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## Enhancement of Accounting of the Agro-Industrial Sector

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**Abstract:**

*The urgency of the discussed topic is confirmed by the problems faced by foreign investors and Russian companies legally represented by CEOs and the accounting services during their interaction in the post-Soviet space.*

*The article objective is an attempt to promote to foreign investors the problems associated not so much with investing for profit in the agricultural sector of Russia, but rather with the problem of interpreting accounting information according to the rules of Russian and international accounting and reporting. The article examines the issues of accounts and records, the formation of the cost of production of sheep enterprises of the agro-industrial complex located in the south of Siberia in the Republic of Buryatia.*

*Research methods of the issue comprise documentation, accounting records, double entry, evaluation, schedule of expenses and balance.*

*In the course of the research, the authors obtained the following results: while calculating the cost of production by sheep enterprises, violations were generally made in most cases, leading to its distortion; differences in the objects of accounting of stock and pedigree sheep enterprises were identified; a register of management accounting intended at streamlining the accounting of production processes was developed; the use of accounting multi-level sub-accounts for each object of costing was offered; the form of the integrated reporting for the livestock farming is proposed, which allows the investor to receive the accounting information in the form accessible and clear for him.*

**Keywords:** *Accounting in agricultural organizations, agro-industrial complex, investment, livestock sector, sheep breeding sub-sector.*

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## **1. Introduction**

At present, the economic processes taking place in the world make us search for new approaches and interactions between countries, communities and people. Particularly it regards the issues of providing the population with food. Food products export and import are not least among other foreign trade operations of any country. Food production is influenced by political, environmental, economic and other factors taking place in the internal and external environment of both the state itself and the entire world community. Russia takes not the last place in this relationship. Our country needs investments, especially the agrarian sector, but the difficult economic conditions of doing business obscure investors' vision of economic prospects in the agricultural sector in Russia. The peculiarities of accounting and reporting, traditionally established in Russia since the beginning of the 19th century and strictly regulated in the Soviet period, have changed little over the past decades. The problem of transition to international standards in accounting and reporting was faced by Russian economists twenty, fifteen, ten and five years ago, but it remains unresolved.

The volume of state financing of agribusiness in Russia is increasing year by year. Beyond that, 64.03% are allocated from the entire amount of state financing for the development of the agro-industrial sector, 21.05% for stimulating investment activities in the agro-industrial complex, approximately 4.82% for the amelioration of agricultural land in Russia and 9.25% for sustainable development of rural areas. Sectoral financing from the state and regional budgets is distributed in the following areas: provision of unrelated support to agricultural producers in the field of crop farming – 19.18%, increase in the productivity of dairy cattle – 14.62%, “Joint Subsidy”, issued for financing targeted regional programs for the development of the agro-industrial complex – 65.75%.

Traditionally, both branches of agribusiness are developed simultaneously in Russia: plant growing and livestock, in the ratio of fifty to fifty. But there are also specific features related, in the first place, to climatic conditions and logistic systems. In mountainous areas and northern regions of Russia, where crop production is problematic, agricultural producers are focusing on cattle breeding, both meat and dairy breeds and poultry.

For foreign investors, it is important to understand what economic benefits are suggested by this or that investment project and how the product cost is formed, which ultimately affects the financial result of the business entity activity and the profitability of the investment. But there exists another problem – the Russian legislation in the field of accounting and reporting. Economic entities' financials are formed primarily for control by fiscal bodies, for the formation of a tax base including numerous taxes and fees and are not focused on generalizing information for the investor.

International accounting principles are becoming part of the Russian accounting environment with great difficulty. Although laws and decrees related to this field are adopted at the state level. So, in February 2011, Vladimir Vladimirovich Putin, being the Chairman of the Government of the Russian Federation at that time, signed Resolution No. 107 “On Approval of the Regulation on Recognition of International Financial Reporting Standards and their Clarification for Use in the Territory of the Russian Federation”. The following documents adopted in Russia on this issue were: Order of the Ministry of Finance of the Russian Federation No. 217 of December 28, 2015 (as amended on July 11, 2016) “On the introduction of International Financial Reporting Standards and Clarification of International Financial Reporting Standards put in force in the territory of the Russian Federation and on invalidation of certain orders (particular provisions of orders) of the Ministry of Finance of the Russian Federation”, RF Federal Law “On consolidated financial statements” of 27.07.2010 No. 208-FZ (last version of December 31, 2017).

In addition, the assessment of accounting items became a stumbling point for the correct interpretation of accounting indicators in accordance with international standards. Currently, these standards are put into operation in Russia “The International Financial Reporting Standard (IAS) 41 “Agriculture” (put into effect in the Russian Federation by Order No. 217n of the Ministry of Finance of the Russian

Federation of December 28, 2015) (Ed. dated June 27, 2016) and organizations are obliged to apply it. In accordance with the adopted document (clause 10) “The organization must recognize a biological asset or agricultural produce if and only if:

- (a) this organization controls this asset because of past events;
- b) the procurement of future economic benefits associated with this asset by this organization is possible;
- c) the fair value or cost of the asset can be measured in a fair way (Ministry of Finance of the Russian Federation, 2015).

Particularly embarrassing for Russian accountants is the wording “fair value”, since there is no practice in assessing accounting items in fact, especially in agricultural organizations. There are no practitioners and properly trained cost analysts in the AIC, and the setting of reporting indicators based on cost or initial cost does not provide an objective picture of the processes occurring in the organization. At the same time, reporting indicators are sometimes so far from reality that the managers themselves and the tax authorities are not aware of the entire spectrum of the problem.

Drawing up reports for investors in accordance with international standards will help Russian producers of the agricultural sector to reveal their secrets, and in some cases make real discoveries, primarily for themselves. As they say in Russia: “Accounting is a delicate matter”. Interpretation of professional indicators may be diametrically opposed, but let’s not despair! The first steps have been made, and there will be no turning back. Even under these conditions, we must remember that the formation of the cost of agricultural products in Russia is somewhat different from the formation of prime cost in other sectors of the Russian economy.

For example, in crop production, the actual cost of finished products can be calculated only at the end of the year, when all field work is carried out, and the cost of a new crop, for example, for winter wheat, begins to be formed already in the autumn of the current year and ends in the next autumn. This period is appropriate to draw the IFRS reporting, but the tax authorities receive distorted information about the activities of the agricultural organization, since according to the Russian standards requirements reporting is drawn for the reporting period from January 1 to December 31 of the current (fiscal) year. Whether it is good or not for tax purposes is another matter.

It should also be noted that the production of any kind of agricultural products has its own characteristics. In plant growing it is the period of vegetation of various plants, protected or open ground, yield, grade, by-products, etc. In animal husbandry, this includes breeds of animals, their sex-age groups, dairy or meat, etc. The establishing production costs in poultry and fish farming is generally a separate topic to discuss, and the same accounting principles do not work here. In modern business environment, taking into consideration technical opportunities, ecology and market conditions, it is necessary to consider any features of agricultural production, and to expand the boundaries of accounting, adapting it to the needs of users of reporting, primarily – investors.

Let us present a particular example of the accounting model that operates in Russia. Animal husbandry in the agrarian sector of the Russian economy, especially in the Republic of Buryatia, is the most important agricultural branch, and sometimes the only source of these products significant for human beings such as milk, meat and wool. The profitability of organizations engaged in sheep breeding depends on the prime cost level and the quality of manufactured products. Within this context, the role of the accounting of production processes in sheep breeding significantly increases. The importance of these types of products is determined by the needs of the national economy, the possibility of production, the economic efficiency of sheep breeding, and the ability to use the natural and material and technical resources available in the country. Stipulated by these and other factors, the problem of rational organization and accounting of production processes in sheep breeding in current conditions is becoming especially essential and finding the best ways to solve it will help organizations timely identify inexpedient expenses and take effective measures to eliminate them.

The purpose of the research of issues related to the formation and accounting of the production cost in sheep farming is to study regulations and standards and the Russian legislation provisions as regards accounting, the accounted production processes, the requirements of international standards and the rationale for recommendations for improving accounting and reporting in this industry.

To meet the assigned objective, the following tasks were formulated: to become acquainted with the peculiarities of production (technological) processes in sheep breeding; to review the literature on the topic; to estimate the regulatory and legal support for the accounting of production processes in sheep breeding; to study the organization of the accounting process of production in sheep breeding farms; to consider the existing practice of forming accounting reporting indicators on the topic under consideration in Russia; to offer recommendations on improving the accounting of production processes in sheep breeding for agricultural organizations which are potential recipients of investment funds from domestic and foreign investors.

## 2. Review of regulatory documents and other sources

The production process is the fundamental process of economic activity of any agricultural organization. For this purpose, the goal of the economic entity's activity is the output of certain products, the performance of work, or the provision of services, subsequently selling them and obtaining maximum profit. One of the most important economic indicators, which characterizes the efficiency of agricultural production, is product costs.

An important feature in sheep breeding is their ability to quickly adapt to different conditions. Sheep are hardy, capable of extended migrations and can eat any vegetation. The sheep production capacity can be improved by keeping them and feeding them. Sheep can safely survive the cold due to their thick wool. By fertility, sheep occupy the third place after pigs and rabbits (Khoruzhy *et al.*, 2013). For this reason, all the above qualities make sheep breeding the most attractive and promising for investors in the livestock sub-sector in Buryatia.

According to C.M. Grimm potential investors need reliable and objective information to decide about investing in a investment object. The outline of the information used for decision-making depends on the specifics of the activity of the organization (Grimm *et al.*, 2006).

Currently, the investor's opinion is grounded based on both financial and non-financial information. Along with this, in the practice of the Russian and international reporting there are no standardized forms for non-financial information. Starting with the reporting for 2019, within the framework of the forthcoming federal law "On public non-financial reporting", it is assumed that in Russia standardized forms of non-financial reporting will be introduced in which, in an accessible form for ordinary users, aggregate information on the activities of the business entity on all key and essential issues of interest to the investor will be presented (Ministry of Economic Development of Russia, 2018).

According to Khoruzhy, public non-financial reporting will serve as a source of data for decision-making, primarily at the state level, at the level of foreign investment companies and private investors (Khoruzhy, 2017). Moreover, according to Kuznetsova, the integrated report allows accumulating, monitoring and providing information of not only economic content, but also social, environmental and any other information to the parties concerned (Kuznetsova, 2014). Tryastsina believes that the form of integrated reporting, focused on investors, should include information on the assessment of the investment attractiveness of projects (Tryastsina, 2018).

According to Glushko (2016) to estimate the company's investment attractiveness the integrated report should include structured and investor-focused information that allows influencing decisions about investing funds. According to foreign economists, to evaluate the investment attractiveness, one should consider the state of the region and the industry, the management quality, the environmental situation and other factors (Sprinkle and Maines, 2010; Ward, 1999). And we are unanimous with

these experts' opinions. Belov (2005) has repeatedly drawn attention to the fact that in order to meet the targets set out in the business plan, farms need to monitor the number of animals both at the reporting dates and during the reporting period, taking into account information on certain types of animals and sex and age groups, which is a guarantee for successful development of the production process. In legal and regulatory acts regulating the accounting of incomes, expenses and financial results of the organization's activities, there is no clear differentiation of the concepts of "expenditures" and "expenses". In international financial reporting standards (IFRS 18 Revenue), expenses are understood in the form of outflows or reductions in assets (Ministry of Finance of the Russian Federation, 2016).

In the domestic accounting, the concept of the expenses of the organization is considered in the Accounting Standards "Organization Expenses" (RSA 10/99), according to which "expenses of the organization are recognized as a reduction in economic benefits as a result of assets (cash, other property) withdrawal and (or) incurrences of liabilities leading to a reduction in the capital of this organization, except for the decrease in contributions by decision of the participants (owners of property)" (Ministry of Finance of the Russian Federation, 1999). Therefore, we can conclude that the definition of the concept of "expenses" in the RAS and IFRS are identical and have one economic category.

In the Methodological Recommendations for Accounting of Costs for the Production and Calculation of Product Costs (Works, Services) in Agricultural Organizations, "costs" and "expenses" are applied in a similar sense. At the same time, there is no clear and unambiguous definition of the concept of "costs" in the Methodological Recommendations, but there is a definition of the concepts of "manufacturing costs" and "nonmanufacturing costs". According to the Methodological Recommendations, "cost accounting" is a set of methods for recording production costs, techniques and methods for calculating the cost of finished goods (Ministry of Agriculture of the Russian Federation, 2003). The methods of calculation, accounting treatment and the degree of revealing information in the reporting on product costs directly depend on the calculation scheme.

The economists agree on that all production costs should be accumulated in accounting separately and be differentiated by itemized cost and time periods, and therefore expenditures should not only be systematized in production accounting, but also be taken into account in the elementwise, itemized grouping, according to the industry nomenclature: raw materials for processing; oil products; fuel and energy for technological purposes; work and services of outside organizations; wages (by types of salary accounting); social spending; fixed assets maintenance; works and services of auxiliary industries; taxes, fees and other payments; other costs; loss from cull, death of animals; general production expenses and general running expenses.

Currently, Russia is constantly and continuously working to improve the legislative regulation of accounting. At the current stage, the system of legal and regulatory instruments is at the stage of reforming and approaching international standards. The absence of common universally recognized standards causes the variability of opinions on this issue. Accounting Regulation (RSA 10/99) "Organization Expenses" is one of the main regulatory and legal acts that regulate the accounting of expenditures in Russia (Table 1).

**Table 1.** Types of organization expenses in accordance with RSA 10/99 "Organization Expenses"

Type of expenses	Definition
A	1
Organization expenses	Decrease in economic benefits as a result of withdrawal of assets (money, other property) and (or) incurrences of liabilities leading to a decrease in the capital of this organizations, except for the reduction of contributions according to participants' (property owners) decision

Expenses from ordinary activities	Expenses associated with the manufacture and sale of products, and also the acquisition and sale of goods. In addition, these include expenses associated with the performance of work or provision of services
Other expenses	Other expenses are related to: <ul style="list-style-type: none"> <li>- provision of assets and the rights of the organization for a fee for temporary use;</li> <li>- participation in the registered capital of other organizations;</li> <li>- sale, withdrawal and retirement of fixed assets and other assets, different from cash;</li> <li>- interest on loans and borrowings;</li> <li>- exchange differences, etc.</li> </ul>

In this situation, the grouping of expenses is ensured in the following elements: material costs; labor costs; social spending; amortization and other costs (Ministry of Finance of the Russian Federation, 1999).

For the purposes of management, in accounting the recording of expenses is organized by the object of expenditure, the list of which is set by the organization independently. Whereas, the accounting regulation (RSA 5/01) "Accounting of Inventories" regulates the accounting of expenditures in terms of forming the actual cost of inventories (Ministry of Finance of the Russian Federation, 2001).

In addition, in clause 16 RSA 5/01 "Accounting for Inventories", the ways to estimate inventories are indicated, when they are released or otherwise withdrawn: by the product cost of each unit; by the average product cost; by the product cost of the first-time acquisition of inventories (FIFO method) (Ministry of Finance of the Russian Federation, 2001). The system of national standards is characterized by convergence processes with IFRS. Some aspects of accounting expenditures are revealed in IAS 1 Presentation of Financial Statements, as well as in IAS 2 Reserves the issues of classification of expenditures, inclusion of expenditures in the cost of products (works, services) (Ministry of Finance of the Russian Federation, 2016).

The branch level of the regulatory and legal instruments of accounting in Russia is represented by the industry standard "Methodological Recommendations for the Accounting of Expenditures for the Production and Calculation of the Cost of Product (Works, Services) in Agricultural Organizations" (Ministry of Agriculture of the Russian Federation, 2003). For the sheep breeding industry, the Ministry of Agriculture of the Russian Federation has developed "Methodological Recommendations for Accounting of Expenditures and Calculating the Product Cost in Sheep Breeding" (Ministry of Agriculture of the Russian Federation, 2008). In addition, agricultural organizations, when reflecting the facts of economic life in accounting, use the Chart of Accounts for the accounting of financial and economic activities of Agro-Industrial Complex Organizations (Ministry of Finance of the Russian Federation, 2010).

According to the normative-legal document under consideration, the following accounts are used for accounting of production costs: accounts 20 "Core production", 23 "Auxiliary production", 25 "General production expenses", 26 "General economic expenses", 28 "Culling and Production", 97 "Prepaid expenses", in addition, 46 "Completed stages for work in progress" and 40 "Output of products (works, services)". Expenses are taken into consideration by the debit of these accounts, and their withdrawal – by the credit. At the end of each month, the expenditures recorded on the cumulative and clearing accounts: 25 "General production expenses", 26 "General economic expenses", 28 "Culling and Production", 97 "Prepaid expenses") are deducted to the accounts of main and auxiliary productions (Ministry of Finance of the Russian Federation, 2010) (Table 2).

**Table 2.** Relationship of account 20 "Core production", sub-account 2 "Livestock", analytical account "Sheep breeding" with corresponding accounts in accounting

Corresponding account of the Credit	Account 20 "Core production" sub-account 2 "Livestock" analytical account "Sheep	Corresponding account of the Debit
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	breeding”			
	Debit	Credit		
10 “Materials”	Material expenditures (feeding-stuffs, medical supplies, implements)	Actual cost of production (expenditures)	11 “Animals for raising and fattening”	
70 “Staff salary settlements”	Salary		animal yield	
69 “Settlements for insurance, social welfare”	Social spendings			
02 “Depreciation of equipment”, 10 “Materials”	Depreciation and sheep breeding farm maintenance OC		gain	11 “Animals for raising and fattening”
25 “General production expenses”	Indirect expenses		wool	43 “Final product”
26 “General economic expenses”	Indirect expenses			
76 “Accounts receivable and payable”	Miscellaneous expenditures	For manure removal	10 “Materials”	

### 3. Research findings

To collect and summarize information on the accounting of production processes in organizations, internal registers of management accounting must be developed. Such a register should be included in the accounting policy for accounting purposes as a supplement with a descriptive part for its completion. In this regard, we propose a register developed by us for the management accounting of production processes and objects for calculating expenditures in sheep breeding. The register is designed to collect and summarize information related to production processes in sheep breeding, such as: the process of herd reproduction (including insemination); the process of feeding; the process of obtaining wool, lamb pelt; milking; manure removal and slaughter process.

The production process of herd reproduction includes 4 subprocesses: the costs of maintaining an artificial insemination station, of the insemination process, the costs of valuation and mortality. For each process (subprocess), accounting for 5 elements of costs is performed: material costs, labor costs, insurance premium costs, depreciation on fixed assets and other costs. Data to fill in the register are based on facts of economic life, reflected in the organizations’ accounting records. This management register can be filled in monthly or accumulatively from the beginning to the end of the year in the context of each month. The register data are intended for use by middle-ranking managers to make managerial decisions.

In the context of automation of accounting processes, to improve the quality of accounting information and upgrade the analytical nature of cost accounting, to make possible a more complete and clear costs differentiation between the calculation units, we recommend that sub-account 20 “Core Production” 2 “Livestock” should be completed by set up subaccounts such as ledger account, accounts of the second, third, fourth and fifth orders by types of sex-age groups of animals (Table 3).

**Table 3. Recommended analytical sub-accounts set up for account “Core Production” 2 sub-account 20-2 “Livestock”**

Account title	Title of sub-account of the 2nd order	Title of analytical account of the 3d order	Title of analytical account of the 4th order	Title of analytical account of the 5th order
20 “Core production”	20 2 “Livestock”	1 “Sheep breeding”	Keeping ram-getters	Ram-getters older than 1,5 years old
			2. Keeping main brood ewes	1. Yeld, pregnant, nursing brood ewes
				2. Pur lambs from birth to weaning at the age of 4

				months
				3. Fertile rams older than 1,5 years
		Keeping herd replacements		Lambs after weaning or nursery up to 1,5 years Ewe-lambs after weaning or nursery up to 1,5 years
		Keeping fattening animals		Culled livestock of adult sheep
		Wedders		X
		Artificial insemination station		X

For instance, account (subaccount) will have the following structure (Table 4).

**Table 4.** An example of advanced structure of account 20 “Core Production” 2 sub-account 2 “Livestock”

Account/sub-account number	Account/sub-account title
20	“Core production”
20.2	“Livestock”
20.2.1	“Sheep breeding”*
20.2.1.1	“Keeping ram-getters” *
20.2.1.1.1	“Ram-getters older than 7,5 years old”*

**Source:** Compiled by the authors.

When calculating the cost of production of sheep breeding, it is necessary to subtract the cost of offspring in meat and wool and wool and meat sheep breeding in the amount of 10%, in Romanov – 12% and in Karakul – 15% from the total cost of maintaining the sheep of the main herd (except for by-products). The remaining amount of costs should be distributed between the wool and the increase in the live weight in sheep related to feed intake (in feed units (FU)) for these types of products according to the following rates of feed consumption in feed units: 1 cwt of wool – 88 cwt of FU; 1 cwt in increase in live weight – 8.9 cwt of FU.

The proposed specification of analytical cost accounting in sheep breeding should be incorporated into the Organization’s Accounting Policy and reflected in the Working Chart of Accounts. Currently, the use of digital ciphers to code accounts in analytical accounting allows one to more effectively use accounting software features and generate any data required for production and management processes in the context of a wider range of data. In its turn, the expansion of such opportunities will be the basis for conducting analytical procedures for economic analysis with the identification of various factors that impact production, improve the quality of indicators related to the analysis of accounting and management information.

In addition to the managerial aspect, the accounting process is designed to generate business entity’s indicators of accounting (financial) reporting. Apart from the basic forms of accounting reporting, agricultural producers compose specialized reporting forms, which reflect the specificity of a branch of agricultural production. Such specialized forms of the accounting reporting of the agro-industrial complex (AIC) in terms of cost accounting include: Form No. 8-AIC Report on Core Production Expenditures and form No. 13- AIC Information on Production, Expenditures, Production Cost and Sales of Livestock Products (Khoruzhy, 2017).

In the standard form 13-AIC, in lines 041, 042 the following groups of animals are mentioned: “reproductive herd” and “sheep and goats for raising (after weaning) and fattening”. The proposed changes related to the analytical accounting, respectively, will affect the indicators of this form. As for sheep breeding farms, the form 13-AIC should be completed with the following lines: line code 041



“ram-getters”, line code 042 “reproductive herd (dams)”, line code 043 “herd replacements”, line code 044 “animal fattening”, line code 045 “sheep raising and fattening”, line code 046 “wedders”, line code 047 “body weight”, line code 048 “sperm”, line code 049 “wool”, line code 050 “lamb weaning weight” line code 051 “lambs at weaning”, line code 052 “lamb live weight gain”, line code 053 “wool”, line code 054 “gain”, line code 055 “live weight”.

The proposed supplements for the reporting format 13-AIC will align the data presented in this report with the methodological recommendations for expenditure accounting and the calculation of the product cost in sheep breeding at sheep breeding farms.

Recently, integrated reporting has become increasingly important. Integrated reporting is the process of collecting, consolidating and analyzing the quantitative and qualitative indicators of the organization’s activity in the reporting period in the process of producing an integrated report. This process is based on the concept of “integrated thinking”, which reflects the organization ability to create value over a long period of time. Integrated reporting is a management tool that allows collecting, monitoring and providing stakeholders with information about how effective the organization (including social, economic and environmental aspects) is. Assessment of these parameters in value terms gives a more complete picture of the organization activities.

The accounting community has long raised the issue of simplifying the presentation of accounting information for users. Since the existing procedure for the formation of reporting indicators by any standards (RAS and IFRS) makes it difficult to read and correctly interpret the information provided. Furthermore, the number of reports for organizations, and in particular for agricultural organizations, is not decreasing, and for a number of reasons (changes in legislation, economic situation, etc.), their amount is only increasing. We propose to present the information in a more grouped, informative and friendly for any user form, who does not possess economic knowledge and skills (Table 5).

**Table 5.** *Integrated report on livestock (illustrative example)*

Line code	Line title	Indicators
100	Average annual number, people	32
200	Average monthly pay for livestock workers, RUB, in thousands	490.8
300	Tangible costs of animal husbandry for the accounting period, RUB, in thousands	13,005
400	The rest of young animals of all ages and fattening adult sheep at the end of the year, year	x
401	Beef cattle	-
402	Dairy cattle	711
403	Swine	-
404	Sheep and goats	3,593
500	Product cost of 1 cwt of live weight, RUB, kopecks	x
501	Beef cattle	-
502	Dairy cattle	6,041.14
503	Swine	-
504	Sheep and goats	5,957.34
600	Total cost of sold livestock products	21,661
700	Income from the sale of own livestock products, RUB, in thousands	25,944

**Source:** *Compiled by the authors.*

The recommended structure of the integrated report on livestock makes it possible to produce recommendations for improving the organization’s reporting content. The integrated form of reporting should include only key indicators of the livestock sector which are of interest for users: the average annual number, the average monthly salary for livestock workers, tangible costs of animal husbandry for the accounting period, the rest of young animals of all ages and fattening adult sheep at the end of the year, product cost of 1 cwt of live weight, total cost of sold livestock products and income from the

sale of own livestock products. To fill in the integrated report on livestock farming, the data of the specialized accounting reporting form No. 5-AIC, No. 8-AIC, No. 13-AIC are used. Table 6 shows the interrelation between the indicators of specialized reporting forms and the proposed integrated reporting on livestock.

**Table 6.** The interrelation between the indicators of specialized accounting reports and the proposed integrated reporting on livestock (illustrative example)

Form № 5- AIC				Integrated reporting on livestock		
1				2		
Line code	Line title	Average annual number, people	Salary accrued for the year	Line code	Line title	Indicators
032	Milking machine operator	-	-	100	Average annual number, people	32
033	Cattlemen	18	3,324	200	Average monthly pay for livestock workers, RUB, in thousands	490,8
034	Pig farm workers	-	-			
035	Sheep farm workers	13	2,387			
036	Poultry farm workers	-	-			
037	Equine farm workers	1	179			
038	Deer farm workers	-	-			
Form № 8-AIC				Integrated reporting on livestock		
Line code	Line title	Indicator in 2018	Indicator in 2017	Line code	Line title	Indicators
100	Tangible costs of animal husbandry, RUB, in thousands	13,005	10,098	300	Tangible costs of animal husbandry for the accounting period, RUB, in thousands	13,005
Form № 13- AIC				Integrated reporting on livestock		
Line code	Line title	Indicator		Line code	Line title	Indicator
510	The rest of young animals of all ages and fattening adult sheep at the end of the year	x		400	The rest of young animals of all ages and fattening adult sheep at the end of the year	x
	Dairy cattle	-		401	Dairy cattle	-
	Beef cattle	711		402	Beef cattle	711
	Swine	-		403	Swine	-
	Sheep and goats	3,593		404	Sheep and goats	3,593
520	Product cost of 1 cwt of live weight, RUB, kopecks	x		500	Product cost of 1 cwt of live weight, RUB, kopecks	x
	Dairy cattle	-		501	Dairy cattle	-
	Beef cattle	6,041.14		502	Beef cattle	6,041.14
	Swine	-		503	Swine	-
	Sheep and goats	5,957.34		504	Sheep and goats	5,957.34
Line code	Title	Total cost	Gained	600	Total cost of sold livestock products	21,661
750	Total own livestock products	21,661	25,944	700	Income from the sale of own livestock products, RUB, in thousands	25,944

#### 4. Conclusions

Having evaluated the regulatory and legal support and the state of accounting and reporting in sheep breeding organizations in the Russian agro-industrial complex, the following measures are proposed in the research:

- to improve the quality of collection and processing accounting information, to apply the register of management accounting of production processes and objects of costing, developed by the authors of this study, in sheep breeding practice;
- to upgrade the analytical nature of accounting and computer processing of accounting information, we recommend using multi-level subaccounts of the third-fourth-fifth order for each object of costing for accounting of costs of the core production (livestock);
- an integrated form as a form of integrated reporting is proposed to give the information on the production activities of the livestock (sheep) organization in an accessible and understandable form to investors and other users of accounting reports.

The proposed improvements in the field of Russian accounting and reporting in the agro-industrial complex are designed to enhance the quality of reporting indicators, reporting transparency and analytical nature, which will eventually bring it closer to international accounting and reporting practices, and will help increase investors' confidence in it.

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