

## CONSIDERATIONS ON AGRICULTURAL PRODUCT QUALITY MANAGEMENT

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### *Abstract*

*Global economic liberalization, progress in the means of transport, the revolution in the communication system have contributed to the acceleration of the economic value chain, including the agro-alimentary ones, in other words internationalization and globalization of human activity. We subscribe in the opinion of Ion Stanciu who states that "there are two ways to approach quality" A "and" Z ". If the quality in the "A" approach is considered a technical function, then the "Z" approach is conceptualized as a management system. This situation urges us to amplify and intensify the study of the factors influencing the quality management of agro-food products in the hope that we will suggest some proposals regarding the increase of the quality of the agro-food products and ensuring the competitiveness of the agricultural sector in the value chain specific to the conditions of internationalization and globalization of human activity.*

**Key words:** evolution, milk production, NW Region, Romania, trends

### INTRODUCTION

Aspects concerning the study of the quality management system including agro-food products have been discussed in the field of national and international public authorities, in many scientific centres and in the street. However, scientific research on quality management of agri-food products under the conditions of internationalization and globalization of human activity is very modest and remains current.

This situation has prompted us to return to the investigation of the quality management of agro-food products, including the factors that influence it in order to elaborate some proposals regarding the improvement of the quality of agro-food products, improving the competitiveness of the agricultural sector in the conditions of internationalization of human activity.

### MATERIALS AND METHODS

The materials used in the research include publications in the field that have helped us to understand and explain the phenomena and processes that occur in the quality management of agro-food products. The

quantitative analysis provided us with relevant meanings and explanations in relation to the impact of the factors influencing the quality management of agro-food products, which suggested some proposals regarding the improvement of the quality of agro-food products, improving the competitiveness of the agricultural sector in the conditions of internationalization of human activity.

### RESULTS AND DISCUSSIONS

#### **Quality management of agri-food products: general characteristics**

Quality can be perceived as a result of meeting the consumer's expectations and/or as a result of the characteristics of the product or service reported to standards, which, as a rule, are complemented by rules and rules. We perceive "quality" as a result of product or service characteristics reported to standards that meet consumer expectations.

The notion of "management" is presented differently, often contradictory. So, Henry Fayol [10] in 1916 wrote that management activity means to predict and plan, organize, command, coordinate and control. Samuel C. Certo [6] argues that "management is the process of accomplishing the organization's

goals by working with and through people and other resources of the organization." To a combination of these opinions, Panaite Nica inclines [11] that "management means the process of efficient and effective realization, through planning, organization, coordination and control, of things through and with other people, in order to achieve organizational objectives ". Generalizing, we support the opinion of Professor Simion Certan [2], who considers that "management, in general, is the set of activities aimed at changing the position of any system in order to achieve the desired result." In our case, the "system" is "the quality of agrifood products".

As a result, "the quality management of agro-food products represents the activity of planning, organization, training and control undertaken by one or more persons in order to combine the factors that contribute to the improvement of the quality of agro-food products and to improve the competitiveness of the agricultural sector under the conditions of internationalization of human activity".

Quality management of agri-food products is required to start from two premises:

- is an area of management, and as a result, the basics of management, including the theoretical foundations, are found in quality management of agri-food products;
- has a high specificity in relation to the classic management that comes from the nature and content of the quality of the agri-food products.

The quality of agri-food products depends to a large extent on the judicious selection and effective application of the methods and techniques applied in quality management, which are influenced, first of all, by the economic system. Most researchers specify two types of economic systems:

a. based on centralized management, dominating the consumer relationship. The quality of the goods and / or services is dictated by the manufacturer. Quality management is done by the person with the position of manager. The focus is on inspection and quality control of the finished product. The degree of involvement of the members of the producer group is low. In

such a system, everyone is doomed to buy and consume what is produced.

b. based on market relations, dominated by the producer-consumer relationship. The quality of the goods and / or services is dictated by the consumer. In this economic system, the key role lies with the client, because of which the business exists and can thrive. Manufacturers are dependent on their customers, so they need to know their needs, including the quality of the product, to meet them. All employees are involved in quality management.

The economic methods and techniques applied in the quality management of agro-food products are based on theories, among which we nominate:

- The theory of comparative advantage stating that potential superiority in exchange relationships depends on differences in comparative costs.

- The theory of free trade or free circulation of products, services, capital and human resources can strongly influence the quality of agri-food products and the competitiveness of the agricultural sector. For this reason, there are constraints such as customs duty.

The theories used by the economic methods and techniques applied in the quality management of agri-food products will be effective in selecting and using binding rules, ie laws, such as:

- The law of the reality of resources according to which everything that surrounds us is a constant size and the economic circuit is nothing more than a closed rotation. The gain of one is a loss for another.

- The Law of Proportional Returns that mentions that increasing a factor increases quality to a certain point beyond which it tends to diminish more and more.

- The competition law, which is manifested by the fact that a multitude of producers - vendors are confronted with a lot of buyers - consumers and each can make decisions only for reasons of market reasoning.

- Say's law [7] provides that aggregate (total) offer creates its own aggregate demand. Otherwise what is consumed must be done.

- The decreasing utility law, according to which, as the quantity of the goods consumed

increases, its marginal utility will tend to decrease.

- The law of the management system unit that requires all elements [9] to be handled based on the same principles (rules).

It should be noted that laws do not act in isolation but as a system of all laws. The most important and sensitive instrument in market relations is the price that broadly expresses "the power of society" over its members as the main and ultimate mechanism governing the

relationship between producer and consumer. The selling price of agri-food products must at least the cost of selling the vegetable products from the Republic of Moldova, as a rule, exceeds those of the costs. Thus, the sales price per ton of grain produced in agricultural enterprises increased from 315 lei in 1995 (Figure 1) to 1,030 lei in 2005 or 3.3 times, then it varies from 1,783 lei in 2010 to up to 2,592 in 2012.

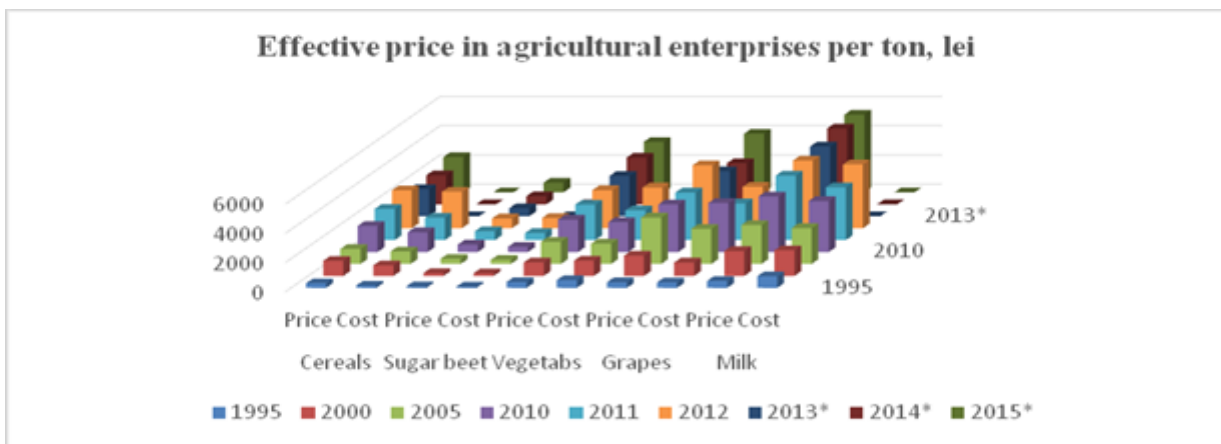


Fig. 1. Effective price in agricultural enterprises (Lei.Ton)  
 Source: authors calculations based on www.statistica.md

However, if in 1995, the price of cereal products exceeded its cost 2 times, then in 2013 - only 4%. The selling price for one tonne of sugar beet in 2013 accounted for 95% of the grain in 2010 accounted for 97% of the cost price. Most of the vegetables had suffered the selling price of which in 1995 accounted for 75%, in 2000 - 89%, in 2012 - 93% of the realization price. The sale price of milk amounted to 60% in 1995 and 97% in 2000 from the cost.

The respective sales price and cost price ratio did not ensure the production of high-quality food, further encouraged abandonment of agricultural land and the expansion of land plots.

The price, influencing the profits or losses of the economic agents, is meant to ensure the balance of the interests of those who grow agricultural production, those who process it and those who market it to put qualitative foods on the table.

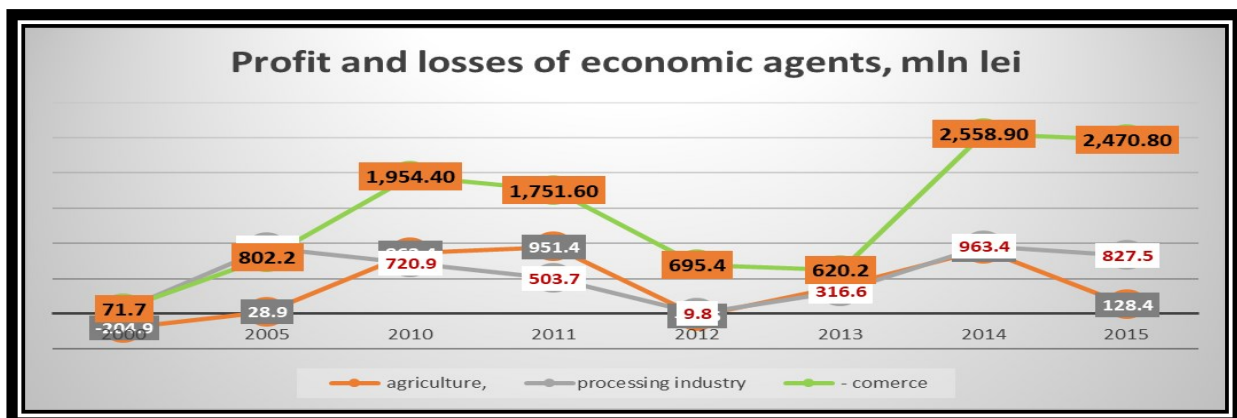


Fig. 2. Profit and losses of economic agents, million lei  
 Source: authors calculations based on www.statistica.md

If in 2000 the economic agents in agriculture, the hunting and forestry economy recorded losses amounting to -204.9 mil lei (Figure 2), then to the processing industry - 70.7 and trade - 71.7 mil lei profit.

We mention the disproportionality of the profit obtained by economic agents in various types of activities. Thus, the profit ratio of economic agents in agriculture, hunting economy and forestry: manufacturing: wholesale and retail trade in 2005 was 1: 32.50: 27.86; in 2010 - 1: 0.83: 2.26; in 2015 - 1: 6.44: 19.24. Thus, the "profit basket" is the economic agents in the wholesale and retail trade.

Public authorities may encourage or limit any activity, including in the quality management of agri-food products through the taxation system. In national agriculture, a very burdensome taxing system, which is sufficiently complicated and inefficient, has been formed. In 2006, the agricultural sector made a 14.4% contribution from sales revenue, and in 2009 the share of taxes and fees amounted to 15.67%. The tax burden on agriculture practically remains at the same level. The value added tax is dominated by 44.4% in 2006 and 58.8% of all taxes, taxes and mandatory payments in 2009, followed by land taxes of 10.5% and 7.6%, respectively.

The quality management of agrifood products is influenced by a large number of factors that are typically grouped into natural, human and material.

#### **Natural resources and quality of agri-food products**

Investigations of scientists from the Moldovan State Agrarian University (Valentin Ungurean, Simion Certan [3], [4] and others) from the institutions of the Academy of Sciences of Moldova (Mihail Lupascu, Ilie Untila and others), the Institute of Pedology, Agrochemistry and Protection of the "Nicolae Dimo" (Serafim Andrieş and others) confirms the correlation between the natural factor and the production quality. For example, according to professors S. Certan and V. Ungurean, sparkling wines made from grapes harvested in the centre zone (Codru) will have superior quality in relation to other areas, and "Cabernet" wines will be more qualitative if they are produced of grapes harvested in the

south of the country. Therefore, obtaining quality agricultural products requires the selection and adjustment of crops to natural conditions that, as P. Bran [1] states, participate with "the force of its laws and its" goodies ", substance (s), energy (e) and information (i) "on the formation of goods.

Natural resources [5] are a sufficiently complicated system to which they belong:

a. The climate in the Republic of Moldova is moderately continental and is characterized by mild and short winter, hot and long summer.

The average annual temperature increases from 8.9 ° C to 9.7 ° C in the North, 10.6 ° C to 11.7 ° C in the South. The absolute annual maximum reaches 40-42 ° C. The length of the vegetation period increases from 167-176 days in the North to about 177-187 days in the South.

b. Atmospheric deposits are characterized by annual rainfall rate in the North ranges from 439 mm to 960 mm in the Centre area - from 428 mm to 734 mm and in the South - from 342 mm to 699 mm.

Insufficient atmospheric deposits, hot and strong winds that cause moisture evaporation bring drought that have become more common in recent years. If in the years 1945-1970 in the centre of the republic there were 7 years with such a drought, then in 1971-1996 - 9 years (since 1982 the drought is repeated over 2 years, and from 1989 over a year). The available water resources are 7.21 km<sup>3</sup> in the average per year and are represented by those 3085 large and small rivers, permanent and temporary streams, natural and artificial lakes.

c. Land resources are the main natural wealth of the Republic of Moldova. Their area is practically maintained at 3,384.6 thousand ha. The agricultural land on 01.01.2016 was 2,499.6 thousand ha (Table 1), including 648.6 thousand ha or 25.95% in public property and 1,851 thousand ha or 74.05% in private ownership.

On our agricultural land the chernozem (about 80%) with a humus content of 2.5 - 5 percent and the average yield of 68 points.

Agricultural land dominated and dominated the arable land which on January 1, 2016 constituted 1,822.9 thousand ha or 72.8% of the total agricultural land.

Table 1. Agricultural land on 1 January 2016

Indicators	Total		Of which			
			public		private	
	'000 ha	%	'000 ha	%	'000 ha	%
Agricultural land, total	2,499.6	100	648.6	100	1,851.0	100
of which: - arable land	1,822.9	72.8	265.2	40.9	1,557.7	84.2
- multiannual plantings	288.9	11.6	37.3	5.8	251.6	13.6
including: - orchards	132.6	5.3	21.9	3.4	110.7	6.0
- vineyards	136.2	5.4	8.1	1.2	128.1	6.9
- pastures	345.0	13.8	339.8	52.4	5.2	0.3
- meadows	2.1	0.1	1.6	0.2	0.5	0.0
- the fall	40.7	1.6	4.7	0.7	36.0	1.8

Source: authors calculations based on www.statistica.md

If the arable land accounted for 40.9% of the total public agricultural land, then the private property - 84.2%. Among the 52.4% public land owned by the agricultural land dominates the pastures, and the lowest share (0.3%) belongs to the meadows.

Multi-annual plantations in 2016 have recovered 288.9 thousand ha, including orchards 132.6 thousand ha of which 110.7 thousand ha (83.5% of the total number of orchards) in private property and vineyards 136.2 thousand hectares of which 128.1 thousand ha (94.05% of the total vineyards) in private ownership.

We find that 40.7 thousand ha or 1.6% of the total agricultural land is plunged. Land plots in private ownership are 36.0 thousand ha or 88 percent.

For the territory of our country is specific varied relief, which is a hilly plain crossed by valleys and ravines. Only 20.2% of the territory is inclined to a degree. Such land ranges from 10.8% in the North to 48.9% in the South East.

On average, 60.6% dominates the inclined terrain from 1 ° to 5 °. The largest share of them (72.1%) is in the north of the country. The lands with slopes of more than 8 ° form 4.4% and are specific to the central area (Codru - 8.1%). About 80% of the total stretches are west, south and east and only 20% north. At least, we consider inefficient when over 58% of the existing vineyards in the Republic of Moldova are located on land with a slope of up to 5 degrees. At the same time, almost half of the 5 to 10 degrees terrain are arable. Of all arable land, 45 percent have

a slope of 5-10 degrees. The peak is that 24% of the lands with a tilt of more than 10 degrees are arable.

This relief causes land degradation, landslides and land erosion. The total surface area of the sloping land grows from about 21 thousand ha in 1970 to just over 81 thousand ha now. It is highlighted the area of the Centre, where the area of landslides is maintained at the level of 53% of the total in the republic. If in 1965 the eroded land consisted of 594.2 thousand ha (23.6% of the total agricultural land) then it now forms 35%. The share of heavily eroded land increased from 3.8% to 4.5%, respectively. The annual loss of fertile soil as a result of erosion is about 26 thousand tons. Agricultural production losses are estimated at 525 thousand tons of nutrients on arable land and 57 thousand tons of grapes and fruit on the fields planted with trees and vines.

#### Human factor in quality management of agrifood products

A. Smith's statement [12] "human activity creates the mass of goods" is incontestable. In the quality management system for agri-food products (Figure 3) man has the following roles:

Natural growth has evolved from + 8.0 in 1990, including + 9.3 in urban and + 6.6 in rural areas to -0.2 in 2014, including + 0.6 in urban areas and -0.9 in rural areas. Reducing natural growth is accompanied by an aging population. Currently, the aging rate is 16.2%, including men - 15.9%, women - 16.4%, and it exceeds the 12% indicated on the G. Bojio-Gamier scale.

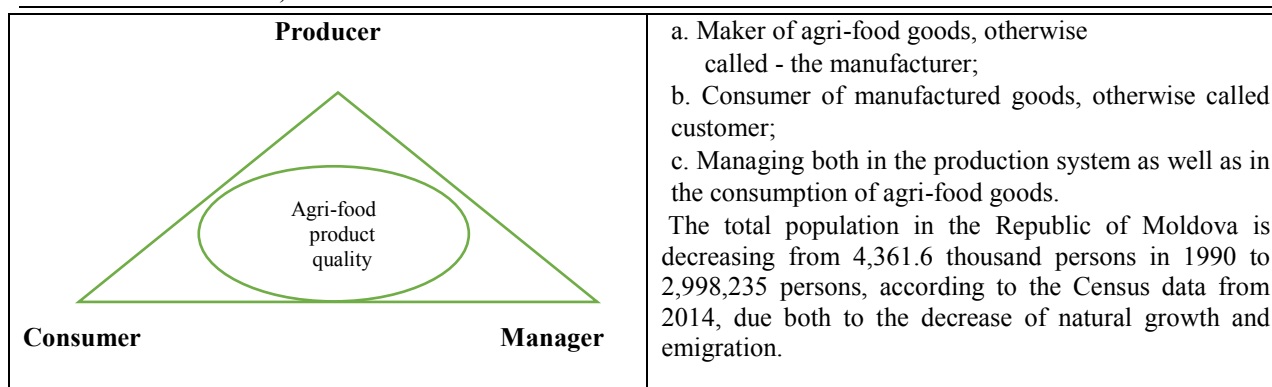


Fig. 3 Person and quality

Source: Certan Simion, Teoria Administrării Afacerilor, CEP, Chişinău, 2012

Emigration has contributed most to reducing human potential. The total population in our country working or looking for work abroad has increased from 138.3 thousand persons in 2000 to 311 thousand persons in 2010 or 2.25 times, then slightly varies to 319 thousand persons in 2016.

The number of the population in the rural area of our country working or looking for work abroad increased from 82.1 thousand persons (59.36% of the total number of those left) in 2000 to 220.5 thousand persons (70.9% of the total number of those left) in 2010 or 2.69 times, and rises steadily to 224.9 thousand people (70.5% of the total number of those left) in 2016 or about 2 percent compared to 2010.

According to the Moldovan diaspora mapping study carried out by the International

Organization for Migration (IOM) experts, mission to Moldova, over 70 percent of Moldovan emigrants are young people up to 40 years of age. The selected and processed information shows that in 2000 the number of those aged between 25 and 44 from the rural area working or looking for work abroad amounted to 38.7 thousand persons (47.1% of the total number of those who left the rural area) and rises to 130.7 thousand people (68.1% of all those left out of rural areas) in 2016. The same ILO study claims that emigrants are those with studies. It is clear that the number of economically active population remaining in the country decreases from 1696 thousand in 1995 (Table 2) to 1266 thousand in 2015 or 27.13%.

Table 2. Distribution of the population on economic activity's participation

	1995	2000	2005	2010	2011	2012	2013	2014	2015
Population, total	3,604	3,639	3,595	3,582	3,560	3,560	3,558	3,557	3,555
Of which: labor force activity rate,%	1,696	1,655	1,422	1,235	1,258	1,215	1,236	1,232	1,266
of which employed	1,673	1,515	1,319	1,143	1,173	1,147	1,173	1,184	1,203
occupancy rate, %	46.5	41.2	36.6	32.1	33.0	32.2	32.9	33.3	33.8
of which occupied in agriculture	711	765	537	315	323	303	338	361	382
employment rate in agriculture,%	42.8	50.5	40.7	27.5	27.5	26.4	28.8	30.5	32.0

Source: authors calculations based on www.statistica.md

The rate of activity decreased from 47.1% in 1995 to 35.6% in 2015 or 11.5 percentage points. Obviously, the number of employed fell from 1,673 thousand in 1995 to 1,203 in 2015 or by 28.1%. The employment rate is reduced from 46.5% in 1995 to 33.8 in 2015 or by 12.7 percentage points. The number of those employed in agriculture decreased from 711 thousand in 1995 to 382 thousand in 2015

or 1.86 times. The employment rate in agriculture has fallen from 42.8% in 1995 to 32.0% in 2015 or with 10.8 percentage points. The most pronounced was the productive population. If the number of 25-54 years employed in the national economy in 2005 amounted to 977 thousand, then in 2015 there were 883 thousand people or about 10% less. The number of persons aged 25-54 employed

in agriculture decreases from 348.1 thousand persons in 2005 to 231.7 thousand persons in 2015. In 2005, the share of the population aged 25-54 years in agriculture was 35.63% and in 2015 - 26.25 percent.

The quality of agri-food products is influenced by the consumer's behaviour, which is largely dictated by its purchasing power. Average monthly incomes available per person in the Republic of Moldova increased from 586.6 lei in 2005 to 2,060.2 lei in 2016 or 3.62 times.

In rural areas, average incomes per person increased from 1,054.7 lei in 2010 to 1,771.3

lei in 2016. Thus, the main problem for the consumer of the Republic of Moldova, especially the rural one, is the quantity and not the quality.

Currently, there are spectacular changes in the ratio of employees, self-employed, unpaid family workers and other categories of people employed in agriculture. Thus, as shown in Table 3, among those employed in agriculture, the number of self-employed workers is high, with 372.0 thousand (72.6% of the total) in 2005 and 258.6 thousand (72.4% of the total) in 2015.

Table 3. Main indicators of populations' purchasing power

	Total		Employed		Self-employed		Unpaid family workers		Owners	
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
Total, 000' people	1,318.7	1,203.6	830.6	787.6	464.7	362.8	14.6	45.9	8.7	7.2
in rural areas	745.1	648.3	339.6	308.8	391.3	291.3	13.1	45.3	7.0	2.9
of which: agriculture	512.5	358.4	127.6	54.8	372.0	258.6	12.8	44.6	1.69	2.88

Source: authors calculations based on [www.statistica.md](http://www.statistica.md) and <http://data.worldbank.org/indicator>.

The number of employees in agriculture has decreased from 127.6 in 2005 to 54.8 thousand persons in 2015 or 2.3 times. Extending private ownership of land, organizing peasant farms (farmers), increasing the number of self-employed workers in agriculture has led to a significant increase in the number of decision-makers, managers. Sure that requires high-quality, productive managers. Therefor "Making people productive through education, - claims Peter Drucker [8], - is "the first of the challenges of our time".

The number of those with higher education and special occupations in the national economy is increasing from 418.1 thousand persons (31.7% of the total) in 2005 to 443.0 thousand persons (38.7% of the total) in 2010 and 464.6 (38.6% total) in 2015 or 11.1% more than in 2005. In agriculture, those with high school, gymnasium and without studies form 352.5 thousand (68.8% of the total employed in agriculture, hunting and forestry) in 2005 dominate categorically in 183.1 (61.9%) in 2010 and 229.0 (63.9%) in 2015. Even if the number of those with higher education and special environments occupied in agriculture, the economy, hunting and

forestry increases from 31 thousand persons (7.4% of all those with higher education) in 2005 to 31.1 thousand people (7.0%) - in 2010 and 42.1 thousand (9.1%) in 2015, it remains far too insufficient.

It is well-known that material resources are required to create values, especially qualitative.

#### **Material resources and quality of agrifood products**

Material resources are primarily represented by fixed assets. Total fixed assets in agriculture, hunting, and forestry increased from 7,687 million lei to their original value at the end of 1995 to 14,189 million in 2014 or only 1.84 times.

If fixed assets for agriculture, hunting and forestry in 1995 accounted 35.0% of the total, then in 2014 - only 6.5%, which is very serious and basically reproduces in the current state of the national agriculture. Vertiginous increased fixed assets in manufacturing from 4,367 million lei in 1995 to 26,842 million lei in 2014 or 6.14 times. However, their share dropped from 19.9% in 2005 to 12.2% in 2014. If in 1995 the fixed assets in the manufacturing industry accounted for 56.8%

of those in agriculture, hunting and forestry, then in 2014 they exceeded 1.89 times. In Moldova, according to the 2011 agricultural census, only 16,064 agricultural farms (Table 4) or 2.3% of the total, owns tractors. Only 990 farms have mini-tractors.

Tractors of all types used 687,765 agricultural holdings, which make 76% of the total indicated in the census.

Table 4. Number of agricultural machinery and equipment, according to the 2011 census

machines and aggregates (MA)	Farmers that used MA	Number	Farms owning MA in property	Number of used MA	
				total	<10 years old
Tractors, total	687,795	23,381	16,064	24,695	19,092
of which: - on wheels	672,795	21,377	15,342	22,303	16,972
- on the rails	36,982	2,004	1,537	2,392	2,102
Garden	6,379	965	990	1,090	449
Trucks	75,309	6,260	4,672	7,604	6,788
combines and harvesters	98,746	2,854	1,652	3,000	1,997
sowing and planting	581,455	8,915	5,139	8,431	5,436
Cultivators	579,752	12,154	7,934	12,045	8,198
plows for tractors	673,266	13,882	10,099	13,782	9,736
irrigation	3,388	712	475	773	266
milking	190	104	98	191	69
for treatment	24,425	2,445	1,556	2,627	1,374
other	53,048	8,497	3,613	9,382	6,214

Source: authors calculations based on www.statistica.md

Mini-tractors are used by 6,379 households. The agricultural holdings owning tractors owned 1.54 tractors. A farm with owner-occupied tractors provided services to about 43 households, and those holding mini-tractors - 6.44 farms.

Trucks were used by 75,309 agricultural farms or 11.2% of households using tractors of all types. Combines of all types and other harvesters used 98,746 trucks were used by 75,309 agricultural farms or 11.2% of households using tractors of all types.

Combines of all types and other harvesters used 98,746 agricultural holdings, which make up 14.7% of the number of tractors. The catastrophe of few households (3,388 or 0.5%

of those using tractors) uses irrigation machinery and equipment.

Of the total of 24,695 tractors used, 77% or 19,092 units are 10 years old and over. The same age of 10 years and over have 89.3% of trucks, 66.6% of combine and harvesting machines, 64.5% of seeders and planters, 68.1% of cultivators, and 70.6% of tractor plows. The machines, equipment and transmission systems being outdated have an advanced degree of physical and moral wear. Obviously, they cannot ensure the desirable quality of agri-food products.

The quantity and quality of agri-food products depend to a large extent on natural and / or chemical fertilizers.

Table 5. Fertilizer use in agricultural enterprises

	1995	2000	2005	2010	2011	2012	2013	2014	2015
Natural fertilizers, total, 000' of tons	1,517.5	22.2	38.7	15.1	29.2	20.0	41.5	28.1	56.2
On average, 1 ha of seed, tons	1.2	0.03	0.04	0.02	0.04	0.03	0.05	0.03	0.07
Chemical fertilizers, total, 000' tons	11.2	11.3	16.5	20.1	23.6	34.7	44.8	72.4	40.1
On average 1 ha of seed, kg	9	10	21	24	29	44	53	84	45.8

Source: authors calculations based on www.statistica.md



The use of natural fertilizers has a clear tendency to decrease from 1,517.5 thousand tons in 1995 (Table 5) to 22.2 thousand tons in 2000 or 68 times, then it varies from 15.1 thousand tons in 2010 to 56.2 thousand tons in 2015. Sure with 20 kg (2010) or even 1,200 kg (1995) of natural fertilizer per hectare of seed, it is impossible to practice high-performance agriculture and get quality products.

Chemical fertilizers used in agricultural enterprises increased from 11.2 thousand tons in 2001 to 72.4 thousand tons of active substance in 2015.

Report on each ha of seedlings, chemical fertilizers increased from 9 kg / ha in 1995 to 84 kg / ha in 2014 or 9.3 times and reduced to 45.8 kg in 2015 or 1.83 or in relation to 2014. But they also remain insufficient to guarantee an acceptable and stable production.

## CONCLUSIONS

In conclusion, we find that the resources that ensure the quality of the agrifood products are at least alarming. The natural question arises "What to do?"

Improving the quality of agri-food products and ensuring their competitiveness requires:

(i) Improving the natural potential that requires consistent investment. Even if they increased from 6,060 thousand lei in 2000 to 72,369 thousand lei (current prices) in 2014 or 11.9 times, investments for environmental protection and rational use of natural resources remain very modest. Moreover, it leaves their structure desirable. If in 2000 the investments for the protection and rational use of land exceeded those for the protection and rational use of water resources by 3.59 times, then in 2014 the situation reversed and accounted for 59.88%. Basically, investment in air protection is lacking.

(ii) To develop and apply economic mechanisms and instruments that can contribute to the natural increase of the population, especially of the rural ones.

(iii) Stop, or at least temper, the emigration of our country's citizens, especially the youth, by

developing and implementing ways that would equal or at least bring the incomes of the rural population to the rural areas of the countries in eastern EU.

(iv) Encourage [5] the growth of agri-food products processed from cereals processed from vegetables, fruits and grapes, especially bottled wines, home wines and reduced agri-food commodity trade.

(v) Enhance the application of technologies and techniques that ensure the quality of agri-food products. To this end, we consider it imperative to at least double the investment in agriculture. Currently, investments in agriculture, hunting economy and national forestry, even if they have risen from 0.09 billion in current prices in 1995 to 1.93 billion lei in 2016, forming 10.7% in 1995 and 10.2% in 2016, are far too short.

(vi) Encourage the crediting of agricultural producers by public authorities, especially for planting orchards and vineyards, for expanding irrigated areas, for purchasing the means of production and for everything that would contribute to the efficiency of this sector.

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