

# Agricultural Policy Influence Upon the Economic Behaviour of Rural Households

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# **Agricultural Policy Influence Upon the Economic Behaviour of Rural Households**

## **Abstract**

*The deep transformations brought about by the progressive and steady commitment of Romanian economy to the market economy have determined, among others, the modification of the role and status of rural household in the economic activity. Rural household changed from a simple participant, constrained to act in a certain way under a centralised, equalising and levelling system during the communist period, to a participant that carries out its activity in a competing environment in which initiative, creativity and efficiency are defining elements. Based on field surveys conducted at national level, the present paper intends to identify the evolution of economic behaviours specific to rural households under the influence of agricultural policy measures in the period 1997-2000. The conclusions of this study reveal that in this period, most of rural households operated under a subsistence system, according to an economic rationality in which market economy mechanism are lacking. However, the economic picture is far from being a homogeneous one: the emergence of a nucleus of agricultural entrepreneurs, i.e. those who assume the risk of shifting from subsistence to competitive agriculture, those who are trying to turn the peasant household into a farm managed on the capitalist principles, has induced new economic behaviours in the rural communities.*

**Key words:** rural household, economic behaviour, agricultural policy, Romania

## **Introduction**

The changes produced in Romania's political, social and economic life after 1989 have also determined agricultural policy modification. The transition process from the command to market economy strengthened and created a series of crisis situations in agriculture. „Thus in the 1990-1996 period one can speak about: crisis of ownership relations; crisis of operation patterns and managerial identity; economic efficiency crisis; market operation crisis” (Vincze, M., 1999, p.216).

Starting from these realities, since 1997 the government set as general objective the development of a competitive agricultural sector, under the conditions of an open economy, mainly based upon market economy forces and mechanisms. Under the heading of this general objective, the agricultural policy had in view certain specific objectives referring to: private sector growth and strengthening through land and operation capital focusing into competitive farms; reorganisation and privatisation increasing, helping development of commercially farms; establishment and development of competition-based markets, mainly of grain market, input market and land market; establishment of a market stabilisation system and of real incentives for farmers; a more rational use of budget resources allocated to the farmers' financial support; development of extension and training systems for farmers; integrated development of rural communities; providing conditions for accession to the European Union (Yearly Report of the Ministry of Agriculture and Food, 1997, p.155-158). Practically since 1997 until 2000 the agricultural policy measures in Romania were centred round the ASAL program (Agricultural Sector Adjustment Loan), understanding with World Bank. Whether the agricultural policy reached its general and specific objectives related to rural households is the object of the investigation in the present paper.

## **1. Specifications as regards the information sources used**

Agriculture restructuring, the place it has inside an unstable economic and social system, affected by changes, imposed the necessity to investigate the main players in this process, i.e. the rural households. The situation of rural households can be revealed by

presenting several more general aspects or of those details that can depict it as accurately as possible. In the wish to go beyond the general aspects of the agrarian reality offered by the few statistical information, in this paper we used the information obtained from two field surveys. In this context, the field survey conducted in the rural households in March 2001, funded by the World Bank<sup>1</sup> and conducted by the Urban and Regional Sociology Centre attempted to obtain certain data permitting the observations of changes produced at rural household level compared to the year 1996, when a similar survey there was. This approach presupposed both the establishment of a comparable sample and the maintenance of a common approach referring to: labour, land tenure, land market, production pattern, agricultural production marketing, agricultural inputs, investments and in 2001 perception of agricultural policy measures. We realise that the proposed objectives are too numerous; however, considering the lack of information in this field, we thought that it is better to make up a comprehensive inventory of the key-problems, while the detailed investigations will be the object of other studies.

## 2. Economic potential of rural households

In the present study we considered that the economic potential of rural household consists of: land area into household ownership, agricultural equipment, household annexes, livestock and available labour force.

**2.1.Land property.** Rural household is characterised by the small land area into ownership: the average size of investigated rural households in the two field surveys is about 3 ha. As a first element, one can notice the maintenance of a high share (about 60%) of small-sized households- less than 3 ha, and the low share (15%) of properties over 5 ha.

A characteristic phenomenon for the year 2000 is represented by the increase (80%) of the share of properties less than 1 ha: from 12.1% to 21.8%, while a diminution can be noticed in the case of the other categories of size. This seems to be a consequence of land sharing among heirs registered in the ownership titles in the case of reconstituted land.

**Table 1. Rural household structure by categories of size (%)**

<b>Category of size</b>	<b>1996</b>	<b>2000</b>
less than 1 ha	12.1	21.8
1-3 ha	45.9	41.8
3-5 ha	26.1	22.0
over 5 ha	15.7	14.5
Average size of household (ha)	3.18	3.02

The socio-economic consideration on the basis of these data leads us the conclusion that a high percentage of rural households have such a small land area into ownership that they do not have the necessary support for competitive farms; the case is excepted when the existing land scarcity would be compensated by leasing in land, by the orientation towards intensive crops or by the adequate development of livestock sector.

The negative consequences of small land properties are aggravated by the exaggerated fragmentation of properties: 4.61 parcels on the average in 1996 and 4.14 parcels in 2000. Specialists consider that land restitution on the old locations represents a serious error of the agricultural policy, that would be extremely difficult to correct. Land fragmentation is

<sup>1</sup> Although the research-hypothesis, questionnaire, sample were elaborated by World Bank experts, the the ideas presented in the paper do not imply this institution. Luca Lucian and Sebastian Lazaroiu also contributed to questionnaire drawing up; the latter also designed the 2000 sample and processed the data.

generally considered a main obstacle to technical progress in agriculture. The low size of properties and the extremely high fragmentation cannot be a basis for competitive agriculture. The traditional practices of property transfer in equal parts to heirs resulted in land fragmentation over time. However, it is difficult to establish to what extent this pattern determined parcel fragmentation or property fragmentation.

**Table 2. Agricultural land fragmentation (%)**

Number of parcels	1996	2000
1 parcel	5.7	12.6
2 parcels	15.3	18.2
3 parcels	18.4	18.3
Over 3 parcels	60.6	50.9
Average number of parcels/household	4.61	4.14

The negative impact of high land fragmentation can be reduced by land market transactions. The improvement of legal restrictions in this field, together with an efficient cadastral system might lead to a more efficient operation of land market, to fragmentation decreasing implicitly.

The private agriculture crisis, amplified by law property size and high fragmentation degree, is also aggravated by the delay in clearing up land ownership rights. Ten years after the coming into force of Land Law, only 68 % of the interviewed persons received their ownership title, while in 32% of cases, ownership was attested by a certificate, in which the area is specified, while its location is not write down. Between the data published by the Ministry of Agriculture and Food (83% ownership titles issued) and the interviewed persons' answer (68% ownership titles received) there is a difference which can be explained by the many cases in which land owners have not taken their ownership titles from the town hall. Although these have to pay quite a small amount to take their titles, the lack of money seems to be the main reason for this situation. The delay in ownership right clearing up has its origin not only in the scarcity of funds but also in the unstable legal environment, having in view the issuing of new regulations in relation to land tenure (Law no.169/1997 and Law no.1/2000). The actualisation of land privatisation process by issuing the ownership titles could facilitate the rural household access to credits and faster land market development.

**2.2.Labour force.** Starting from the premise that the initiation of any action in agriculture should start with and be based upon the defining of social players, of their particularities which may represent the basis for modernisation and development process, particularities that may represent the support for modernisation and development, a first investigated aspect referred to the defining characteristics of human resources. Attested the data obtained from the 1996 survey, the structure by genders remained relatively balanced, being identical to that at national level (49% men and 51% women). The average age of sample (about 55 years), through down by 5% compared to the year 1996, reveals quite an old population compound to the national average (38 years). As regards the educational aspect, the investigated population is within limits close to the values in the rural area: population's concentration in the group of those who graduated primary or secondary school (about 60%) and low access to higher education (1-2%). As a consequence of the economic crisis that affected the industrial sectors, the urban-rural migration process resulted in a 14% increase of young population in the age group 15-30 years, with a higher training level (mainly high school studies)

Employment, as basic component of human development, is still one of the most "sensitive" fields during transition. The continuous deterioration of labour force utilisation in urban areas made agriculture be a "social buffer"; absorbing about 40% of total active

population. The direct consequence of this situation is the negative influence manifested in impeding structural adjustment in agriculture, by maintaining the type of land tenure under its present form, i.e. small-sized properties and high fragmentation degree; this further contributes to the emphasis of certain phenomena, i.e. hidden unemployment and low incomes.

Monoactivity represents the characteristic feature of Romanian rural communities: about 80% of rural population were and are employed in agriculture, mainly and secondary. In both field surveys under the background of the existing demographic structure, the employment pattern is specific to a marginalized area. This high share of those who are related to agricultural activity in a way or another reveals rural population's orientation towards a subsistence agriculture.

The structure of population employed in rural area is not the result of a development and investment policy, but rather the result of the absence of such a policy, associated with the lack of a coherent job creation policy at national level, that resulted in labour force migration from urban to rural areas. The share of non-agricultural employed population is still at a low level (22% in 1996, 19% in 2000), revealing the perpetuation of a low diversification degree of economic activities in rural communities.

Under these conditions, it is imperiously necessary to draw up an integrated rural area development policy that has in view, on one hand, the creation of non-agricultural jobs and on the other hand, the improvement of access to education and training of labour force in order to reduce the inter-sectors mobility costs.

The labour force in rural households is mainly provided by family members (74% in 1996, 66% in 2000), while in the peak periods hired labour is used, paid in cash, in kind or in mixed types. As regards the use of other labour force types these are specific to peasant economy, where labour exchange prevails (between neighbours, friends and relatives in particular). Hiring seasonal or permanent workers, although not a common practice has experienced an increase as against 1996, indicating a start in moving away from peasant autarchy.

**Table 3. Types of labour force utilisation (%)**

	1996	2000
Family workers	74.0	66.0
Permanent workers	0.2	0.7
Seasonal workers	29.2	24.0
Labour exchange - relatives	29.1	37.5
Labour exchange - other persons	16.0	18.4

**2.3.Livestok.** Animal husbandry experienced a decline at national level after the year 1996; this situation was also found in the case of field survey. In 2000, mainly poultry, pigs and cattle were raised in rural households.

**Table 4. Average number of livestock and share of households raising animals**

	Average no. (heads/hhs)		Share of households (%)	
	1996	2000	1996	2000
Cattle	1.2	1.0	53	48
Pigs	3.2	1.6	85	65
Sheep	2.7	3.0	39	30
Poultry	17.3	17.5	92	91

However the share of households that raised at least one species decreased by 26%. The main characteristics of structural evolution was the reduction of average number of animals by household, as well as of the share of households raising different species: the strongest decline was found in the case of pigs (24%).

**2.3. Technical endowment and draft animals.** After getting back his agricultural land, the Romanian peasant found himself in the dramatic situation of being obliged to farm it in the absence of necessary agricultural equipment/implements and of the financial possibilities to buy them. When the rural households owns implements to farm the land, these are of traditional type-cart, houses and very rarely modern, i.e. tractor, combine, sower. Generally the traditional facilities date back before 1990, while the modern ones were acquired after this date. The high costs of modern technique make it inaccessible to incomes coming from an ordinary rural household. The agricultural credit policy has not succeeded it in building up between the rural households and the manufactures of agricultural machinery and equipment, as a paradox, the latter are also found in a crisis situation.

However the investigation of the endowment degree with modern agricultural equipment reveals the success of rural households compared to the initial starting point and the difficulties they had to surmount.

**Table 5. Rural household endowment ( % )**

	1996	2000
Tractor	4.7	7.2
Plough	4.7	6.7
Grain combine	1.4	1.0
Sower	2.6	3.3
Irrigation equipment	2.2	1.7
Processing equipment	4.3	2.3
Wagon	35.2	33.5
Horses	27,0	27,0

However, we can conclude that the endowment with modern agricultural machinery and equipment is so low that it defines the rural households as a traditional productive entity.

**2.5. Endowment with production annexes.** The pre-transition history also meant the annihilation of rural households as production entities. The infrastructure that should support their economic function is so weak that it can rarely support a normal production cycle: low capacity stables, archaic modalities for cereal storage, etc are prevailing. In the case of annex buildings their endowment is very modest and one cannot speak any modern facilities. The share of traditional productive infrastructure decreased under the background of agricultural production deterioration: stable (15%), storage spaces (23%) and sheep shelter (22%).

### 3. Productive behaviours

In most rural households there is a mixed type of production; one can certainly find a series of zonal differentiation in this respect. Production is mainly extensive and it can be characterised by: high share of population employed in agriculture; decreasing of land areas under industrial crops and increasing of those under cereal crops; reduction of livestock number in all species, of their density per surface unit implicitly; low level of average yields both in crop production and in animal production; decreasing trend in modern inputs use (pesticides, chemical fertilisers, selected seeds), etc

The analysis of crop structure and of the share of different crops in total cultivated area does not reveal significant changes as against 1996, i.e. cereals are prevailing: the

average area under cereals increased from 1.5 ha to 1.73 ha while the share of households cultivating cereals from 88% to 92%. The cereal crop structure has not suffered significant changes either: maize remains the prevailing species, followed by wheat.

The share of households cultivating industrial crops declined by 17%: both areas under sunflower and under sugar beets decreased. The same negative trend was found in land areas under fodder crops: the areas under clover and alfalfa decreased by 33% while those under hay by 15%.

The orientation towards those crops that incorporate a high labour volume and with high yields, as in the case of vegetable farming that brings high incomes per hectare, thus compensating the existing land deficit: the share of households that grow vegetables increased by 38% while the average cultivated area by 100%. This behaviour is specific to rural households located near large urban cities.

The average yields per household are extremely low and far from the existing yielding potential. As against 1996, there is no significant productivity increase.

**Table 6. Crop production**

	1996			2000		
	Share of hhs (%)	Average area/hh (ha)	Output/hh (kg)	Share of hhs (%)	Average area/hh (ha)	Output/hh (kg)
Cereals	88	1.50	3360.4	92	1.73	3058.8
Industrial crops	29	0.15	798.3	25	0.19	505.8
Fodder crops	51	0.42	1306.6	41	0.34	797.0
Vegetables	26	0.03	123.4	36	0.06	148.6
Grapes	23	0.08	380.4	27	0.06	376.0
Fruits	9	0.03	95.7	6	0.02	67.5

The analysis of the number of crops and livestock species per household indicated the existence of a highly diversified agriculture: about 60% of households cultivate more than three crop species or raise more than three animal species both in 1996 and in 2000. Diversification defends farmers against risk and incertitude; at the same time it is a characteristic of subsistence households in which meeting self-consumption needs becomes a priority.

**Table 7. Agricultural production diversification (%)**

	Crop production		Livestock production		
	1999	2000	1996	2000	
Do not growing	4,1	3,0	Do not raise	4,2	5,7
1 crop	12,2	10,5	1 species	8,0	14,7
2 crops	20,5	22,7	2 species	17,2	22,5
3 crops and over	63,2	63,8	3 species and over	70,6	57,1

One of the main causes of low agricultural efficiency is determined in the first place by the low level of agricultural inputs utilisation, though after 1997 the support provided to agriculture by the government was mainly directed to individual producers. This support was materialised in the form of vouchers, the equivalent value of which was financed from the state budget. A decline was found in the share of rural households using certified seeds (21%), mechanisation services (26%), veterinary services (29%) while an increase was noticed only in the case of fertilisers (47%). Rural household connection degree to inputs market is in direct relation with larger incomes and larger operated areas. In the case of inputs for the livestock sector which are produced and sold along private channels, veterinary

services and veterinary medicine are the most demanded. Buying combined feeds is a very rare practice; this situation can be explained by the fact that traditional agriculture is based upon fodder production in each household.

**Table 8. Agricultural inputs utilisation ( %)**

<b>Inputs</b>	<b>1996</b>	<b>2000</b>
Certified seeds	42.3	33.5
Fertilisers	32.9	48.5
Pesticides	21.8	21.6
Mechanisation services	71.0	52.3
Veterinary services	56.4	40.3

The main causes which determined consumption decline were identified as the following: non-adjustment of input markets to the new ownership structures, price scissors and the lack of financial resources in the case of numerous households.

The implemented privatisation policy made the state sector lose its importance as main agricultural input supplier for rural households for the benefit of private sector. However the low privatisation process of the enterprises in the upstream sector of agriculture hindered to a great extent, through their deficient operation, the recovery of agricultural sector, dependent upon input prices and input supply in due time.

Consequently, in 2000 the suppliers with majority state capital dominated only certified seeds market while private suppliers dominated the market of mechanisation services, veterinary services, of combined fodder and of buildings.

The main modality of input procurement is direct payment. The relation on contract basis still has an extremely low share (4%).

The use of extension services for agriculture by the investigated household as modernisation and development factor, declined by 14%. The financial power, the production patterns, the behavioural types are the main predictors of this behaviour. The assistance provided by vets and specialised individuals have the highest shares.

**Table 9. Agricultural extension used by rural households (%)**

	<b>1996</b>	<b>2000</b>
Agricultural chambers	11.0	11.1
Agricultural engineer	4.7	8.5
Vet	69.9	53.4
Specialised private firm	3.9	3.8
Agricultural association	25.9	13.7
Private person (specialist)	39.6	45.4

The agricultural extension system should be better adjusted to the present production structure, to small-scale agriculture that lacks both agricultural technical knowledge and marketing skills in particular.

#### **4.Organisational and landed behaviours**

**4.1. Individual operation.** In spite of existing difficulties (lack of agricultural equipment, high agricultural input prices and low agricultural prices, etc), rural households prefer farming their land on individual basis: this land operation modality is about 92%. The average size of individually operated area declined by 18% compared to 1996. Among these



households about two thirds were pure individual households. The remaining households prefer a mixed operation modality, in which the household farms only one part of the property, while the remaining land is operated within associations or leased out. This high share of individual households suggests that in spite all the difficulties, this agrarian structure is the optimum form for the materialisation of a deep need, i.e. that of the indissoluble link between the producer and its property.

**Table 10. Agricultural land operation**

<b>Types of land operation</b>	<b>1996</b>	<b>2000</b>
Average area operated on individual basis (ha)	2.10	1.73
Share of households operating land on individual basis (%)	91.90	91.50
Average area operated in associations (ha)	0.80	0.63
Share of households contributing land to association (%)	33.70	26.30
Average area leased out (ha)	0.30	0.14
Share of households leasing out land (%)	14.40	18.00
Average area leased in (ha)	1.00	2.52
Share of households leasing in land (%)	2.60	6.80

**4.2. The operation on association basis.** The Romanian peasant's traditional individualism, the negative experience this had in the period of production co-operatives of communist type, the discontent caused by the lack of interest and sometimes the illegal-type advantages that the managers provide for themselves made the rural household orientation towards farming land in association decreased by 22% in the investigated period. The tendency in sample can be also found at national level. The agricultural association that should provide a high capital and labour productivity, in reality creates and maintains a framework for merely formal participation of the associated members. Family and legal associations contributed to the consolidated land operation of small-sized land areas in this period. The absence of ownership titles and of effective land repossession facilitated this process. Land operation in association is the most common practice of old families, with few family members, lacking the financial means necessary to initiate new production cycles.

**4.3. Operation on land lease basis.** Legitimated by the promulgation of Lease Law no. 16/1994, modified by Law 65/1998<sup>2</sup>, land lease is slowly but steadily expanding and consolidating. As compared to the year 1996, the share of persons leasing out land increased by 30%. However, the land area leased out decreased from 0.3 ha to 0.14 ha. The households leasing out land, the whole property or only part of it, generally consist of old aged people that are confronted with financial difficulties, as well as of land owners living in towns, who provide a significant part of land areas operated under this form. Those modalities that should satisfy both lessees and lessors are still being looked for. Even the high share (90%) of informal relations may be a proof to support this statement. The direct interest that the lessee has in obtaining a good harvest makes land lease be more and more preferred to the detriment of land operation on association basis. As against 1996, the share of households leasing in land also increased by almost four times. The multiple job-holding households, which operate land on individual basis, with hired labour, have a well-defined lessee behaviour. These households also have an investment-oriented behaviour, mainly for productive investments. The larger scale practice of land leasing in, as basic component in competitive farm establishment, has been hindered by a series of factors, namely: existence of agrarian overpopulation, oriented towards small-sized property maintenance; lack of financial resources and of opportunities to obtain credits; low number of entrepreneurs willing to

<sup>2</sup> published in "Official Gazette" no.126/1998

assume the risk to establish a farm by leasing in land; small size of parcels and difficulties in their consolidation, etc.

**4.4. Agricultural land sale-purchase market.** Land market was not functional on the legal basis until 1998. In the two years of legal operation, the beginning was quite slow, the area alienated by “sale and purchase” being quite small. The share of households that made land transactions is low: 5.4% bought land; 2.3% sold land, while 0.5% both sold and bought land. The average transacted agricultural land areas are small: 1.46 ha average bought area; 1.05% average sold area. The peasants who had hardly received their land back are not willing to transfer it to other entities. It seems that, out of economic instability considerations, the owners of small land areas prefer to keep land as a good destined to provide their social security.

The households consisting of old persons, with no heirs, lacking agricultural technical means and financial resources, are mainly those who sell their land. Those households buy land, which consist mainly of young persons, which generally have high incomes, operate larger land areas and have higher demographic resources.

Land market development is confronted with a series of difficulties, among which the most important seem to be the following: delay in clearing up ownership rights by a slow issuing of ownership titles; high share of rural population for which land is the main way of existence; scarcity of available financial resources; inflation process which makes potential sellers wait for better opportunities; limited access to credits and high bank interests.

The legal operation of land market is perceived as a positive measure by about 75% of interviewed persons. The more the households consists of younger persons, the higher incomes they have and the larger the land areas they operate, the higher their agreement degree to the right to sell and buy land. When answering the question “*Do you think it is easier now as against 5 years ago to sell or buy land?*”, 29% of interviewed subjects answered that it is more difficult. It is heavily to appreciate what are the reasons (legal, financial, bureaucratic) that lay at the basis of this answer. The possibility for larger-scale development of land market in the years to come seems quite reduced: only 1.6% of respondents showed their intention to sell land in the near future.

## **5. Commercial behaviours**

As characterised by a subsistence economy, rural communities have a poorly defined commercial behaviour. If in 1996 the share of rural households selling at least one agricultural product represented 49%, in the year 2000 only 35% of households participated to the commercial circuit.

The problem of agricultural products marketing tends to get worse, inducing negative effects in the process of production cycle resuming, due to the lack of available financial resources. Self-consumption leads to the absence of agricultural outputs to be sold on the market. This implies obtaining low incomes that hinder the future development of these households. Under the background of a decreasing share of households that sold agricultural products and of sold quantities, the share of incomes obtained from their sale also decreased by 38%.

The rural household further shifted to this natural economy type, more and more covering its consumption from its own resources, with deep implications concerning the relation of integration to the local and regional community. Most peasants sell the surplus left after covering their families needs; family here means both family members who have effectively worked in household or the family members living in town. In many cases if their products do reach the market, the explanation for this is not the landowner’s entrepreneurial behaviour, but rather the sharp need of money. Although this seems a paradox, the rural

household is attracted into the trade mechanism to quite a great extent. A first cause is the economic milieu in which it operates, where money is omnipresent. As it cannot „ignore money”, it is often „forced” to sell agricultural products in order to make different payments. The second cause is related to the lack mechanical equipment in the rural household. In this case, the household is „forced” to sell agricultural products in order to pay in cash those who provide such services.

**Table 11. Marketing of agricultural products**

	1996		2000	
	Share of households (%)	Sold products/hh (kg)	Share of households (%)	Sold products/hh (kg)
Maize	14	299.7	9	156.1
Wheat	8	114.8	7	158.6
Potatoes	4	62.6	4	66.3
Vegetables	2	53.5	4	126.4
Fruits	1	15.2	1	11.1
Pork (live weight)	9	32.1	3	6.6
Milk	19	353.4	11	255.4
Eggs	4	23.4	1	4.3

The sale of agricultural production still continues to be dependent to old practices: the traditional sale of production “at the market place” is still maintained as a prevailing form of produce marketing (53.2% in 1996; 67% in 2000). i.e. each producer sells its own production. The links between the small producers and the downstream sector of agriculture are weak. The processing industry is still characterised by a low productivity level, obsolete technologies, lack of adjustment to demand and an inadequate treatment of small producers.

Policies regarding privatisation determined a change: the state sector was no longer the main partner in the commercial relations with the rural household: the share of state agencies declined by 85%. while that of processing units with state capital by 48%. The private sector grew instead: private trader by 5% and private processor by 24%.

## 6. Investment behaviours

The investment behaviour of rural households is mainly specific to a survival, subsistence strategy rather than a development strategy. The share of households that made investments declined as against 1996 (40% in 1996; 35% in 2000).

The production investments that could contribute to agriculture development have a much lower level than in 1996; they declined by 36% in the case of agricultural equipment buying and by 50% in the case of purchasing livestock and fruit-trees.

The first positive signals have appeared as regards an early legal operation of land market: investments in buying land rose by 23%. Social investment as “children’s education” have still a top position in the year 2000.

**Table 12. Types of rural household investments (%)**

Type of investment	1996	2000
Agricultural equipment purchase	4.4	2.8
Purchase fruit-trees	2.8	1.4
Purchase livestock	23.9	13.7
Buy land	2.1	2.6
Annex buildings	7.7	5.7

Development of non-agricultural private business	1.0	0.5
Development of food private business	0.1	0.1
House building / improvement	5.2	4.9
Buy car	1.6	1.6
Children's education	14.1	16.6

The financial sources for investments mainly come from people's own savings obtained from agricultural and non-agricultural sources both in 1996 and 2000 (62.6% and 49.8%). The perception of bank as loan institution is negative. A double conditioning appears in the relation of rural households with banks. In the first place there is the peasant carefulness when contracting a debt. „Debt is no joking” and „I am better off without” says the peasant. This is the reason why those getting a loan from a bank represent an extremely low share, under 1%. The second reason at the basis of peasants' reluctance to credits is related to the very high interest rates and the great bureaucracy (a lot of formalities needed to get a loan). We must mention that as regards credits the state has had no policy in order to facilitate private producers' access to banking credits. Following the non-interventionism principle, this permitted the banks to follow interest and credit related policies that are harmful to rural households and national economy in general.

The development of an institutional and legal framework for credit supply for agricultural business development represents one of the most urgent measures that have to be taken.

## 7. Entrepreneurial behaviours

The entrepreneurial orientations represent a reaction of rural household's adaptability to a capitalistic economic environment. The study attempted to identify certain entrepreneurial orientations and aptitudes in the peasant economy context. The entrepreneurial behaviour has an active and innovative nature, specific to the economic systems based upon competition, risk and private initiative. The agricultural entrepreneur assumes the risk to organise, carry out and develop a profitable activity. He is in opposition to peasant mentality, shifting from the aspiration to have land to the aspiration for its rational utilisation, from self-subsistence to production for consumption, from the mentality to have to the mentality to achieve. Unfortunately, the entrepreneurial tradition is very weak in Romanian agriculture under the conditions in which the private land farming tradition transmitted from generation to generation was interrupted during the communist period, and the opinion of a large part of civil society referring to private entrepreneurs is quite unfavourable.

It might be useful to see what happen with agricultural entrepreneurs between 1996 and 2000. What changes occurred in terms of incidence and structure? Defining agricultural entrepreneurs is always a controversial issue. However we are going to use four dimensions of agriculture related entrepreneurship in Romania by means of endeavouring to make agriculture a business:

- a) buying or leasing land – if they bought or leased in land;
- b) productive investment – if they have within the household: truck, tractor, combine for cereals, sowing machine, processing agricultural products equipment or invest money in buying agricultural equipment, planting trees, developing a food processing business;
- c) buying inputs/selling outputs – if they bought at least one input and sells at least one agricultural product;
- d) hiring labour – if they hire full time or part time people to work for their farm.

According to the schedule above we define three of entrepreneurial households.

**Table 13. Types of households according to entrepreneurial behaviour (%)**

Type of entrepreneurial household	1996	2000
Households with weak entrepreneurial behaviour	38.4	27.6
Households with medium entrepreneurial behaviour	19.3	15.8
Households with strong entrepreneurial behaviour	5.5	6.2

The economic crisis that not only persisted but also deepened in the investigated period of time has determined a significant decrease (28%) of the share of rural households with weak entrepreneurial orientation and of those with medium entrepreneurial orientation (18%). At the same time, the households considered as having strong entrepreneurial orientation better adjusted to problems occurring in the investigated period and even increased by 13%.

In the following paragraphs we plan to describe these three types in relation with other significant variables to capture the changes of structures over time.

For the three types of households the structure in terms of average household age and incomes is very significant. The younger and richer (in terms of money) a household the higher the probability to be a hard entrepreneurial farm unit. This is also true for households with medium entrepreneurial behaviour and the relation is still true for households with weak entrepreneurial behaviour even though it is not so evident. Apparently between farm size and different types of entrepreneurial households there is not a linear relationship and the structures from 1996 to 2000 prove to be different.

In terms of occupational status it seems that households with strong entrepreneurial behaviour contained more members with non-agricultural occupations in 1996. But the structure is quite similar for households with medium entrepreneurial behaviour in 2000. It seems that non-agricultural occupation provided capital for agriculture investments in 1996. But it is likely that hard entrepreneurs in agriculture are not anymore dependent on a non-agricultural occupation since their business consolidated in the last years. Selling agricultural products source is more present in the case of households with medium entrepreneurial behaviour and households with strong entrepreneurial behaviour, even if there is a decrease from 1996 to 2000. A private non-agricultural business seems to be an important discriminating factor between households with strong entrepreneurial behaviour and the other types of entrepreneurial households. There is also a visible decrease of salaries for households with strong entrepreneurial behaviour from 1996 to 2000 which seems to be not significant for other types of households, which might confirm our hypothesis that non-agriculture sources of money are not so much important for households with strong entrepreneurial behaviour as it used to be.

The increasing share of growing vegetables from 1996-2000 should be related to entrepreneurial spirit in agriculture. It is well known that growing vegetables in Romania is probably the most profitable agricultural business on small areas. Due to different cycles of production growing vegetables is quite a hard work. The increased number of households growing vegetables might be a sign of profit-oriented or market oriented structure of small farms. Area cultivated with vegetables increased from 1996 to 2000 within rich private farms, with average size (3-5 ha) and young aged. This profile is quite similar to the entrepreneurial household one. More data on the relation between types of entrepreneurial households and growing vegetables proves that from 1996 to 2000 the structure has significantly changed. Growing vegetables is not a characteristic of hard entrepreneurial households any more, but it used to be in 1996. This could be a symptom of the best way to grow the business in agriculture-growing vegetables.

The use of paid mechanical services, which seems to have been decreased between 1996-2000, is less important for households with strong entrepreneurial behaviour as they got their own agricultural equipment, but still important for households with medium entrepreneurial behaviour or households with weak entrepreneurial behaviour. However it seems that the decrease is more dramatic for non-entrepreneurial households. And the weight of non-entrepreneurial households, which bought mechanical services, was half of the entrepreneurial households in the same situation in 2000.

The aspects presented above regarding the characteristics and changes produced at the level of rural households with entrepreneurial orientation in the period 1996-2000 invite us to reflect on this matter. Agricultural sector performance is mainly influenced by two factors, i.e. the quality of entrepreneurs in the agricultural sector and a favourable economic environment. During the transition period, the governments that have been in power mainly focused upon decollectivisation and denationalisation, while the problems linked to competitive family farm development were on the second place in the agricultural policy agenda.

## 8. Policy measures perception

Among the measures applied to agriculture in the investigated period, the most well known, appreciated measure, most farmers benefited from was the voucher system application, starting with 1997. As regards price liberalisation of agricultural products, land market liberalisation and diesel vouchers, although they are quite well appreciated. Their impact upon rural households is perceived at a very low level. The measures concerning state aids for wheat storage in 1998 and grant in aids for livestock in 2000 are least known and appreciated, while benefits at rural household level are perceived as being almost zeroed.

**Table 20. Perception of policy measures in total sample and by types of entrepreneurial households**

Which measure was more beneficial for you?	Total sample	Households with weak entrepreneurial behaviour	Households with medium entrepreneurial behaviour	Households with strong entrepreneurial behaviour
Voucher system	64.0	68.5	57.8	36.0
Diesel vouchers	5.6	7.6	4.7	4.0
Agricultural price liberalisation	10.4	8.5	18.0	32.0
Land transaction liberalisation	3.2	3.1	2.3	10.0
Bonuses for wheat and milk	1.4	0.9	3.9	4.0
Grant in aids for livestock	0.0	0.9	2.3	2.0

An aspect worth mentioning is that the perception of policy measures by the households with entrepreneurial behaviour was different from that of total sample. Thus, the appreciation of the beneficial effect of measures introduction of agricultural voucher system and of diesel vouchers decreases while the entrepreneurial behaviour gets stronger. As the orientation towards market economy of households gets stronger the measures such as agricultural price liberalisation, land market liberalisation, wheat and livestock bonuses are perceived as having a beneficial effect upon households.

## Conclusions

In the investigated period, private agriculture, „stake of political bets”, has still remained a subsistence agriculture, far from operating according to market rules. Its main problem is low efficiency. The lack of balance as regards labour, land and capital resources at household level determines an extremely low productivity. The technical-productive and economic changes are still modest in the investigated period, mainly due to the very high share of agricultural labour, which makes production investments unnecessary.

The sector of rural households was dominated by self-consumption, with few connections with input and output markets. The operation of land, credit, input and agricultural produce markets has been and is still deficient mainly due to the inadequate and changing legal and institutional framework and to the lack of adequate infrastructure. However, the application and simplification of certain laws on land tenure has led to the land market setting into operation: the share of households making land transactions increased, as well as of those involved in land lease relations.

Policy regarding privatisation, restructuring or liquidation of the state sector upstream and downstream of agriculture determined a change of rural household economic partners. The resistance to change and the blockages that appeared did not allow for these relations being efficient.

In this period, agriculture practiced by rural households did not feature uniformity. In parallel with subsistence agriculture, entrepreneurial agriculture also operated, although on a very small scale. The presence of entrepreneurial behaviour in private agriculture is an early start in agriculture operation in conformity with market economy rules and it represents a first step towards its modernisation and development.

The financial support policy for rural households under the form of voucher system, as the most well-known and appreciated measure by private farmers, had an important social security function and maybe in its absence private agriculture would have further deteriorate.

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