ALEKSANDRAS STULGINSKIS UNIVERSITY
Business and Rural Development Management Institute

INNOVATIONS IN THE DEVELOPMENT OF SOCIO-ECONOMIC SYSTEMS: MICROECONOMIC, MACROECONOMIC AND MESOECONOMIC LEVELS

Volume 3

Collective monograph
edited by J. Žukovskis, K. Shaposhnykov

Kaunas, Lithuania
2016

UDC 338.242(438+477)
LBC 65.050.9
I - 64

Recommended for publication
by the Academic Council of Aleksandras Stulginskis University
(26.12.2016)

Innovations in the development of socio-economic systems: microeconomic, macroeconomic and mesoeconomic levels. – Collective monograph. – Vol. 3. Lithuania: "Izdevnieciba "Baltija Publishing", 2016. – 348 p.

ISBN 978-9934-8643-1-5

Khomoviy M. M.
Candidate of Agricultural Sciences,
Senior Lecturer at Department of Agriculture,
Soil Science and Plant Protection
Podolsk State Agrarian-Technical University
Khomoviy S. M.
Candidate of Economic Sciences,
Senior Lecturer at Department of Accounting and Taxation
Bila Tserkva National Agrarian University
Tomilova N. O.
Candidate of Economic Sciences,
Senior Lecturer at Department of Accounting and Taxation
Bila Tserkva National Agrarian University

ORGANIZATION OF QUALITY OF AGRICULTURAL PRODUCTS: AN ACCOUNTING CONTROL ASPECT

Summary

Accounting system in the company has certain stages. The information required on each of these stages must be specially prepared and interpreted and eventually the internal reporting forms will be provided with the data necessary for making administrative decisions. This necessity applies to the process of the cost accounting on product quality, as today the problem of the quality of products is one of the most actual in economic and social life. The main goal of the company, oriented towards a market is getting a profit under a circumstance of covering all costs. A complete account of all costs is important, but a traditional accounting cannot always realize its functions fully, because the quality cost accounting is not included. Nowadays, there are unresolved issues in the Ukrainian companies related to the construction of the mechanism of the product quality cost accounting. It is known that the allotment on the quality of the accounting documentation that exists in Ukraine is not provided. The costs of money are not the part of an ordinary production costing. Thus, the problem of reflecting the costs accounting in product quality remains unsolved.

Introduction

Nowadays, in a globalized civilization development processes in the context of a global sustainable development there is the question that not only modern humanity will leave it to future generations, and its physical health, but also the possible existence of humankind in general. The quality and safety of agricultural products as one of the main factors ensuring natural human needs in the reconstruction of the bioenergetics balance play not the least role in this.

According to the international practice, the effective regulation of the quality of agricultural products and an appropriate legislative framework is an essential element in the system of food safety purposes. The current European system of quality agricultural and food products based on the quality system of certain countries, which are members of the European Union, in particular: National system of providing the food quality of Germany (Qualität und Sicherheit GmbH − QS), the Dutch quality assurance system – "The Integrated Control of Circuit" (Integrierte Kettenüberwachung – SCR); the Belgian quality assurance system of pork production – «Certus»; the French quality system for production of food processing «Label Rouge» («The Red quality mark») and others.

In the developed countries of the world high quality products are one of the main sources of the national wealth. According to the annual report of the UN Human Development in 2015, the index of human development Ukraine takes the 85th place among 182 countries. A significant reason for this is the low quality of food consumed by Ukrainians. For sufficient potential abilities of the agricultural sector, the ensuring of the appropriate product quality is the primary task and one of the areas of the national economy.

International experience shows that only those countries that can reach the leadership in the global economy, social and cultural development, which are able to provide the global quality products and services. It creates competitive advantages for manufacturers and comfortable life for consumers. That is why the world's leading quality problem is a centre of economic interests, manufacturers and consumers. That is why in leading countries the quality problem is a centre of economic interests of a country, manufacturers and consumers.

According to a survey of customers in different countries of the world we see that today almost all of them consider quality as the main factor in the selection of goods compared to its price and other criteria [1, p. 38].

The quality of products creates bases of economic security institutions of different levels. On the one hand, it expresses aggregate characteristics, services provided by the company, which are satisfied by a consumer, and the other – the correspondence processes of management in the enterprise established purposes and the chosen development strategy [2, p. 110].

Part 1. Theoretical principles foundations of the «quality of agricultural products»

The category «quality» is closely connected to the needs of consumers. A product that can satisfy the needs of consumers and be appropriate for certain requirements (regulatory and technical documents, etc.) is considered to be qualified.

Evolution category «quality» depends largely on the same level of technical and economic development of society, i.e. the expansion of technology (innovation, scientific-technical progress), the sectorial structure of the economy, patterns of production and consumption [3].

Ukrainian Quality Association provides the following definition of «quality control» – these are activities for the common control that determine quality policy, objectives and responsibilities and carry them through such means as quality planning, quality control, quality assurance and quality improvement within the quality system.

There are two terms in the dictionary the European Organization for Quality (YEOYA), in the international standards ISO 8402: 1994 and ISO 9000: 2000 that characterize quality management, «quality control» and «quality management», analogues of «operational quality management» and «quality management» [4].

Considering the problems of adaptation of legislation on the quality of agricultural products to international requirements, it should be noted that the quality of products in the market environment is a basic factor of its competitiveness, one of the basic conditions for realization of export potential of Ukraine. The harmonization of the Ukrainian legislation to the European Union (EU) on the quality and safety of agricultural products is also an important factor in attracting foreign investment to the agricultural sector of the Ukrainian economy. These issues are reported in Regulation № 178/2002 of the European Parliament about the establishment of general principles and requirements of food code, establishing a European authority for food safety and the establishment of measures for food safety, which was the basis for the all-embracing standard of hygiene in food and stern products.

On the legal basis of this given resolution a system of rapid alert – Rapid Alert System for Food and Feed (RASFF)) was created, for informing direct or indirect risk to human health. Through this system the member countries, the European authority of food safety – European Food Safety Authority (EFSA), Commission (which is responsible for management), countries, which join the EU, are integrated into the network. Therefore, in accordance with the action plan «Ukraine – EU» providing the progress of being closer to the EU legislation in the field of tracking the food chain «from a field to a table»; the general principles and requirements of food safety in accordance with the Regulation № 178/2002.

Nowadays, the concept of NASSR has an international recognition as a special food system, due to which the safety of the consumers' health is ensured. The main purpose of this concept is the systematic analysis of the flow of products from raw materials all stages of handling and processing up to the sale of finished products.

Also, it should be noted that according to the Law of Ukraine «On State Program of the Adaptation of Legislation of Ukraine to the Legislation of the European Union» the first stage of accomplishment of the program, priority areas in which the adaptation of the legislation of Ukraine, in particular, is the field of agricultural production.

At the same time, the process of the adaptation of the legal regulation of quality agricultural products to international requirements needs a transitional period. Its essence lies in the transition from an obligatory certification to assessment its accordance and above all to the requirements of technical regulations.

The process of production of a certain type of agricultural products must be in compliance with the so-called «welfare practice» the maintenance of some field of

agriculture, because it actually depends on the final product quality. However, the development branch of welfare practice for agricultural production in line with international requirements and its legislative consolidation already continues.

Therefore, the ensuring of a proper state control over the quality of agricultural products and the gradual formation of an information database on its circulation and quality in accordance with the EU requirements are appropriate at the transitional level. It is also important to ensure access of agricultural products to information on quality and costs incurred to ensure. It is also important to ensure the access of agricultural products to information on quality and costs incurred on its ensuring [5].

The Concept of a comprehensive program of supporting the development of a Ukrainian village for years 2016-2020, approved by the Cabinet of Ministers of Ukraine, there is one of the ways to solve the problem of rural development is food safety and manufacturing quality products that are provided to ensure through the following measures:

- strengthening the protection of consumers rights by improving state control over the quality and safety of food products, harmonization of national standards with international ones;
- establishment of the quality management system of agricultural products and foodstuffs;
- introduction of the global system of marking and certification of agricultural and food products;
- encouraging expansion of organic, environmentally pure products [6].

The quality of products is influenced by a number of factors. The importance of each group of factors is undeniable, although each company depending on the conditions of each of these groups can be specified factors and take different priority.

There are two groups, which are considered to be the main factors that affect the formation of agricultural product quality. The first category includes: 1) raw materials, seeds and own produced food take a specific weight; 2) staff (middle managers and workers as direct executors); 3) equipment. The second group involves: 1) cultivation technology of biological assets; 2) technological stages (processes) of the production that are distinct in the plant production and distant in time; 3) functioning of the system of quality control.

Factors of the first group are the most given in the monitoring «cost-benefits» and are controlled in the enterprises. High-quality seeds of appropriate high yielding variety that is adapted to the climatic conditions of a particular area will provide the corresponding yielding capacity and the quality of received grains for favourable weather conditions. But at the same time the factors of the second group are taken into account. They are technology, processes, the presence of control (agronomy – checking for similarities, agro technical – the width and depth of planting, agricultural chemistry – taking into account last year's predecessors and using mineral fertilizers and herbicides, before sowed tillage).

All these factors affect the organization and methods of accounting and economic analysis of the costs for quality products produced by a company. The dependence of the quality of additional measures for its improvement is hampered owing to an

inadequate system of display quality costs, their isolation from the aggregated. A manager takes a decision as regards the introduction of an accounting system of quality, if he is interested in the issue of quality as an important factor for sustainable enterprise development.

Part 2. Organization of accounting quality of agricultural products

In terms of introduction and operation of a quality management system at enterprises, there are appeared new requirements as to an organization and accounting. This is due to the fact that the internal accounting system, which is formed in most enterprises, does not correspond to the modern demands of the quality management system and requires substantial reform. In other words, accounting cannot always realize its functions as to giving the necessary information about costs proving the quality for assessment of a company operation. First and foremost, it is explained by the lack of recommendations for an accounting display of such expenses on accounting and, consequently, they are not extracted from the total costs of the enterprise [7].

Development of accounting methods and the cost for providing the quality products must match the principle of the process approach to quality management declared by international standards ISO 9000. It will let give complete and accurate information about the costs of business processes that characterize the quality of products, taking into account the resources used for economically proved management decisions.

As the practice shows, agro-industrial enterprises do not make a calculation of the value of «quality» due to the lack of the typical cost accounting techniques on the quality for the purpose of calculation of the cost of finished products. Some researchers have tried to resolve the pointed problem, therefore, let's consider their proposals on the composition and an accounting display of costs on the quality of products. Some scientists' approaches to building techniques of reflecting the cost of providing quality products to the accounting can be divided into four groups, which are presented in Table 1.

N.A. Morozova-Gerasymovych proposes to use the following subaccounts: 1) «The costs for providing a given level of quality» to display productive costs (for the assurance of the production quality and quality control in the manufacturing process); 2) «Loss of non accordance productions» displays unproductive costs connected with the removal of defects and losses from the lack of a final product (the cost of correcting defects discovered during the manufacturing process, the cost of satisfying claims etc.), the losses of the final defect will be the part of losses from non-compliance products [8].

O.M. Zenova focuses on the features of the company in connection with providing quality products at all stages of the life cycle of a product and offers call an account 24 «Costs on the product quality». The amount of the credit account 24 «Costs on the product quality», which is accumulated for the reporting period, is proposed to write

off the debit account 23 «Production», which will allow reflecting the cost in calculation of production cost of products [9].

Table 1

Scientists' approaches as to an accounting reflection of costs for ensuring products quality

Author	The basis of accounting costs			
	Special account	Subaccount to account «Production»	Subaccount to account «Other operating expenses»	Analytical accounts to the accounts of calculation
I.V. Desyatkina				+
N.A. Morozova-Gerasymovych	+			
I.Y. Tymriyenko		+		
K.A. Yagmur			+	
O.M. Zenova	+			
V.M. Parkhomenko				+

Summarizing scientists' approaches of the first group regarding the display costs for quality assurance it should be noted that the opening of a separate prefabricated account will not let to lose quality assurance costs in total costs of an enterprise. However, this approach leaves several unresolved issues. Firstly, information on the cost for providing the quality of products will have the general character without distribution between types of products; Secondly, it will not allocate costs between business processes and the responsible departments.

The next group of accountants considers it appropriate to take into account the costs on the assurance of the quality on a separate subaccount to the account «Production». It comes from the fact that today, according to I.Y. Tymriyenko, the costs for the quality products recorded total amount consisting of direct production costs on account 23 «Production» [10] (Fig. 2).

It means the costs on the assurance of the quality of certain type of a product are «disappearing» in the total amount of the costs for its production. This technique will not allocate the costs inappropriately. Combining the costs for providing the quality of products in a subaccount is incorrect, because such costs have different funding sources and in different ways are included in the cost.

In turn, K.A. Yagmur [11] offers to lead accounting costs of quality on the subaccount 941 «Costs of research and development» (Fig. 3).

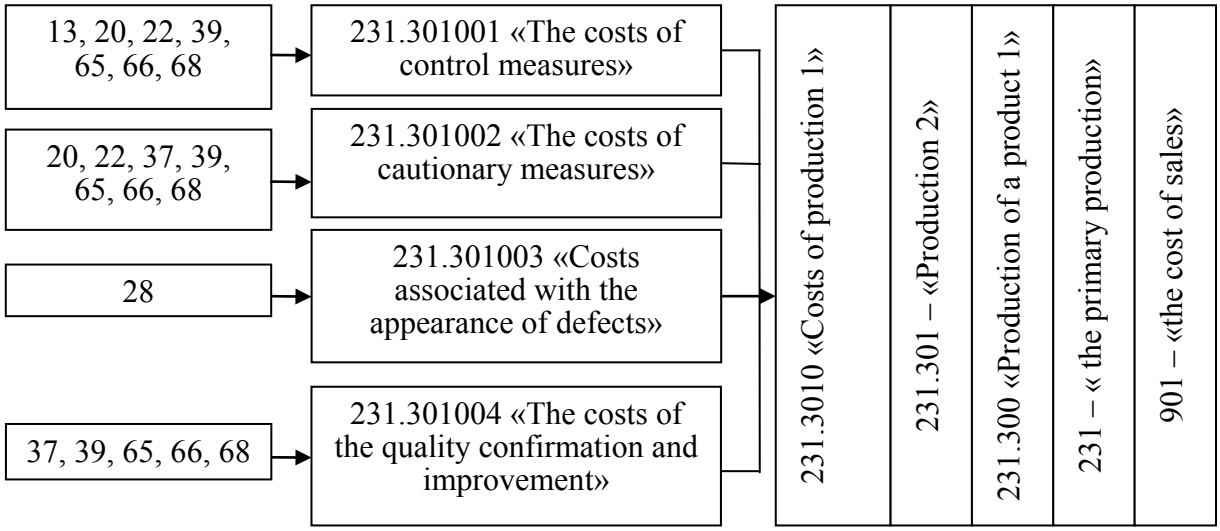

Fig. 2 The model of a cost accounting on a product quality

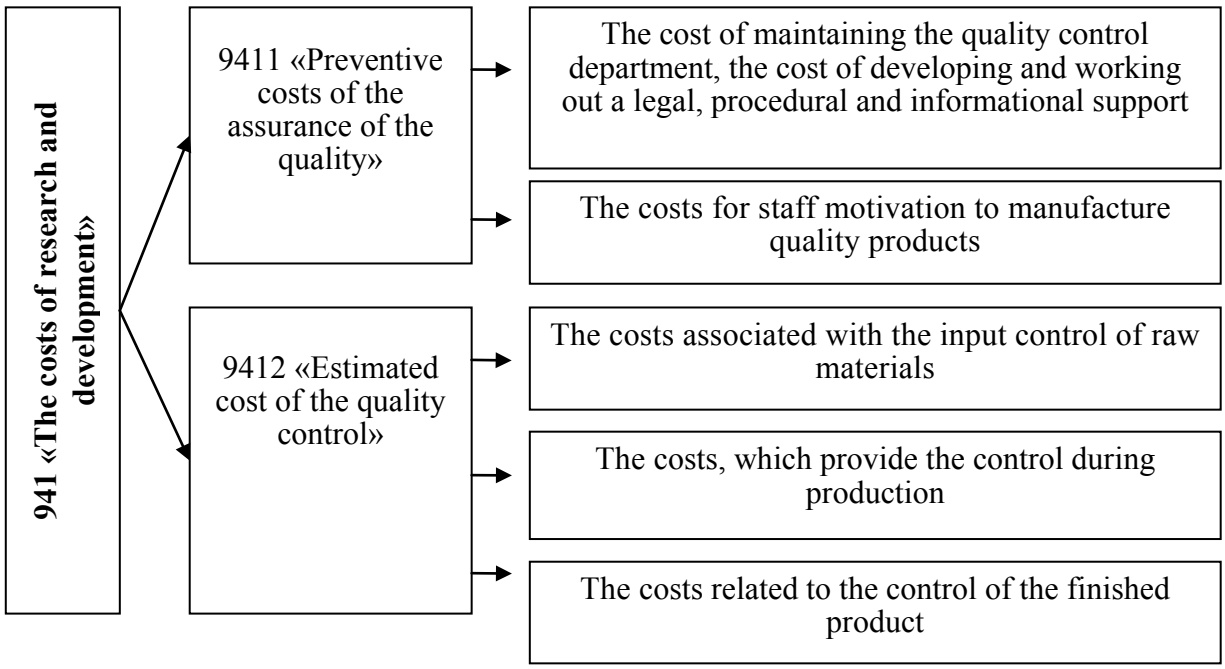

Fig. 3 Structure of subaccount 941 «Expenses on research and development»

The expediency of using this subaccount, a scientist explains that the cost of providing quality products can be linked not only to its production but also with the administration and implementation of this product. At the end of the reporting period preventative spending the first group (subaccount – 9411) in its entirety should be written off on a synthetic account 92 «Administrative expenses». Total costs of the second group (subaccount – 9412) distributed between types of products. The most economically justified distribution base K.A. Yagmur consider direct labour costs or the overall (physical) production volume at the balance sheet date.

It should be noted that the proposed method of the product quality cost accounting using account 94 «Other operating expenses» does not match the requirements of the regulations on the application of the Plan of Accounts for assets, capital, liabilities and business operations of enterprises and organizations. First, the instructions

provided for an application of subaccount 941 for storage costs for research and development. Second, subaccount 941 costs accumulated on, according to the instructions written off to account 79 «Financial results».

Unlike other researchers, V.M. Parkhomenko considers it appropriate introducing analytical accounts to account for the cost of providing quality products to the synthetic accounts 20 «Inventories», 23 «Production», 24 «Defect in the production», 26 «Finished goods», 91 «Total expenditures», 92 «Administrative costs», 93 «Cost of sales», 94 «Other operating expenses» in terms of «Quality costs». Using computer equipment in accounting, according to the scientist, allows leading accounting for various analytical sections to obtain more detailed and accurate information [12].

Costs associated with the quality of the products should be grouped by a principal and a functional appointment. Such detailed additional costs V.M. Parkhomenko proposes to hold by expenditure, types of existing activities, types of products, activities, processes, cost centres (centres of responsibility) and sources of funding. In our opinion, the proposed method of cost accounting is appropriate, not complicated to use, provides for the opening of analytical accounts for the accumulation of costs to ensure quality and can be used in every business process.

I.V. Desyatkina also supports V.M. Parkhomenko' position as to irrationality accounting costs money on the quality in a separate account or on subaccounts of the second and the third order on a synthetic account 23 «Production». The scientist recommends registering the cost of quality assurance accounted for in accordance with the stages of the economic process (obtaining, production, realization) [13]. Moreover, the costs which occur in the first stage I.V. Desyatkina recommends to register on a synthetic account 91 «Total expenditures», the second stage of the costs – 23 «Production» and 91 «Total expenditures» and reflections of the costs of the third stage of «realizations» provides synthetic account 93 «Cost of sales».

In our opinion, proposed by I.V. Desyatkina method of cost accounting does not satisfy the principle of process approach to quality management, because it does not for see opening individual subaccounts, which accumulate the costs of quality and make it difficult to calculate the cost of each stage in relation to product quality.

The conducted analysis showed the cost of providing quality products arise directly during each business process. In view of this, in general V.M. Parkhomenko and I.V. Desyatkina agree on account of the cost of providing quality products to different accounts.

For the display of the cost of providing quality products for their intended purpose and business processes on accounts offer apply analytical accounts (Table 2) and to the following structure:

XX / YZ: the first two signs – an account number on the plan of accounts; the last two signs – the code of an item of expenses on quality: 00 unrelated expenses to provide quality products (important to accounts 20 and 26); 01 «The costs of prevention»; 02 «Expenses for evaluation»; 03 «Costs because of internal defects»; 04 «Losses through external defects».

Table 2

The reflection of the cost of providing quality of products for their intended purpose and business processes. Accounts of an accounting

Business process	Subaccount code	Account name (subaccount)
Supply	20/01	«The costs of prevention»
	20/02	«The cost of the assessment»
Production	23/01	«The costs of prevention»
	23/02	«The cost of the assessment»
	23/03	«Costs (losses) on internal defects»
	24/02	«The cost of the assessment»
	24/03	«Costs (losses) due to internal defects»
	24/04	«Costs (losses) through external defects»
Quality control of finished products	91/02	«The cost of the assessment»
Selling	93/01	«The costs of prevention»
	93/03	«The cost of internal defects»
	93/04	«The cost of external defects»

Taking into account, pointed above the technique accounts reflect the cost of providing quality products to the accounts for the main business processes in agriculture enterprise (tab. 3).

Table 3

Accounting costs of quality agricultural products

Content of business operations	**Correspondence accounts**	
	Debit	**Credit**
1. Business process «Supply»		
1.1. The costs of repairs of measuring instruments that are used for quality control of raw materials (realized of third parties*). The primary document: report of completion*	20 / 01	63, 20 / 00, 22
1.2 The cost of entrance control of raw materials. *The primary document: entries in laboratory journal*	20 / 02	63, 66, 65
2. Business process «Production»		
2.1 Expenditure on education and training the level of proficiency of operating personnel for ensuring the product quality. *The primary document: a contract, a delivery-acceptance act, the order*	23 / 01	63, 68, 66

Ending of Table 3

2.2 Costs of holding a certification of a production laboratory. *The primary document: report of completion*		63, 39
2.3 The cost of controlling the production process. *The primary document: entries in laboratory journal*	23 / 02	65, 66
2.4 Expenses for a correction of a defect, which is found in production. *The primary document: the requirement to supply materials*	24 / 02	20 / 00, 65, 66
3. Business process «quality control of finished products»		
3.1 The cost of finished goods transferred for certification	26 / 02	26 / 00
3.2 The cost of a testing and a certification of finished products (performed by external organizations). *The primary document: report of completion*	93 / 01	63, 68
3.3 Returning of finished products, which is transferred into production	23	26 / 00
4. Business process «Sales»		
4.1 The costs to provide the quality storage and transportation of finished products. *The primary document: accounting-payroll of employees (financially responsible persons)*	93 / 01	20 / 00, 65, 66
4.2 Expenses as a result of a purchaser are identifying low quality of products. *The original document:* a pretentious letter	704	36
4.3 Losses due to the detection / occurrence of irregularities during storage, shipment and transport products	93 / 03	26 / 00

However, it is necessary to remember that high quality should not be achieved at any cost. Additional costs associated with the realization the complex of factors must be economically expedient, that the demand for products and in some cases the price should rise in value more than it is necessary compensating an excess of these costs (Fig. 4).

In the process of having own research related adjustments and amendment appeared, which without changing the approach in general, still making adjustments to the analytical process of determining the most quality costs. As a result, the following groups of losses in quality were identified:

1) strategic costs of quality – associated with the improvement of the quality management system;

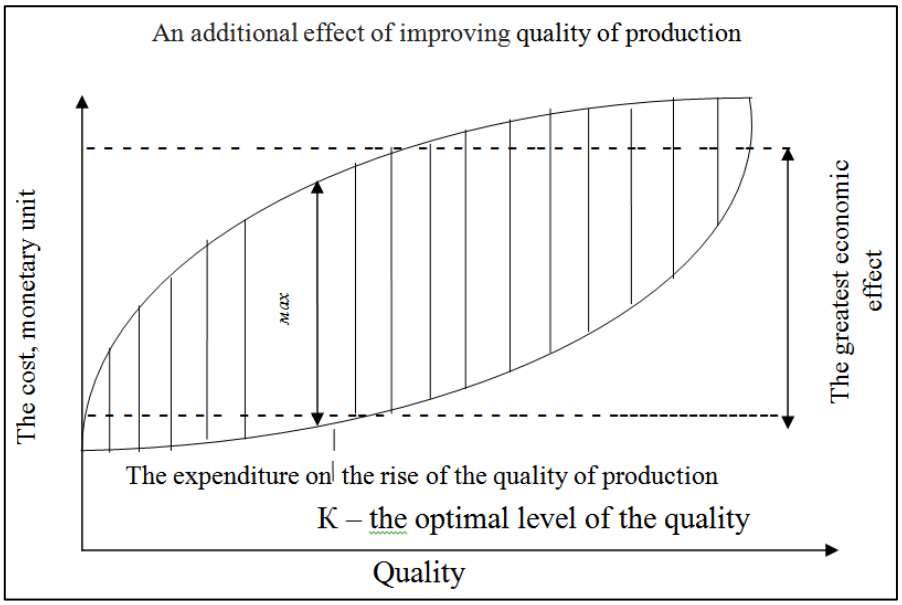

Fig. 4 The definition of the optimal level of product quality [14]

1) current costs to assess the level of quality – the cost of monitoring and testing, audit of quality assurance;

2) real costs of an insufficient quality – the cost of processing production, losses due to lower grade of quality, as a result of a complaint and as a result of liability claims and lawsuits.

The cost structure for quality in 5 enterprises of Skvyra area Kyiv Region is analyzed in this research (tab. 4). The data in the table 4 show that the proportion of quality costs in the total cost ranges from 1.4 – 3.9% and is generally acceptable within the industry.

Table 4

The cost structure of the quality in agricultural enterprises

Years	The cost of quality		The cost structure of the quality, %		
	Th.hr	in the expenditure structure, %	strategic quality costs	current cost of quality assessment	losses from the lack of quality of production (defect, etc.)
2012	10965,32	3,96	0,04	1,21	98,75
2013	7310,25	1,48	1,47	2,98	95,55
2014	18501,41	2,80	0,33	1,97	97,70
2015	18891,05	2,24	0,69	1,86	97,45
2016	16036,75	1,70	1,14	2,13	96,73

However, the bulk of these costs make up the losses from defective products, which constitute 95.5 – 98.7%, which is average – 93.3%. The downside is the low share of strategic and quality costs, including the observed dependence – the lower the cost of developing the quality, the higher the loss of a defect. That last provision

could be seen as reducing overall costs in general, including the defect of improving the management quality.

Part 3. Evaluation of quality control of agricultural products

For studying the economic processes, which take place at enterprises, identified factors affecting the quality of products and measuring this impact using internal audit.

Internal auditing provides an opportunity to determine how planned activities are properly composed, performed and help prevent negative consequences. The importance of internal audit is also that the results can be used by independent experts to assess the ability of organizations to identify existing problems (violation of or non-compliance) and find the opportunity for continuous quality improvement. The purpose of an audit is a systematic and independent analysis that will determine whether the activities and results in the quality sphere, and efficiency of these measures and their ability to achieve this goal.

Table 5

Key indicators to assess the effectiveness of internal audit of the quality system of an agricultural enterprise

Indicator	**The method of a calculating indicator**	**Indicator value**
Quality planned documents from internal audit	The relation of a transportation quantity audits of time to the total number of objects audit plan	Go to 0
Audit effectiveness	The ratio of actually conducted audits to the number of planned audits	Go to 1
The capacity of the audit	The ratio of the number of objects of audit to the number of structural divisions of enterprises	Go to 1
The average duration of the «audit on-site» (man-hours).	The ratio of the total audit duration to the number of objects of audit	In accordance with the practice of a company
The audit team leader's average labour costs of work with documents (man-hours).	The ratio of total labour costs for job with documents to the number of audit groups	In accordance with the practice of a company
Deviations of actual labour costs for holding the audit from the planned (man-hours).	Comparison of actual labour costs for audit the planned	Go to 0
Number of discrepancies identified in paragraph. 8.2.2 UNSS of ISO 9001: 2009 with external audits	–	Go to 0

Table 6

Method of estimation of labour costs for the internal audit of quality management system of agricultural enterprise

Object audit	Costs of labour to audit (man-hours).		Costs of the work of a work team leader with documents (man-hours)		Diversion, +,-		auditors
	plan	fact	plan	fact	Costs of labour to audit (man-hours).	Costs of the work of a work team leader with documents (man-hours)	
The quality management system (requirements for documentation, monitoring protocols, common provisions on quality)	548,7	548,7	125,6	128,7	-	3,1	S.R. Petrenko
Management responsibility (liability, quality policy, internal information)	245,4	240,4	88,5	88,5	- 5,0	-	V.S. Akinshyn
Source of implementation (human resources, infrastructure, workplace)	378,4	380,5	110,5	110,5	+ 2,1	-	I.V. Batsura
The audit results (summing up and determining inconsistencies)	78,5	78,5	55,4	55,4	-	-	T.P. Stepanenko

The compliance of the system of quality management requirements specific documents is checked in the internal audit. Thus, during the preparation of the quality management system for a certification, the internal audit is conducted in accordance with international standards ISO 9000, ISO 9001 and others, but since the certification of internal audit checks the quality policy and other documents approved by the company.

We have developed a set of indicators to determine the effectiveness and efficiency of the internal audit of the quality system of agricultural enterprise (tab. 5).

If the quality of planned documents grows, efficiency and capacity of internal audit increases, the average duration of «on-site audit increases,» the audit team leader's the average cost of labour to work with documents reduced to the optimum value, and the deviation of actual labour costs for the audit of the plan and the number of identified discrepancies in accordance with UNSS ISO 9001: 2009 with the external audit tends to zero, in this case we can reasonably talk about the effectiveness and efficiency of the internal audit of the quality management system of agricultural enterprises. However, the calculation given in Table 5 of index is impossible without keeping primary documentation for audit. First, this is a program and schedule of audit and evaluation of labour costs for internal audit (tab. 6).

Thus, data which are reported in Table 6, any deviation in the internal audit of quality management system of the agricultural enterprises should be analyzed and sure-made conclusions. Thus, positive changes – for use in the future of the company, and the negative – to prevent the factors that have led to the negative outcome.

Summarizing, we note that the introduction of internal audit system of farm management has a positive effect precise determination of foreign policy, assistance from specialized international funds and organizations and state funding for the training and retraining of specialists revitalization of professional auditing organizations promoting internal audit, Clarification value of internal audit for effective business development and provide guidance and practical help Ukrainian companies to create internal audit governance structure, government support and promotion of research on internal audit.

By the results of the operation of most enterprise, the use of automated accounting forms is greatly improved timeliness and the accuracy of processing accounting information and the formation of primary accounting documents. To automate cost accounting for quality of agricultural products the use of software is required, the most popular is «1S: Accounting».

Organization of the primary account in a computer-based environment begins with the study of accounting nomenclatures. Particularly important is the right to determine their composition while creating the appropriate database. In order to create nomenclatures of cost accounting for quality of agricultural products surveyed enterprises compiled a list of all items to be recorded in the primary documents (tab. 7).

Table 7

The organization of an accounting nomenclature in agricultural enterprises in «Cost accounting for quality of products»

П/п	Nomenclature	Primary accounting				
		Components characteristics		The reasons of fact arising	The documents in which facts of economic activity are recorded	Tasks in which information data are used
		quality	quantitative			
1	Released materials for control of quality products	From whom, Whom, Date, Grounds	Quantity, Sum	Accounting availability and process of materials	Invoice, the requirements, fixed limit-in taking cards, certificates, demands for replacement (optional dispensing) material	Accounting for quality costs of products (Control measures)
2	Released raw materials for research	From whom, Whom, Date, Grounds	Quantity, Sum	Accounting availability and process of raw materials	Invoices	Accounting for quality costs of products (Control measures)
3	Amortization of equipment used to control product quality	Which Date, Grounds	Sum	Accounting amortization of fixed assets	The calculation of amortization of basic means	Accounting for quality costs of products (Control measures)
4	Improvement of equipment, instruments used for monitoring the quality of products and processes	Which, For what, Date, Grounds	Sum	Accounts of credit debt	Accounts, report of completion	Accounting for quality costs of products (confirmation and quality improvement)
5	Collection and analysis of relevant data on costs of product quality, reporting	Who, For what, Date, Grounds	Sum	The accounts of payments of wages	Calculation and pay of an employee	Accounting for quality costs of products (confirmation and quality improvement)
6	Written off the cost of raw materials, finished products, which do not suit the requirements, taking into account the cost of its destruction	Which, Why, Date, Grounds	Quantity, Sum	Accounts of defect	Invoices, act of liquidation, account	Accounting for quality costs of products (Costs associated with the appearance of defects)

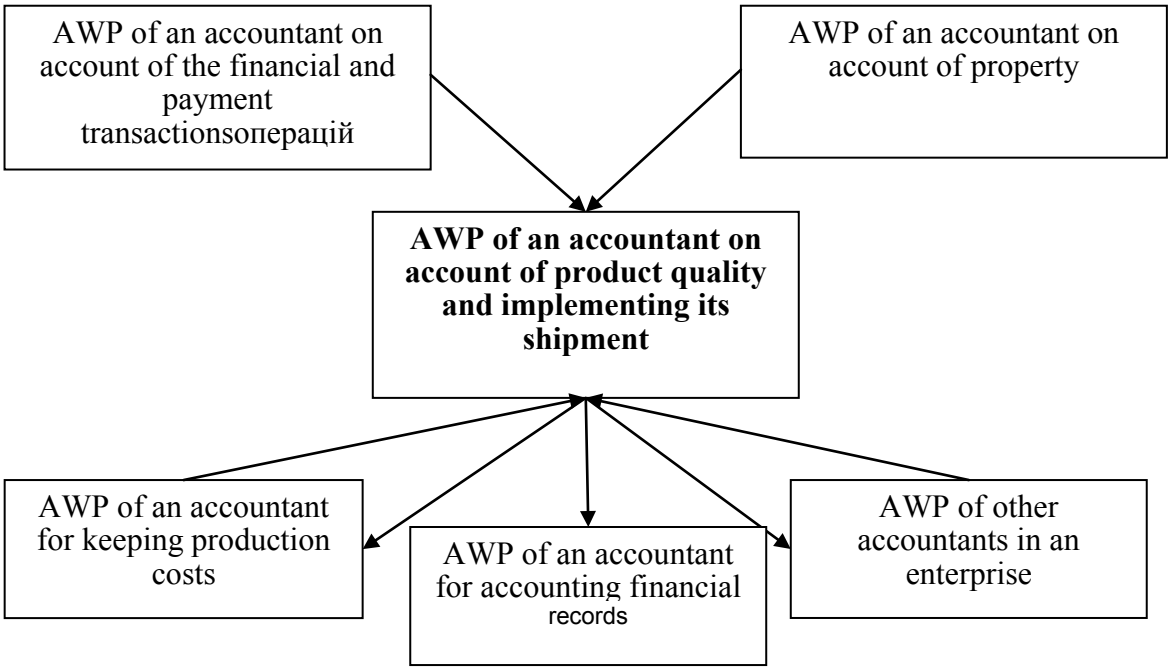

Fig. 5. Information on the scheme of interconnection of AWP of accountant on account of product quality

The process of mapping the primary information in the form of records on accounts also requires clarification procedures of cost accounting for product quality. It must be decided on consolidation of functions of the primary documents according to the requirements of the accounting costs for product quality. This function can be assigned to: 1) all employees of the accounting department in certain areas of accounting; 2) special accountant in the service; 3) independent managerial accounting.

For studied enterprises in practice it is better to use the second option because it provides a systematic vision and a common approach to the assessment process, and eliminates duplication of primary documents and information flows. In addition, in this labour costs for the organization of management accounting will be significantly lower because it does not need to teach all professionals of the accounting department (which suggests the first option) or bear the cost of creating a special unit (the third option).

Automated workplace (AWP) of an accountant for keeping product quality, its shipment and sales perform complex tasks, information-related tasks related workstations, as well as the objectives of the information system as a whole (Fig. 5).

In AWP of an accountant on account of product quality, shipment and its implementation will enter information on these AWP:

- AWPA on account of material assets – information about the side-made supply of semi-finished goods and material values;
- AWPA on account of the cost of production – about the actual cost of commercial products;
- AWPA of accounting for financial and payment transactions – information on paid bank settlement documents and non-production expenses;

- other AWP companies – regulatory, planning information, data on supply contracts.
- in turn, AWP accountant on account of product quality to provide information:
- AWPA on account of the cost of production – information about production of finished products in bulk in terms of nomenclature;
- AWPA on account of financial statements – information on proceeds from the sale, the actual cost of sales, the share of non-production costs relating to the products sold on the results of implementation;
- other AWP accountant – information on the availability and volume of products shipped

To eliminate backward flow in the process of moving the original documents, we consider it proper to put these functions on employees taking these documents for financial accounting.

So to make entries in the accounting system costs for product quality certainty identification will be provided in the primary documents of accounting nomenclatures by a computer environment in «Cost accounting of product quality»

Conclusion

Summarizing the above information, the following conclusions must be pointed:

1. The accounting information is the main object of internal controls and therefore the effectiveness of the management costs depends on the quality of accounting and information support for management decisions and improves the financial performance of the company. Thus, the system control of quality costs allows enterprises to earn the following results: the competitive advantage of the possibility of effective price reduction manoeuvre without profit; release resources for expansion or implementation of new investment projects; improve the effectiveness of the tactics and strategy of the company.

2. Ukraine's accession to the EU opens up new markets for products and including agricultural. However, realization of this possibility is necessary to ensure the specified level of product quality. Given the international experience of legal regulation of quality agricultural products, solving this issue in Ukraine is possible by developing the program adaptation of national legislation on accounting and legal regulation of quality agricultural products to international requirements.

3. The analysis showed that there are no recommendations for composition, display the costs, and improve product quality assurance in Ukraine. This leads to complications and sometimes impossibility of obtaining information on the cost of the quality of decision making by management and further development of the company. To solve this problem, given the characteristics of farms defined the quality costs and the method of data mapping costs accounting system, which is based on the reflection of costs associated with product quality according to the stages of economic activities of enterprises.

4. Research the cost structure for quality in 5 enterprises of Skvyra area Kyiv Region revealed their share in total expenditure varies from 1.4 – 3.9%. Much of

these costs make up the losses from defective products. So, in 2012 they accounted for 98.7 %. Due to the deteriorating financial situation in Ukraine by 2016 their share decreased by 2 %.

5. The proposed technique of estimation of labour costs for the internal audit of quality management system of agricultural enterprise allows identifying, which types of costs are product quality deviations, identifying those responsible; and increasing the investment attractiveness of the company.

6. Optimized accounting nomenclature in «Product quality cost accounting» and the structure of an apparatus in agricultural enterprises improves the speed and quality of processing accounting information on the subject.

References:

1. Anisimova N.Y. Quality System analysis of wine products / N.Y. Anisimova // Bulletin ZHGTU. – № 2 (32). – 2005. – P. 38-44.

2. Parkhomenko V.M. The quality of products as the basis of contractual obligations, an accounting measurement / V.M. Parkhomenko // International collection of scientific works «Problems of theory and methodology of accounting, control and analysis» – Issue 1 (13). – P. 110-124.

3. Buryak R.I. The impact of a category «quality» on the socio-economic development of society / R.I. Buryak // Scientific Production Journal «Innovative Economy». – № 3. – 2015 (58). – P. 9-17.

4. Buryak R.I. The quality management as part of the overall management of agricultural enterprise / R.I. Buryak // Proceedings of the Tavrian Agrotechnological State University (economic sciences) / Ed. M.F. Kropyvka. – Melitopol, Melitopol publishing house typography «Lux», 2012. – № 2 (18), Volume 4. – P. 50-59

5. Bugera S.I. Quality agricultural products: problems of adapting legislation to international requirements / S.I. Bugera // Actual problems of law. – 2011. – № 5. – P. 698-704.

6. The concept and content of the quality and safety of agricultural products [electronic resource]. Access-http: // pidruchniki. Com / 1499052857508 / pravo / pravove_regulyuvannya_yakosti_bezpechnosti_silskogospodarskoyi_produktsiyi#793.

7. Bodnar T.L. Method of accounting costs for quality assurance / T. L. Bodnar // Bulletin of the Odessa National University: Ser .: Economics. – 2015. – T.20, no. 1/1. – P. 151-156.

8. Morozova-Gerasimova N.A. Methodical principles of the organization of operational analysis of costs to ensure quality tinned vegetables enterprises / N.A Gerasimov, Morozova // Bulletin ZSTU / Economics. – 2004. – № 2 (28). – P. 131-137.

9. Zenova O.M. Accounting for costs of product quality: Author's abstract. Dis. ... Getting sciences degree candidate. Econ. Sciences specials. 08.00.12 «Accounting statistics» / O.M. Zenova. – Nizhniy Novgorod, 2001.

10. Tymriyenko I.Y. Management accounting costs of the product quality, conceptual approach, theory and practice [electronic resource]. Access – : http://www.nbuv.gov.ua/e-journals/PSPE/2009_1/ I.Y. Timriyenko_109.htm.

11. Yagmur K.A. Accounting for production costs of construction products: theory, organization and method: Dis. ... Candidate economical. Sciences: 08.00.09 / K.A. Yagmur. – K., 2008. – 185 p.

12. Parkhomenko V.M. The concept of accounting progress, control and cost analysis product quality: Dis. ... Dr. Sc. Sciences: 08.00.09 / V.M. Parkhomenko. – Zhytomyr, 2011. – 640 p.
13. Desyatkina I.V. Display quality costs of companies in the restaurant industry, an accounting aspect / I.V. Desyatkina // Problems of the theory and methodology of accounting, control and analysis: an international collection of scientific work. – Zhytomyr: ZSTU, 2011. – № 2 (20). – P. 168-175.
14. The costs of improving the product quality, key factors to improve it and ensure competitiveness of enterprises. [electronic resource]. Access-: − http://pidruchniki.com/75533/agropromislovist/vitrati_polipshennya_yakosti_produktsiyi_osnovni_chinniki_pidvischennya_zabezpechennya_konkurentospromozhnosti_pidpriyemstva#885