

## CLUSTERIAL STRUCTURES OF PRODUCTION AND COMMERCIALIZATION OF AGRICULTURAL FOOD PRODUCTS

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### Abstract

*The agrarian sector in its composition constitutes the nucleus of economic and social rural complex. The dynamic development in scientific directions argued of the agrarian sector, will assure also rhythms of economic development of the rural space.*

### INTRODUCTION

Clusters constitute integrated structures of economic agents from different organizational and legal forms that: activate in different branches, but, in one and the same field of the agricultural food sector; they are placed relatively compactly in the territorial aspect; they have a relative comparable level of insurance with the main factors of production; they have common interests as regards the dynamical and long development of this field from the many branches composition of agricultural food sector.

At the same time, the differences of these integrated systems are more multiple and more diversified in comparison with their common characteristics. It is meant the possibility of application in the cluster as of the integration processes on the vertical line, so of the association processes on the horizontal line; every economic agent has the right to be a member of more clusterial structures in functions of the directions and specialization levels; managerial contribution of the head bodies within the cluster is strictly determined by the empowers delegated to these bodies, from the part of economic agents involved in clusterial structures.

### MATERIAL AND METHOD

The investigation methods consist in a systemic, comparative analysis and in the complex approach of the research subject

depending on the offered aims and tasks. There were used mathematic and statistic methods in the study, such as: classification, synthesis, static, comparative and dynamic analysis, correlation analysis, methods of induction and deduction, graphic representation of the events and investigated phenomena.

### RESULTS AND DISCUSSIONS

If in holdings the managerial decisions are elaborated and applied by top managers (either by holdings owners; or wage managers), then the advancement of the tasks within the clusters that must be solved in an operational and argued way makes the cluster's members by the mechanism of the empowers delegation (fig. 1).

As the result, managerial capacities within the holdings are manifested by a relatively reduced group from the top head of the holding ( $M_{hold}$ ) whereas the execution of these decisions is put in the task of an important number of holding members ( $M_{max}$ ). In case of clusters the situation is narrow opposite. The managerial process within the both integrated structures is differed one from each other. Taking managerial decisions within the cluster is based on the main reasons of all the members, and their execution – at a higher level of knowledge and professionalism of executants, as usual, employed workers. Besides the decisional aspects, that seem to be more efficient and more democratic within the

clusters, than in case with holdings, the first ones are more open (more accessible) for all the economic agents, regardless of the fact if they are natural or juridical persons. As it is known this element of integration process is very important for the autochthonous agriculture at the present phase of development, because the weight of the production volume of individual households and those domestic and auxiliary ones, without speaking about unrecorded farmers (by farmer), constitutes more than a half of all the brutal agricultural production volume.

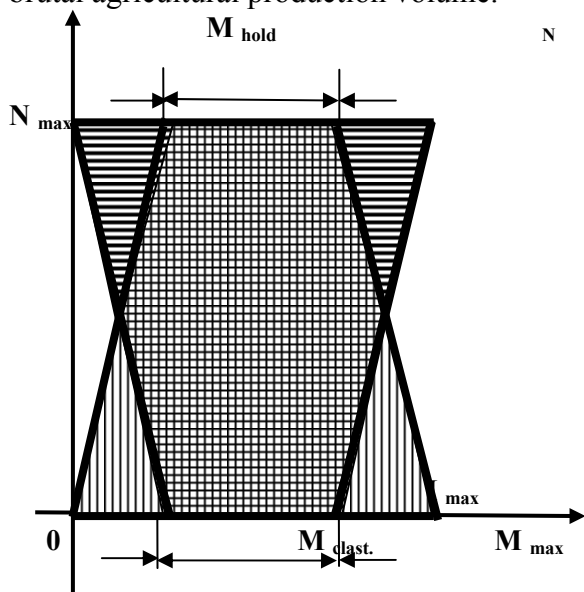


Fig. 1. Management system within integrated structures. N – hierarchical levels for taking decisions. M – numbers of the persons involved in the decisional process.

The cluster is created with the intention to equal, in one way or another, the incomes of its members in estimation of a unit effort. Likewise in holdings, all the hierarchical steps are harmoniously enlightened in the scientifically argued structure of the cluster; the proportionality principle is observed between the steps (phases) of the agricultural food products movement; practically the access is blocked in the composition of the cluster of speculative structures, of different types of intermediates, midfielders, firms created in an artificial way, sometimes for a single affair or for a day etc.

The regrouping of the production potential under the integration form on the vertical line of the all the cost chain is favorably for every enterprise

(economic agent) separately and completely for the national economy on the whole.

The economic effect is stipulated by durability and transparence of cooperation relations at the level of economic agents from the composition of integrated structures, by lowering of the natural and economic risks impact, by support (by case) of the economic activity from the state part. Participation of the economic agent in clusterial structures means its involving into the cost chain or into another one with all the derivate consequences on the theoretical plan. Obviously, as higher the economic efficiency of the cost chain functioning is, so more efficient will be also the members cluster functioning.

The level of competition in case of integration on the vertical line in the respective market is in growth, because the economic agent responsibility increases regarding another one that is placed hierarchically higher that receives goods from its predecessor and promotes it in continuation. At the same time the level of competitively is growing between the clusters, holdings enterprises non-involved in these integrated structures etc.

Formation of clusterial structures has the aim to assure proportional and harmonious development of all the hierarchical steps. Naturally the result of this intention is finished with the great reproduction at an argued level not only to the cluster members, but to all the components of the production potential from clusterial structures. At the same time the establishment and te durable keeping of proportions of structures well argued at the cluster level (holding, corporation etc.) in an automatic manner leads also to the correlation respect of the most efficient between the branches (under branches) at the national and global levels.

But at the moment it remains to establish hexogen factors of destruction of the agrarian sector at the phase of post privatization. As an example of argumentation the cost chain was selected regarding the production, transport, proceeding (including - package) and commercialization of the product made under homed cattle meat. The social necessary outlays in a normal mode on the all the mentioned chain (we underline the fact) could have a security under the income direct

proportional form (collection). In any case, the theory of fluxes (refluxes) free of money calls us to this thing that permanently has the intention to be oriented to those income sources that assure the maximal result obtaining (income). Consequently, a state of equalization of the income on a unity of income appears reflected on the conventional diagram (fig.2)

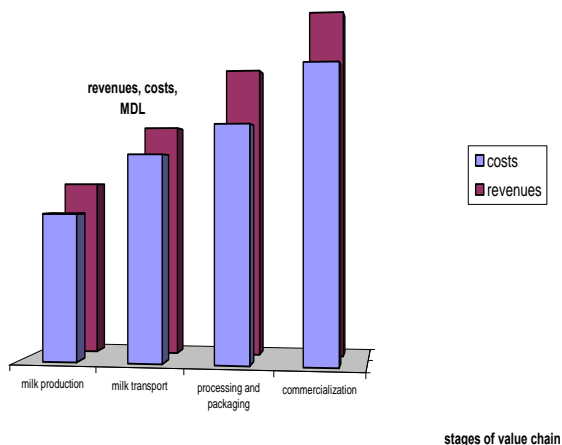


Fig. 2 Attended correlation (virtual) between the incomes (collections) and costs at the different phases of the cost chain of promotion of homed cattle meat.

But in reality the situation is different. The most traditional estate is characterized by the fact that the collection of agricultural producers are smaller than the costs, but the collection of superior hierarchical steps of the cost chain are higher in comparison with their necessary social costs (fig.3).

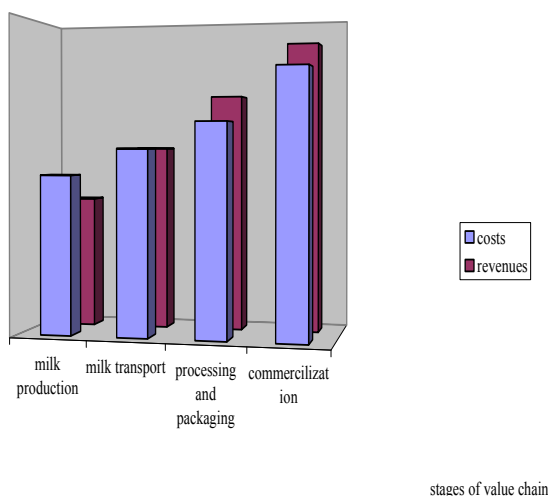


Fig. 3 Real correlation between the incomes (collection) and costs at the different phases of the cost chain of promotion of homed cattle meat.

Adequate consequences of evident distortions between the prices of cost and those ones from the market, more precisely-those ones of commercialization of homed cattle meat to final consumers are easily imaginable.

The structural proportions of the cost chain in milk production and in commercialization in the Republic of Moldova have dimensions better argued and more acceptable for agricultural products. This conclusion is made on the basis of the comparative estimations (analytical) of the level and structure of milk prices at the different phases of the cost chain respectively in the Republic of Moldova and in some other European countries (tab.1).

Table 1. Level and structure of realization prices of milk at the different steps of the cost chain (year 2007).

Countries	Market price of the milk, at the final stage of consumption, dol. SUA/100kg	Including			Structure of market price of the milk, at the final stage of consumption, %			
		Agrarian sector	Industry and trade	VAT	Total	Including		
						agriculture	industry	VAT
Russia	99	38	52	9	100	39	52	9
France	88	38	47,5	4,5	100	43	52	5
Germany	87	47	34,5	5,5	100	54	39,5	6,5
Holland	87	48	34	5	100	55	39	6
Lithuania	74	31	32	11	100	39	46	15
Czech Republic	73	41	28,5	3,5	100	56	39	5
Poland	67	40	22,5	4,5	100	59	34,5	6,5
Ukraine	67	31	24,5	11,5	100	47	36	17
Moldova	50,2	24,8	21,7	3,7	100	49,4	42,6	8
Byelorussia	39	19	16,1	3,9	100	48	43	9

Source: Republic of Moldova-estimated by the author.

Table 2. Tendencies of lowering of livestock of cattle and lowering of production volumes of milk and meat of homed cattle at the national level.

Indicators	Years									year 2008 in % towards the year 2000
	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Livestock of horned cattle, thousand head, including cows	423 275	394 269	405 272	410 279	373 256	331 231	311 217	299 207	232 169	54,8 61,5
Milk production, thousand tone	574	579	604	593	628	659	628	604	543	94,5
Production of caw meat (in growth after sacrifice, thousand tones)	18,0	15,6	16,1	16,3	16,1	15,6	15,0	15,2	12,0	66,7
Production in estimation on habitant head, yearly, kg										
- milk	157,5	159,3	166,5	163,9	174,1	183,0	174,9	168,7	152,0	96,5
- horned cattle meat	4,9	4,3	4,4	4,5	4,5	4,3	4,2	4,2	3,4	69,4

Corporate sector regarding the milk production and homed cattle meat in the first years is persuaded also by the small and middle sector of production, including farmers and those auxiliary ones. As the result the general volume of production is reduced, the

dynamic of their lowering from year to year being reflected in the tab. 2.

## CONCLUSIONS

Although it is practically known that the Republic of Moldova can be appreciated as an agrarian country, with a preponderant rural population and very small incomes in the geographic centre of the richest continent in the world, that Europe constitutes. As pessimistic this estimation could be, it is objective, because it corresponds to the reality. The conclusion that at present an especial attention must be taken at first to the rural space is discussed widely by the savants in the matter of economic sciences.

Obviously, the lack of the autochthonous production at present is widely compensated

by the import supply, about which fact it was spoken in the analytical part of the paper.

Formation of the clusterial sector of production constitutes a solution practically deprived of the alternative of the above mentioned problems.

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