

# Romanian agriculture performance under three restrictions : property, family and market

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# Introduction

- Most of European countries have an advanced industrial economy. Compared to these, Romania's economy is an agrarian-industrial type.
- This profile was achieved in 1975 and lasted to this day. This fact is demonstrated by the urban population – rural population ratio, as well as industry or agricultural share in GDP.

# Performance of Romanian agriculture

- The agrarian-industrial profile determines the Romanian economy to be an economy of resources, rather than an economy of performances.
- For this reason, agriculture as a branch of resources, keeps its large share in the national economy, compared with the EU (the share of agriculture in GDP is reduced by half, every 10 years → in 2000, compared to 1990, it decreases from 21.8% to 10.80%, and at the end of the next decade, in 2010, reaches 5.4%).
- Romanian agriculture registers the lowest performances from all the EU countries.

## Yields per hectare, 1985 – 2009 (Kg / ha)

Items	1985	1990	1995	2000	2002	2004	2006	2008	2009
<b>ROMÂNIA</b>									
Cereals, of which:	3102	3010	3085	1856	2439	3995	3102	3247	2824
- wheat	2338	3235	3090	2299	2058	3477	2773	3422	2430
- maize	3852	2760	3191	1606	2902	4549	3575	3227	3416
Sugar beet	22303	20.148	19928	13778	22947	32393	29431	34889	38607
Sun flower	1494	1409	1358	822	1106	1682	1554	1446	38607
Potatoes	20657	10999	12360	12273	14398	16654	14185	14048	15381
Vegetables	14448	9446	12008	10866	11895	15915	14886	14241	14662
<b>U.E.</b>									
Cereals, of which:	4096	4320	4270	4540	4731	5339	4691	5213	5066
- wheat	4265	4811	4668	4985	4969	5616	5084	5673	5405
- maize	5418	4811	5530	5520	6500	7156	6541	7142	6922
Sugar beet	42487	48039	46790	55171	57848	59542	59154	66478	71036
Sun flower	1556	1614	1362	1408	1545	1837	1737	1889	1791
Potatoes	22236	22123	21301	25596	26854	28617	25071	28992	30038
Vegetables	20489	20664	21539	24315	24470	26541	25180	26186	27163

Source: FAOSTAT, data retrieved on line: <http://faostat.fao.org>, last accessed 9.04.2011

In the analyzed period, the yields achieved in Romania were half and often under half of the EU average

## Yields per animal, 1985 – 2009

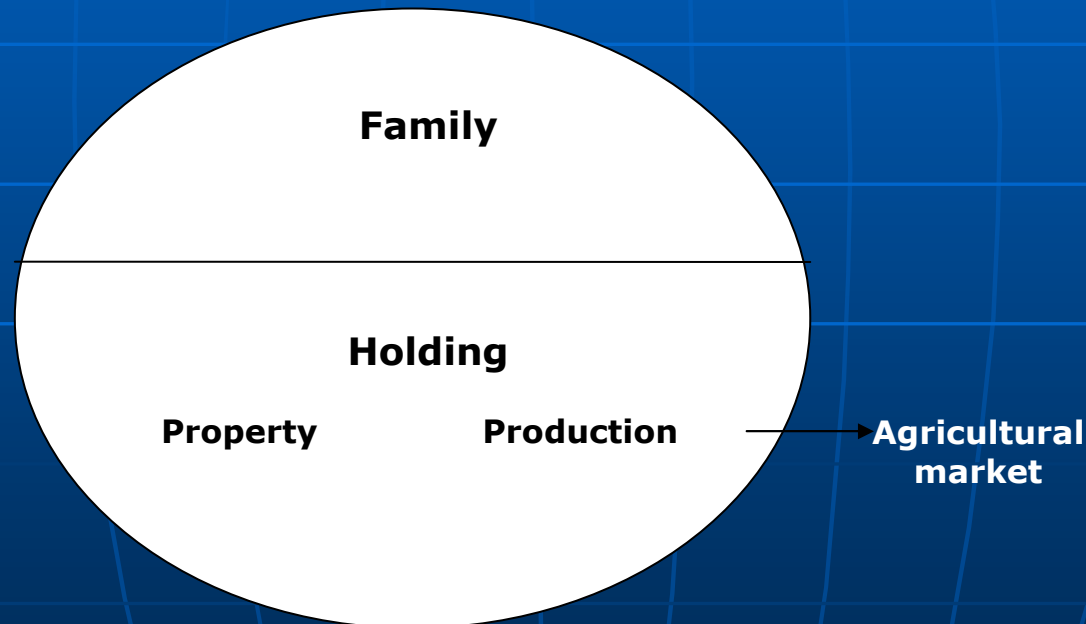
Items	UM	1985	1990	1995	2000	2002	2004	2006	2008	2009
<b>ROMÂNIA</b>										
Cattle meat	Carcass weight kg/year	154	146	135	116	126	159	137	139	163
Pig meat	Carcass weight kg/year	79	84	85	87	89	81	82	83	82
Cow milk	Kg/year	2007	1744	2910	2542	2753	3115	3625	3426	3458
<b>U.E.</b>										
Cattle meat	Carcass weight kg/year	235	253	252	256	259	272	276	280	280
Pig meat	Carcass weight kg/year	82	84	85	86	87	88	87	87	88
Cow milk	Kg/year	3986	4345	4858	5420	5577	5763	6013	6104	6117

Source: FAOSTAT, data retrieved on line: <http://faostat.fao.org>, last accessed 9.04.2011

# Causes

- The causes for these low performances in Romanian agriculture are:
  - Low level of the factors of technical progress (mechanization, chemicalization, irrigation and other);
  - Size and quality of agricultural population;
  - Size and structure of land ownership;
  - Links between production and agro-food market, from CAP perspective

- Most economists approach only factors of technical progress (inputs).
- Through this paper, we mainly approach the last three causes: population, property and market links.
- Such an approach is motivated by the internal structure of family farms, which in Romanian agriculture are nearly 4 million (figure no.1).



**Figure.1 Structure of family farms**

# The agricultural population

- In Romania there are more than a third of EU farmers; however, agricultural production is only a tenth of the production recorded in EU countries.
- In the last 20 years the rural population has experienced some negative aspects that have led to a decrease in its production potential. In a synthetic approach, here are some of them:
  - Decrease of rural population from 9.6 million people in 1990 to 10.8 million people in 2008;
  - Increase of average age and thus, increase the third age people involved in productive activities;
  - Natural growth of population has registered negative values, which have fluctuated between 94-96%.
  - The appearance of a new phenomena, especially after Romania's EU entrance, with dramatic consequences in the equilibrium, already fragile, of socio-economic relations in rural areas, namely the external drain, estimated at nearly one million active people.
  - Maintaining and even reducing the level of training and professionalization of the rural population - it is estimated that more than 90% of rural population has only elementary school.



- All the negative aspects are common to employed population in agriculture, but more dept. For example, in agriculture, in 1992, the population was 3.5 million people, and in 2008, 2.5 million people. The decrease was, as the one in the countryside, of one million persons.
- The problem, in terms of efficiency, is whether this decrease in the number of people active in agriculture was compensated by increased technical equipment.

Items	1992	2008
Cultivated agricultural area per person (ha/person)	2,63	3,68
Cultivated agricultural area per tractor (ha/tractor)	56,1	52,3
Number of farmers per tractor (persons/tractor)	21,34	14,20

Source: own calculation, Romanian Statistical Yearbook 2009, Time series 1990-2008,

The data of Table 4 reveals that, in 2008 compared to 1992, a tractor had to replace the work of 7.14 people that left the branch, which means that the cultivated agricultural area per tractor had to be of 26.02 ha ( $7.14 \text{ persons} / \text{ha} \times 3.68 \text{ ha} / \text{person}$ ) and not 52.3 ha, how many are in present → which took Romania far away from the EU average (11,8ha/tractor)

- Other two socio-demographic phenomena with dramatic effects on the Romanian agriculture potential are given by:
  - the age and
  - natural growth of people working in the branch.
  
- Nowadays, young farmers (under 40) represent only 10% of the total population of farmers and they own less than 10% of agricultural land. By contrast, farmers that have exceeded retirement age (over 65 years) represent 43% of the total number of farmers, and own 31% of agricultural land.
  
- The negative values of the natural growth are due not only to the higher degree of aging of agricultural population, as well as significantly lower income, poorer quality of public services and much lower promoting opportunities (natural growth of population has registered negative values, between 94-96% ).

# Land ownership

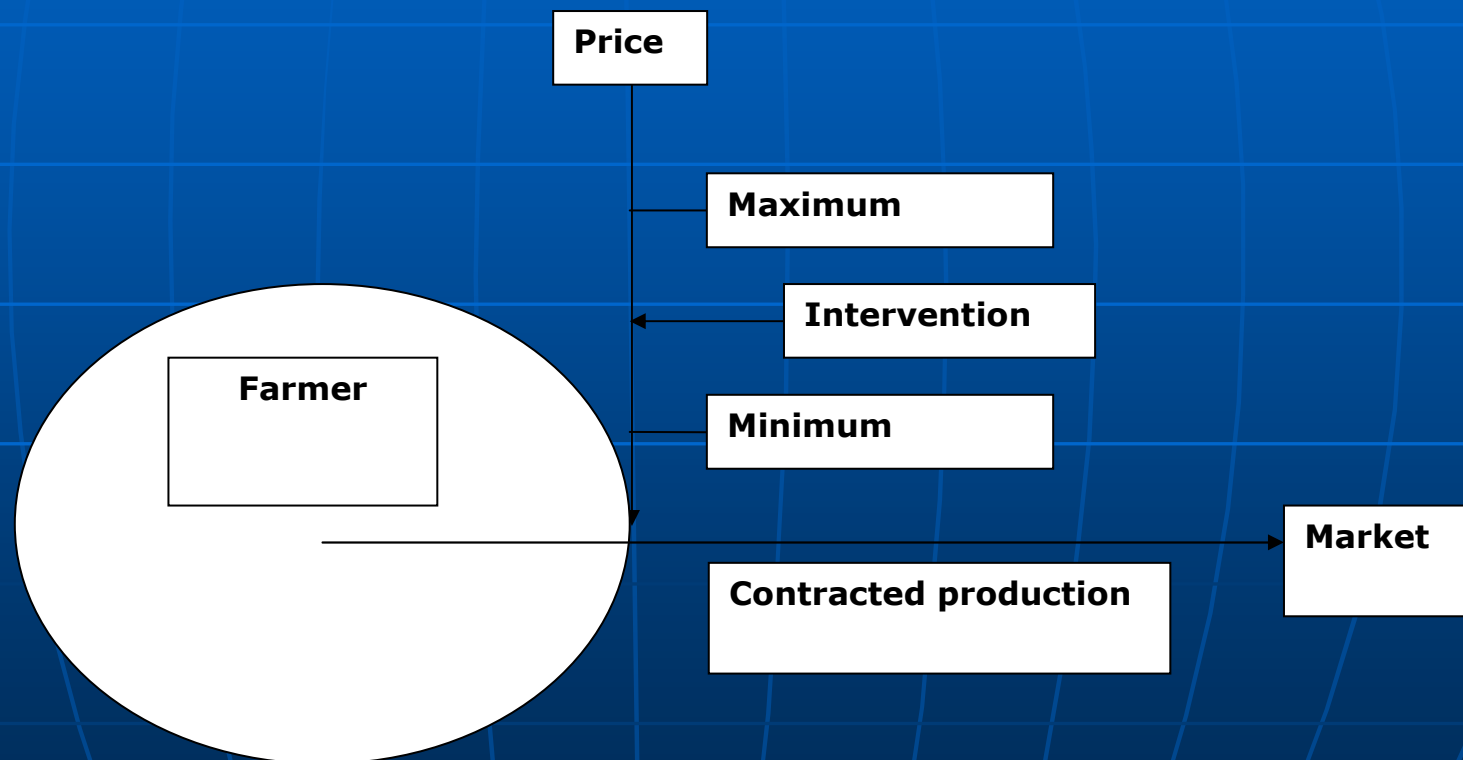
- Major shortcomings with direct restrictive effects over the agricultural performance:
  - Very small size of farms → on average 3,5 ha/farm → the smallest in the EU countries
  - The high degree of farm parceling, on average are 4.5 plots
  - The legislative framework is ambiguous and inconsistent in terms of stimulating the fusion of parcels and increase the farm size
  - The delay in completion of the cadastre actions and land registration, which causes a high level of volatility in the property rights regime;

# Agricultural production and market

- Agricultural production must be analyzed distinctly:
  - Comercial farms (large farms) → there are over 31.000, own 5.8 million hectares and have an average size of 190 ha
  - Family farms (small farms) → there are over 3.8 million, own 13.3 million hectares and have an average size of 3.5 ha
- Take into consideration the main indicators characterizing agriculture after 2007, mentioned above, we can see that the CAP actions have not led to a significant increase of agricultural performance.
- Natural question that can be ask is: did CAP correctly configure the Romanian agricultural support?
- In order to answer correctly to this question, we need to analyze the CAP philosophy, on two doctrinal directions: Pillar I and Pillar II.

# Pillar I

- According to the operation philosophy of Pillar I, the agriculture of the first 15 member states was oriented and supported to produce as much as possible for the market.

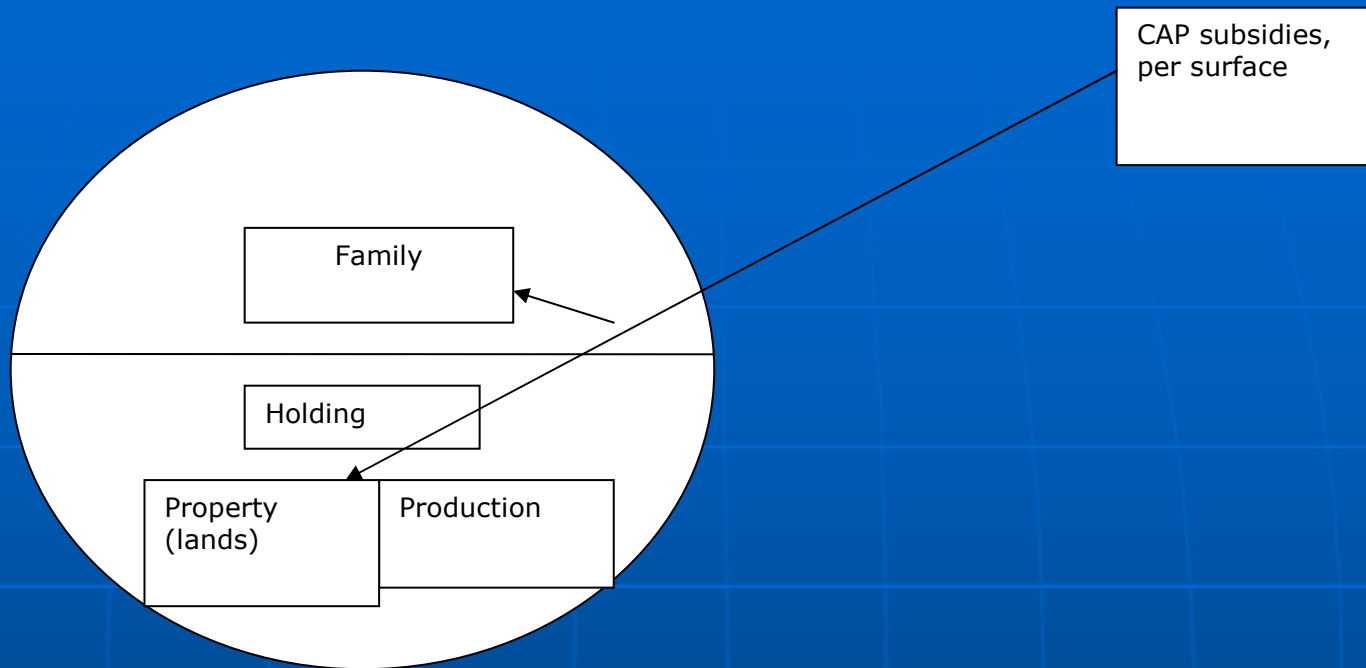


*Figure 2*

**Intervention scheme, under Pillar I, through price over the producers, between 1962 and 2003**

- The intervention scheme throughout the period when CAP was implemented only by Pillar I, between 1962 and 2003, was, in essence, quite simple, because:
  - the farmer received financial support only for the production that was valued on market, based on recognized contractual relationships;
  - the financial support was the result of a scheme where the intervention price was the key factor (Figure 2);
  - intervention price fluctuated within predetermined limits – minimum or maximum – depending of the demand intensity, so that if the market interest was higher for a specific product, the intervention price increased to a maximum, and vice versa;
  - The granted subsidies aimed, naturally, the development of farm productive capacity, rather than the unproductive consumption.

- Decision to reduce support prices has established 2 categories of member states, as following:
  - the first one comprises the 15 countries that entered EU by the end of 1995, and have managed to improved their agricultures due to the price support advantages;
  - the second one groups the 12 countries that adhered to EU after 2003; these countries' economic and agricultural performances were less than modest, compared to the ones from the first category.
- Since 2003, in the Pillar I view support occurs outside the rules of agricultural markets, and has a main objectiv:
  - increasing **the farmer families' income, according to the following scheme:**



**Figure 3**  
**Support scheme per area, after 2003**

- This scheme shows that the support is achieved according to the farm area (conditions: 1 ha / farm and 0.3 ha / plot) and not the production volume or production for market
- The main purpose of support is to increase the farmers' incomes

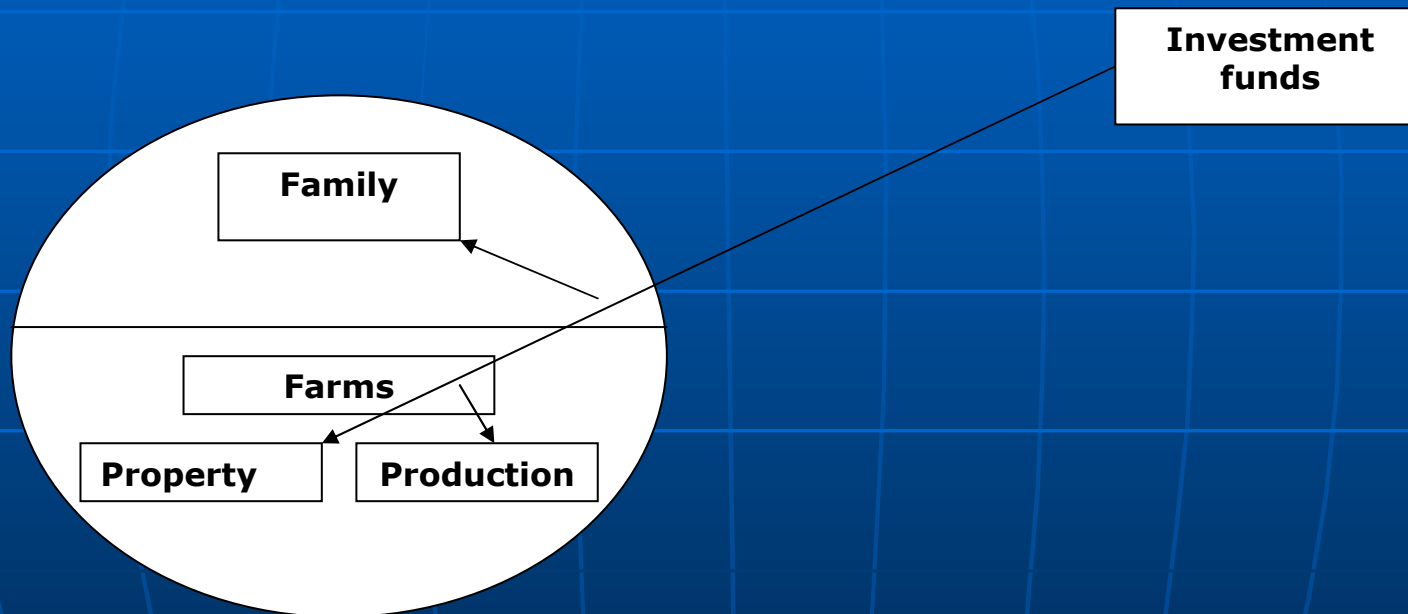


# Effects

- The macroeconomic effects of their implementation have been destructive, because:
  - land market, regardless of its forms of manifestation (selling – buying, cooperative, association or lease) registered the lowest functioning levels in the last decade
  - more than 2,5 million hectares of agricultural land were abandoned;
  - capitalization degree and the production performance registered decreasing rates;
  - domestic demand for agricultural products is covered in a large and increasing proportion by imported products.

# Pillar II

- In the Pillar II, the main objective is **the stimulation of agricultural holdings performances (Figure 4)**



*Figure 4*

**Stimulation of agricultural holdings performances scheme**

- Through CAP, funds are allocated on three defining components of agricultural holdings structure: family, property and production, in order to increase both the production performance and economic efficiency.
- Judging this stimulation form in relation to the agricultural market, we can draw two types of manifestation:
  - If the supply of agricultural market is below demand, we can be certain that the model can be viable. This is the typical case of agriculture with a lower efficiency level, and therefore, the case of Romania.
  - If the supply is above or at least equal to demand, the model is certainly unviable, because it can naturally generate the same types of disturbances occurred in the agriculture of EU countries, in the 90's.
- Less positive side is given, not by the work philosophy, but by the field of application. In Romanian agriculture, not more than 30 thousand farms, against over 3,8 million can effectively access investment funds.

# Conclusions

- Subsistence farm approach as a key element in evaluating the Common Agricultural Policy actions for the period 2014-2021, will definitely not solve the problem of Romanian agriculture underdevelopment.
- The viable solution for the Romanian agriculture is, as supported since the 90's, to connect it to the market. In other words, set it in line with market requirements.
- In fact, we do not suggest anything else than what Europeans have requested for their own agriculture from 1962 to 2003: sustaining through price the production destined for market. This is the only guarantee in favor of progress in the field.

**Thank you!**