complex may include the following:

1. The purpose and objectives of the audit should be determined and an appropriate internal audit method and plan should be selected.
2. It is important to draw up an audit plan, determine the criteria for assessing the performance of the audited entity and the necessary materials.
3. The management and staff of the assessed facility should be aware of all audit processes and objectives, and the staff of the assessed facility should provide all necessary information for the audit of the financial statements.
4. Preliminary documents and documentation provided by management of the assessed facility should be analysed.
5. It is important to examine issues related to risk management and controls over financial transactions.
6. It is necessary to identify problem areas in the financial and operational management of the assessed facility and propose recommendations for improvement.
7. It is essential to identify and define all potential tax risks affecting the performance of the assessed facility.
8. Each recommended change should be supported by a justification and reviewed with the management of the assessed facility.

Compliance with these recommendations will allow the agribusiness facility to be audited more thoroughly and efficiently, identify problem areas, identify tax risks, assess performance and offer recommendations for improvement.

5 Conclusion
In general, the audit of the agro-industrial complex is one of the important components in the process of development of this industry, allowing to make more accurate and well-founded decisions in the field of investment and resource management.

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