

ROMANIAN AGRARIAN STRUCTURE AFTER THIRTY YEARS

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Abstract: Land ownership was and still is one of the most important indicators of wealth, even if the importance of agricultural sector has diminished in the last half of the century, at least in the developed countries. The current status of the Romanian agricultural sector is not only the sum of the agrarian reforms adopted in the nineties, but the result of the agrarian reforms of the past century and a half, with their instances of progress and regression, but, especially, their times of deep rupture.

The article is a comparative analysis of the information available from the agricultural censuses of 1948, 2002, and 2010 and the structural investigation of the agricultural sector of 2016, capturing the developments which have taken place in the last 30 years, thus enabling us to draw conclusions as to these developments and the consequences of the post-1990 agrarian reforms.

The conclusion is that agricultural holdings are extremely polarized and very fragmented, mostly dwarf in size, economically inefficient, lacking a modern set of agricultural machineries, that determines low quantitative and qualitative productions as a result. This has caused the Romanian rural population to live on the brink of poverty and the agricultural sector to continue to be underdeveloped.

Keywords: agrarian structure, economic inefficiency, land fragmentation, polarisation, rural underdevelopment

Introduction

Nowadays' social reality, including the current structure of the agricultural sector, has been significantly influenced by the political decisions made immediately after the revolution of 1989. The agrarian reform of 1991, which continued throughout the last decade of the 20th century, had substantial effects on land ownership in Romania and otherwise determined the development of the rural areas overall.

The reform entailed the suppression of collective ownership and the return to private land ownership, the dissolution of the state agricultural holdings based on intensive exploitation of agricultural land, and the return to the *status quo* preceding the forced installation of the communist regime in Romania. Thus, one can observe the re-

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emergence and perpetuation of certain much older states of affairs rooted in the country's past.

The 'agricultural issue', as it is known in the field literature, together with the underdevelopment of rural areas in general, has been one of the most important unsolved and persistent problems of Romanian society in the last two centuries. There are two aspects which need to be understood with respect to this issue: first, the fact that it affected the social category which included the overwhelming majority of the population in the past and continues to affect nearly half of Romania's current population (the rural population, which depend on agriculture); second, the fact that it has had major implications on other essential aspects of Romanian society, such as: economic development and efficiency, education, the health of the population, urbanisation, migration, demographic evolution, etc., which, in turn, perpetuated the cycle of underdevelopment in the rural world.

The question which naturally arises is: why, in the more than one hundred and fifty years of existence of the modern Romanian state, has one failed to develop a modern and efficient agricultural sector and a thriving peasant class, to the difference of many other European states, which succeeded in doing so, irrespective of whether they mostly supported the development of large agricultural holdings (such as Great Britain) or focused on creating a prosperous small and middling-farmer class (such as France and Germany, for instance).

Furthermore, one would be justified in asking certain other questions as well: is it possible to identify two different models of agricultural development (one in Western and another in Eastern Europe)? do Eastern-European states show similar patterns of evolution or are there certain differences between them? if such differences exist, when did they appear (is it a matter of different feudal development models, or did they emerge once capitalism developed on this continent)? were there any notable differences within the sphere of Eastern-European communism or between the strategies adopted by the states in this region after the fall of that regime? will these differences disappear due to a common evolution at the level of the European Union? etc.

The answers are obviously not simple.

The current status of the Romanian agricultural sector is the sum of the four major agrarian reforms of the past century and a half, with their instances of progress and regression, but, especially, their times of deep rupture: the transition from feudalism to a capitalist system, the dismantling of the agricultural structure based on private property and the development of a co-operative communist system, followed by its destruction and the return to a capitalist system. The fast-paced historical succession of these moments of deep rupture for Romanian society (feudalism-capitalismcommunism-capitalism) was bound to have a profound influence on it, considering that the political, economic and social incompatibilities between the three systems are substantial and it should have taken several generations to adapt these rapid structural changes.

Steps forward and backward in Romanian agrarian reforms

The first agrarian reform, the one of 1864, was the starting point of the transition of the agricultural sector from feudalism to capitalism. It was the result of the economic and political development of the Romanian Principalities that began after the Treaty of Adrianople (1829), which provided for free trade for the two principalities, as well as the diminution of Turkish economic and political influence in favour of Russia. Free trade had benefitted from strong support from Great Britain and France, the former being especially interested in cereal trade, given the particularly rapid industrial and demographic growth of the early 19th century.

The positive effects of the treaty were not immediate (Murgescu, 2010, p. 115-117), as the two principalities' cereal trade made a rather shy debut on the European market, its boom occurring later, around 1860 and carrying on throughout the second half of the 19th century. The economic benefits generated by this kind of trade became very significant, especially for great landowners/lessees, whose production went to export and who owned most of the agricultural land.

The agrarian reform of 1864, however, also constituted a genuine 'social revolution', the way most analysts have called it (Madgearu, Zeletin, Pătrăşcanu, etc.), mainly due to the fundamental change it brought about in the structure and relations of the agricultural sector:

- as a result of this law, for the first time, peasants were granted ownership of a total of nearly two million hectares of land (approximately a quarter of Romania's arable land at that time), which evidently made it a socially radical law for that age;
- the reform also set out to maintain the economic profitability of agriculture; it aimed to grant ownership over more land to those peasant families that could afford to cultivate it (based on the number of draught animals they owned, peasants were divided into three categories: those with four oxen, those with two oxen, and those with none). The land was distributed to the following peasant categories: 413,202 hectares were granted to a number of 71,912 first-category peasants (20% of the land given in ownership); 882,737 hectares were distributed to 202,075 middle-category peasants (44.3%), and 381,708 hectares were allotted to 134,132 last-category peasants (19.2%). The distribution was uneven, as first-category peasants received an average of 5.7 hectares, middle-category ones 4.4 hectares, and last-category ones 2.8 hectare, the overall average being 3.9 hectares per family (Axenciuc, 1996, p. 88; Bărbulescu, Deletant, Hitchins, Papacostea and Teodor, 1998, p. 381, 528);
- Zeletin (1927/1992, p. 31-33) believed that one of the positive effects of the reform was the institution of an ownership regime of a capitalist nature, which turned peasants into owners and their land into goods, thus determining them to change their attitude towards work as well;

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 - large agricultural holdings continued to possess significant areas of land, which made Romania one of the largest cereal producers and exporters up until the beginning of the First World War.

However, the practical enforcement of this law brought about a series of negative consequences, which impacted on the viability of peasant agricultural holdings for half a century to come:

- the land distributed to peasants was not sufficient to ensure the economic viability of all peasant households and, in a great many cases, they plots were of poor quality, as they were located far away from villages; many peasants were allotted several disparate plots of land, which meant it took a long time to travel from one plot to another, thus rendering their exploitation inefficient (Pătrăşcanu, 1925/1978, p. 27-28);
- the great landowners, alongside the Romanian state, continued to own about 70% of the arable land, as well as all of the grasslands and meadows. Thus, landlords secured the workforce they required for their land by capitalising on peasants' need for grasslands for their cattle, for additional land to lease, or for money. The reform also splited assets into two categories: on the one hand, the land was owned by great landowners and peasants and, on the other, the means of labour, the implements and workforce were owned exclusively by peasants, thus enabling the exploitation of peasant labour (Axenciuc, 1996, p. 77-78);
- forests became the private property of great landowners, which made it impossible for peasants to procure their firewood cost-free, as their right to collect it from forests was suspended;
- furthermore, the law provided for the payment of compensation for corvée and other feudal duties, which was to be made for 15 years. In addition, compensation was to be paid to landowners for the land expropriated in view of the reform. The immense burden of such payments encumbered the budgets of peasant families, while their tax burdens increased up to several times the previously owed amount (Pătrăşcanu, 1925/1978, p. 27-28);
- one of the negative consequences of the reform concerned the emergence of 'new-serfdom' relations (Dobrogeanu-Gherea, 1910-1977, p. 61) as a result of agricultural agreements, which came to be seen as the main cause of peasant poverty up until the 1921 reform. In the early 20th century, 60% of peasant households were engaged in agreements with landowners or lessees;
- the law introduced the inalienability of land, the interdiction spanning 30 years (land could be alienated only to the local administration or to another villager), which prevented the genuine transformation of land into goods, the creation of a market for agricultural land and the trading thereof.

The shortcomings of the agrarian reform of 1864 had become obvious to everyone even from the early 20th century, while the extraordinary efforts made by the peasants during the First World War compelled the elaboration of a new law; the agrarian reform of 1921 sought to improve the situation of peasants who did not own sufficient land,

while also strengthening the category of medium-sized properties which had taken shape up to that point.

The agrarian reform aimed to eliminate large land properties (over 100 hectares); thus, 22,523 estates were expropriated, adding up to over 6,000,000 hectares, which gave the 1921 reform a particularly radical character, practically resulting in the disappearance of large land properties and of landowners as an economic and social class.

The data show that the process of granting ownership to the 2,300,000 with no or insufficient land who had signed up to receive it was a cumbersome one; by 31st December 1933, 1,500,000 peasants (64%) were made owners of over 3,400,000 hectares. The data also indicate that, 10 years after the reform was adopted, there was still a substantial number of families without any land (Axenciuc, 1996, p. 99-100).

This strategic decision to support small peasant holdings had numerous consequences for the agricultural system as a whole, often affecting in a negative way the economic viability of Romania's agricultural holdings:

- small peasant holdings became prevalent in interwar Romanian agriculture: almost 90% of the country's agricultural holdings were under 10 hectares; over 70% of these were under 5 hectares and amounted to more than half of the country's agricultural land;
- Romania ceased to be one of the greatest cereal exporters, as cereal production was channelled towards meeting the demand on the internal market of the Great Romania, which registered a significant increase as a result of demographic growth (due to both the joining of new provinces and the population's positive rate of increase);
- one of the consequences of the reform and of the high rate of natural growth during the interwar period was the further fragmentation of agricultural holdings and the perpetuation of poverty among the rural population; Madgearu (1940, p. 32) observed that an area of cultivated land of 17.5 million hectares corresponded to 13.5 inhabitants who lived off of land cultivation, so that the average cultivated area per capita was 1.34 hectares. The number of peasant properties under 1 ha (which represented 18.6% of all peasant holdings and 2.1% of the cultivated land) was characteristic of a rural economy based on dwarf properties, which was much worse than the situation in neighbouring agrarian states, such as Bulgaria, Yugoslavia, or Hungary;
- comparative data regarding other countries in the region, as well as developed countries in Western Europe show that, in Romania (similarly to Hungary), the total area of medium-sized properties, namely those between 10 and 100 hectares, amounted to 25% of the overall land area, while, in Bulgaria, the area of such properties amounted to 32% of the overall area, in Germany it was 40%, and in France it reached over 60% (Axenciuc, 1996, p. 242-243).

As a result, even though the amount of land distributed through the agrarian reform of 1921 was significant, it failed to bring about the economic viability of peasant households and stimulate the development of a prosperous middle class in Romania's

rural areas. Agricultural holdings remained small, a significant share of them even dwarfish, merely capable of ensuring the survival of peasant families.

At the end of the Second World War, under the increasing influence of the Soviet Union on the decisions of governments in Central and South-Eastern Europe, a series of new agrarian reforms took place in an attempt to improve the condition of peasants, but also destructure any instances of the rising middling-peasant class, which could put up a strong opposition against the communist regime.

The agrarian reform of 1945 was characterised by the lowest amounts of land given in ownership: land was expropriated from over 143,000 people, totalling a surface area of 1,444,000 hectares, and nearly 800,000 peasants were granted land amounting to 1,058,000 ha. To this, another 940,000 ha were added, which were nationalised in 1949, which means that middle-sized properties were dispossessed of a total area of 2,360,000 ha (Axenciuc, 1996, p. 102).

The negative impact of this law in relation to middle-sized properties, which had started to develop during the interwar period, consisted in the dispossession of persons owning over 50 ha of land, which was construed as one single agricultural property, irrespective of its positioning (arable land, meadows, orchards, artificial pools and ponds, etc.). This reform is also the first one to provide no compensation to deprived landowners.

Along with the land, the state also took possession, without delay or compensation, of all the equipment found on the agricultural land, which was to be part of county centres for the hiring of agricultural machinery meant to serve farmers, as well as of the implements and draught animals, proportionally to the expropriated land area, which were to be transferred to the peasants who were granted land ownership by operation of law. This law practically meant the confiscation of privately owned agricultural assets, which resulted in the destructuring of highly mechanised modern agricultural holdings, which had reached economic efficiency.

The peasants who received land were forced to pay for it: the price to be paid to the Romanian state was set at the level of one year's average crop, namely 1,000 kg of wheat and 1,200 kg of maize, respectively, with 10% of the cost to be paid in advance, while the rest was to be paid in instalments within a period of 10 years for those who owned land and 20 years for those without any, whereas former landowners had been expropriated without any kind of compensation.

The reform was followed by a process of forced collectivisation, which was particularly violent, at least in its initial stages, and aimed to eradicate the 'chiabur' (kulak) class: one of the systems employed was that of mandatory quotas, which meant the obligation to supply the state with agricultural products under the terms and for the prices established by the latter. The system imposed disproportionally large quotas for well-off peasant households, which led to their impoverishment (Larionescu, Mărginean and Neagu, 2006, p. 97). The duties and obligations enforced upon middling peasants were so burdensome that there were numerous cases in which they willingly relinquished their land to the state (Şandru, 2000, p. 308).

These economic measures were complemented by acts of physical anihilation, especially from 1949 to 1962, as part of one of the longest and most radical collectivisation campaigns in the Communist Block. Repression was most severe in Romania, as shown by the report of the Presidential Commission for the Analysis of the Communist Dictatorship in Romania (2006, p. 440-441): tens of thousands of peasants were sentenced and imprisoned, their property, including their homes, was confiscated, while their families were forced to pay rent in order to keep living in those homes, etc. Furthermore, the co-operative system created was a highly centralised statist one, which failed to reduce gaps and ensure the prosperity of peasants, who continued to survive economically during the communist period as well.

The agrarian reforms of the early 20th century determined the nearly complete disappearance of large agricultural holdings, while those after the Second World War abolished the class of middling agricultural landowners. Consequently, the structure of the Romanian agricultural sector of the mid-20th century consisted to an overwhelming extent of merely small areas of land for most peasants.

The communist system fostered the forced pooling of these plots of land, which led to the creation of large agricultural holdings, with a superior yield, yet founded on constraints and therefore artificial, which would be subject to dissolution immediately after the disappearance of the communist regime.

Restitutio in integrum and post-revolutionary agrarian reforms

Post-1989 agrarian reforms (Land Law 18/1991, as well as Law 169/1997 for the amending and supplementing of Land Law 18/1991, and Law 1/2000 for the reconstitution of ownership rights over agricultural and forest land requested under the provisions of Land Law 19/1991 and Law 169/1997) gradually restored, within a decade, private property rights over the land in the patrimony of the former agricultural and production cooperatives to both former co-operative members and their legitimate successors, according to the land ownership *status quo* before the forced installation of communism in Romania.

The philosophy of post-revolutionary agrarian reforms was, again, of a social nature: the law dissolved agricultural production cooperatives, which, in spite of all their problems, had proven to be more economically efficient than small agricultural holdings (pooled land yielded larger crops, while cooperatives used selected crops, possessed irrigation systems over relatively large areas, specialists, as well as various production equipment). The law of 1991 replaced them with economically inefficient small and dwarfish agricultural properties.

The first legal regulation restored ownership rights within the limits of at least 0.5 ha for each entitled person and no more than 10 ha per family in terms of arable land (by family one meant spouses and unmarried children). Those entitled could also request the difference between this area and that which they contributed to the agricultural

production cooperative, yet still no more than the amount of land stipulated by Law 187/1945 for the carrying out of the agrarian reform, namely 50 ha.

The arguments in favour of such a decision were numerous: private property needed to be constituted and upheld, with any future form of association having to be based on incentives, not coercion, while the expectations of the population and the pressure it exerted to reconstitute ownership rights were very high (particularly among elderly rural inhabitants, who had experienced the confiscation of their agricultural assets, the pressure and abuse of forced collectivisation during communism). There was also the solid argument regarding the need to ensure an additional level of income for the population in rural area. Naturally, undeclared political arguments prevailed as well, as the rural population constituted almost half of the country's population, which represented a category of voters chased after by the new political parties competing for power in elections.

The shortcomings of the agrarian reform of 1991 quickly became obvious, so that the governments which succeeded one another after 1996 wanted to re-evaluate the size of the land areas to be transferred to owners; hence, Law 1/2000 stipulated that the restoration of ownership rights should be carried out within the limit of 100 ha for each dispossessed landowner, both for agricultural and forest land. Moreover, the law provided for the possibility of pooling where possible for the differences in land areas between 50 and 100 ha. Thus, this new law allowed for the concentration of land and the creation of middle-sized holdings that should have constituted the driving force of Romanian agriculture.

This massive transfer of agricultural property towards a significant number of private beneficiaries, some of which were uninterested in agricultural activities or unable to cultivate the land they were made owners of, would generate a series of negative economic effects on agricultural holdings in Romania, as well as on the agricultural sector as a whole, among which we would like to mention the following:

- granting ownership over small land areas caused most Romanian agricultural holdings to grow crops only for their own consumption, agricultural production thus dropping significantly. According to Otiman (2012, p.340), two economic indicators relevant for the analysis of the dynamics of agriculture (the average cereal production and the value of agricultural production) highlight the stagnation, perhaps even regression brought about by the agricultural policies of the last 30 years: the average cereal production for the 1990-2011 period was at an average level of 40-45% of the EU average, while the value of agricultural production for 1998-2009 was around 800-900 euro/ha in Romania, compared to 1,800-2,000 euro/ha in the EU;
- the restoration of land ownership resulted in many owners of an advanced age, incapable of working the land, thus leading to many plots being left uncultivated;

- in many cases, the ones to receive the land were the rightful owners' heirs, who lived in urban areas and were engaged in non-agricultural activities;
- the quality of crops dropped due to the decrease of the permanent employment of specialists in the field;
- due to the lack of interest, the low value of land plots, etc., many heirs of the initial owners failed to carry out the legal procedures required to register agricultural properties so that, at present, it is impossible to identify the real owners or the possessors of significant areas of Romania's land, which has negative effects on the long-term development of the Romanian rural world;
- the process of granting ownership was long and cumbersome and, at the end of it, part of the agricultural land ended up being owned or exploited by the local elites (former cooperative presidents or specialised personnel), who possessed the knowledge and connections required to produce and commercialise agricultural products (Aligică and Dabu, 2003, p. 54-55). Even though there are no data regarding the expansion of this phenomenon, the reality in certain parts of the country shows the large agricultural holdings belong to members of the former or current local elites.

One important aspect worth stressing is that not all communist states adopted the same methods for carrying out the transition to private property in agriculture after the fall of communist regimes, as each country had its own strategy for the reformation of the agricultural sector, as well as its own reform timeline. Obviously, the strategies they employed were influenced by their historical past, the current situation in each state at the time of the reforms, etc.

One study focused on the agrarian reforms in 25 former communist states in Central and Eastern Europe, as well as in the former soviet region (Hartvigsen, 2014, p.332), identifies six general approaches exhibited by agrarian reforms across the ex-communist area: four of them aimed to return the land to its former pre-communist owners, while two of the approaches set out to distribute the land to the current rural population. The strategies for the restitution of the land to former owners, in most of the states which opted for this approach, mainly sought to reconstitute properties in their old locations and, wherever that was no longer possible, other plots of land were allotted; a second approach allowed former owners to withdraw from cooperatives and take with them the areas of land which they had put in them; some states offered compensation in the form of vouchers, others in monetary form; one final version aimed for privatisation through the sale of state land. The agrarian reform strategies regarding the distribution of land sought to allot either actual plots of land or shares in land under exploitation. It is necessary to stress that it was very rare for one single approach to be employed; as a rule, there was one general approach and one or several secondary ones, depending on the specific local context, as can be seen in the table below:

		Land reform approach						
		Restitution Distribution						
Region	Country	Restitution to former	Withdrawal of formally	Compensation	Privatization through sale	Distribution in physical	Distribution in land	No agrarian
		owners (including other land when restitution	private land from collective farms		of State land	parcels	shares	reform
		on old boundaries not possible)						
Baltic	Estonia	x		0	x			
states	Latvia	x		0	0			
	Lithuania	x		о	о			
Central- European	Czech Republic	x	x	O	O			
countries	Slovakia	х	x	0	0			
	Hungary			x	x	x		
	Poland				x			
	Eastern Germany	x	x	O	X			
Balkan	Albania	0		0		x		
countries	Romania	x		0		0		
except former Yugoslavia	Bulgaria	x		0	0			
Former	Slovenia	x						
Yugoslavia	Croatia	x		0	x			
countries	Serbia	x			x			
	Bosnia- Herzegovina							x
	Montenegro	x			x			
	Macedonia	X						
	Kosovo				x			
Western CIS countries	Moldova		0			x	0	
	Ukraine		0			x	x	
	Russian Federation		0				х	
	Belarus							х
Trans	Armenia					x		
Caucasus	Georgia					x		
states	Azerbaijan		0			x	0	

Table 1. The general approach of the agrarianreform in former communist states

x – main approach o – secondary approach

Source: M. Hartvigsen, 'Land Reform and Land Fragmentation in Central and Eastern Europe', p. 333.

As can be concluded, Romania adopted an agrarian-reform philosophy which is not unique in the former communist area, the restitution of the land to its former owners being the most widespread method in 13 of the 25 states under analysis (Estonia, Latvia, Lithuania, the Czech Republic, Slovakia, East Germany, Romania, Bulgaria, Slovenia, Croatia, Serbia, Macedonia, and Montenegro).

The conclusion reached by those who have analysed the agrarian reforms of former communist states, however, is that those countries which did not completely dismantle the former co-operative structures registered superior agricultural results compared to those which went through radical reforms for the restitution of land in its pre-collectivisation forms (Mihalache, 2020, p. 50).

The current structure of the agricultural sector: fragmentation and economic (in)efficiency

Fragmentation is characteristic to several Eastern-European states, having resulted from the regional historical context, as well as from the strategies implemented by each of these states in the years following the collapse of communist regimes. There are two types of fragmentation in the field of agriculture: a fragmentation of properties, which means that they consist of subdivisions which are much too small to be exploited rationally, and a fragmentation of holdings, which implies that they are made up of numerous disparate plots of land, which has much more serious negative economic effects. When analysing the fragmentation of agricultural holdings, one needs to take into account a multitude of factors, such as: the size of the agricultural holding, the size of its parcels, their number, their distribution and the distance between them, the shape of the parcels (King and Burton, 1982, p. 475-480).

One aspect which needs to be stressed from the very beginning is the fact that there is a difference between an agricultural property and an agricultural holding when it comes to fragmentation analysis: viable agricultural holdings can emerge even if we are dealing with a fragmented agricultural property, in which case fragmentation does not have a direct negative effect upon the efficiency of the agricultural activity. Land ownership, however, is definitely affected by the medium-term and long-term development of the rural population, given that a demographic increase can lead to the accentuation of fragmentation, while the ageing of the population can result in the spontaneous pooling of agricultural properties.

Economists and sociologists (Axenciuc, 1996, p. 107) underscore the essential difference between an agricultural property and a holding, one that needs to be taken into account by any analysis of the agricultural sector and has major economic and social implications: an agricultural holding entails an agricultural property which is being capitalised on. In order to analyse the current Romanian agricultural reality, we will refer to the size and size-based categorisation of agricultural holdings – as opposed to properties, as they represent an indicator of the efficiency of agricultural activities.

The data presented in the following table uses the information available from the agricultural censuses of 1948, 2002, 2010 and the structural investigation of the agricultural sector of 2016, capturing the developments which have taken place in the last 30 years, thus enabling us to draw conclusions as to these developments and the consequences of the post-1990 agrarian reforms. We have included the data from the 1948 census as a starting point and comparison, as the Romanian agrarian reforms after 1989 aimed to reconstitute properties according to the *status quo* after the Second World War:

(0	,	
Number of holdings and	1948 ¹	2002 ²	2010 ³	20164
utilised agricultural area				
	Agricultural	holdings under 1 ha	ı	
Number of holdings (% of	529,474	2,221,508	1,999,533	1,770,569
the total number)	(17.10%)	(49.53%)	(52%)	(52.98%)
Utilised agricultural area (%	305,000	770,665.77	733,519.48	639,180.15
of the total utilised	(2.26%)	(4.91%)	(4.67%)	(5.11%)
agricultural area)				
	Agricultura	l holdings of 1-5 ha		
Number of holdings (% of	1,813,755	1,925,388	1,524,899	1,290,358
the total number)	(58.58%)	(42.93%)	(39.66%)	(38.61%)
Utilised agricultural area (%	5,718,000	4,442,543.05	3,511,485.59	2,949,226.62
of the total utilised	(42.30%)	(28.28%)	(22.37%)	(23.59%)
agricultural area)				
		holdings of 5-10 ha		
Number of holdings (% of	551,090	263,715	222,933	194,200
the total number)	(17.80%)	(5.88%)	(5.80%)	(5.81%)
Utilised agricultural area (%	4,324,000	1,740,279.52	1,487,340	1,304,357.10
of the total utilised	(31.99%)	(11.08%)	(9.48%)	(10.43%)
agricultural area)				
		holdings under 5 ha		•
Number of holdings (% of	2,343,229	4,146,896	3,524,432	3,060,927
the total number)	(75.68%)	(92.46%)	(91.66%)	(91.58%)
Utilised agricultural area (%	6,023,000	5,213,208.82	4,245,005.07	3,588,406.77
of the total utilised	(44.56%)	(33.19%)	(27.05%)	(28.70%)
agricultural area)				
		holdings under 10 h		
Number of holdings (% of	2,894,319	4,410,611	3,747,365	3,255,127
the total number)	(93.48%)	(98.34%)	(97.45%)	(97.40%)
Utilised agricultural area (%	10,347,000	6,953,488.34	5,732,345.28	4,892,763.87
of the total utilised	(76.54%)	(44.27%)	(36.52%)	(39.13%)
agricultural area)	A . 1/ 11	1 1 1: 010 100 1		
NI 1 CI II. (0/ C		holdings of 10-100 h		74 740
Number of holdings (% of	187,738	63,840	83,432	74,748
the total number) Utilised agricultural area (%	(6.06%)	(1.42%)	(2.17%)	(2.24%)
	2,231,060	1,194,928.7	1,879,323.32	1,636,317.91
of the total utilised agricultural area)	(16.50%)	(7.61%)	(11.97%)	(13.09%)
agricultural area)	Acutional	haldinga ayar 100 h		
Number of holdings (% of	14,120	holdings over 100 h 10,442	a 14,448	12,310
	(0.46%)	(0.23%)	(0.38%)	(0.37%)
the total number) Utilised agricultural area (%	940,000	7,559,539.59	8,083,358.81	5,973,453.71
of the total utilised	(6.95%)	(48.13%)	(51.50%)	(47.78%)
agricultural area)	(0.2570)	(+0.1370)	(31.3070)	(+/./0/0)
agriculturar area)		TOTAL:		1
Number of holdings	3,096,177	4,484,893	3,845,245	3,342,185
Utilised agricultural area		15,707,956.63		12,502,535.49
Sources: 11/ Ascancius Evolut				

Table 2. Agricultural holdings according to size (number and utilised agricultural area)

Sources: ¹V. Axenciuc, Evoluția economică a României. Cercetări statistico-istorice 1859-1947. Vol. II -Agricultura, p. 214; A. Golopenția, P. Onică, 'Recensământul agricol din Republica Populară Română la 25 ianuarie 1948. Rezultate provizorii' in A. Golopenția, S. Golopenția, Opere complete. Vol. II - Statistică, demografie și geopolitică, p. 483-484; ²Recensământul general agricol 2002; ³Recensământul general agricol 2010; ⁴Ancheta structurală în agricultură 2016, p. 20-21. One initial observation which immediately emerges from the analysis of the data in the table has to do with the fact that there is a certain consistency as to the total number of agricultural holdings in the last half a century, except for the data revealed by the 2002 general agricultural census, which show a significant increase (by almost 50%) in their number compared to the situation in 1948. The large number of agricultural holdings in 2002 accounts for the negative effects of the post-revolutionary agrarian laws, which pulverised agricultural holdings in a manner unprecedented in the history of Romanian agriculture.

Other negative developments can be observed upon analysing the situation of the total utilised agricultural area, which registered a significant increase (over 20%) during the communist period, as a result of the expansion of agricultural areas, by a maximum of almost 16 million hectares in 2002, a surface area which remained relatively constant until 2010, after which we witness a significant drop until 2016 (the disappearance of three million cultivated hectares compared to 2010 and one million lost hectares compared to 1948).

As can be seen, the average utilised agricultural area per agricultural holding also registered a significant decrease: it used to be 4.36 ha in 1948, dived down to 3.5 ha in 2002, rose to 4.08 ha in 2010, as a result of the concentration of agricultural holdings, after which it dived down again to 3.74 ha in 2016. The severe drop revealed by the 2016 structural investigation of the agricultural sector can only be explained by the significant reduction of the total agricultural area; had the agricultural area remained at a similar level to that of 2010, the average area would have been 4.7 hectares, more than at any other previous point in history.

If one were to trace where the 3 million utilised hectares went, one will notice that the most significant loss of utilised area lies, paradoxically, with the large agricultural holdings (over 100 ha), which shrank by 2.1 million hectares, while 200,000 hectares disappeared from middle-sized holdings and over 800.000 hectares from holdings under 10 hectares. The existing data do not allow for a more detailed analysis, but we may assume that, given that the number of agricultural holdings remained relatively constant during the period under analysis, the decrease may have been caused by the abandonment of agricultural areas with low potential, which ceased to be leased and exploited, the cause thus being found to lie again with small landowners.

The phenomenon of the disappearance of some agricultural holdings is a general one at European level, considering that, within the European Union, between 2005 and 2016, their number decreased by 4.2 million (almost one quarter of the total), 85% of which were the ones under 5 hectares (Eurostat, 2018, p. 22). However, the issue which should draw attention in the case of Romania is that, between 2002 and 2016, over one million agricultural holdings disappeared, which is a quarter of the total number thereof in the European Union.

A more detailed analysis of the data (see **Table 2**) allows us to draw a few relevant conclusions as to the instances of progress/regression which can be observed in the last thirty years:

- 16 Romanian agrarian structure after thirty years
 - the structure of Romania's agricultural sector is unique in the European Union, as it is characterised by a highly pulverised set of agricultural holdings: of the total 10.5 million agricultural holdings found in the EU in 2016, one third (32.7%) are in Romania, while their utilised agricultural area represents a mere 7.2% of the total European utilised area (12.5 million hectares out of a total of 177 million), which means that the average area per holding is significantly smaller in the case of Romanian holdings; furthermore, the data (Eurostat, 2018, p.18) show that the number of agricultural holdings in Romania is similar to the sum of the numbers in the three EU countries which follow it by number of holdings: Poland (13.5%), Italy (10.9%), and Spain (9.0%);
 - over half of the agricultural holdings in Romania (52.98%) are dwarfish (under 1 ha); in 2016, these were exploiting a mere 5% of the country's total utilised agricultural area, which made for an average surface area of 0.4 ha per holding, which means that they can only ensure the survival and a precarious one at that of their owners;
 - very small agricultural holdings (under 5 ha) constitute over 91% of the total number of Romanian agricultural holdings and possess little over a quarter of the utilised agricultural area;
 - upon analysing the ensemble of agricultural holdings under 10 ha (dwarfish, very small, and small ones), we notice that they amount to 97.40% of the total, while exploiting 39.13% of the utilised agricultural area. If we were to compare that to the situation at start of collectivisation (1948), we would find that, even though the number of agricultural holdings was similar (93.45% of the total in 1948), they were exploiting 76.54% of the total utilised agricultural area, which is more than double the present amount (over 10 million hectares as opposed to the 4.9 million in 2016). This shows that, in spite of the sometimes anti-economic nature of the reforms of the second half of the 20th century, they managed to provide the category of small agricultural properties with much more substantial areas of land;
 - the number of middle-sized agricultural holdings (between 10 and 100 ha) is half of that in 1948, with a surface area of 1.6 million ha compared to 2.2 million, which testifies to the failure of post-1990 reforms to build a strong set of middle-sized properties and middle class in the Romanian rural world. The data reveal excessive polarisation, with, on the one hand, a huge number of small agricultural holdings, some of them dwarfish, and, on the other, a small number of large agricultural holdings, which utilise almost half of the country's agricultural land;
 - even though the number of large holdings is relatively constant, the area exploited by these is 8 times greater in 2002 and 6 times so in 2016, as compared to 1948;
 - the area owned by the large agricultural holdings (over 100 ha) increased from 6.95% in 1948 to 48.13% in 2002, 51.50% in 2010, 47.78% in 2016, which shows that large holdings were reconstituted spontaneously, returning to a

level similar to that which existed at the time of the 1921 reform. This reality confirms once again that large holdings are more economically efficient.

The fact that little over one quarter (28.70%) of the total area is utilised by small agricultural holdings (under 5 ha) explains a great many of the negative social aspects present in today's Romanian rural world: poverty, a low level of healthcare and education, inadequate living conditions, low quality of life, etc.

The connection between migration and the state of the agricultural sector is more than obvious: a recent study (Mihalache, 2015, p. 197) shows that the great population losses occur in rural areas which are either isolated or located at long distances from towns and cities, while peri-urban areas register increases in population in general and in young population, in particular. This proves that young people in areas with no prospects of long-term development move to job-generating centres or to other countries. Thus, the population left behind in isolated areas becomes increasingly scarce and ageing, which has negative long-term social and economic consequences, including for agricultural properties and holdings.

The current structure of the agricultural sector: polarisation and poverty

As we have already shown, 97.40% of all the agricultural holdings in Romania are under 10 ha, while utilising only 40% of the total agricultural area, which renders them incapable of becoming economically viable. At the same time, agricultural holdings over 100 ha, which represent 0.37% of the total, utilise 47.78% of Romania's entire agricultural area, which makes for a strong polarisation between small and large agricultural holdings, which will have a negative impact on the development of rural areas and of the peasant population for a long time to come. Even though the areas utilised by small agricultural holdings are reduced, for three decades, they have provided the means for survival for the bulk of the rural population, thus leading to the emergence of what Vladimir Pasti (1997, p.47-48) called a 'survival society'.

In order to understand the high level of polarisation in Romania, it is of interest to compare the percentage of different size categories of agricultural holdings and the percentage of utilised area in the EU-28 to those in Romania. The data in **Table 3** show that two thirds of European farms utilise less than 5 hectares, while, in Romania, the percentage of holdings in this size category is over 91%; the area utilised by such farms in the EU-28 is 6.1% of the total area, while, in the case of Romania, the percentage is almost 30%. However, this situation is not unique to Romania, but occurs in other states in the same region as well (Van Dick, 2003, p. 150-151).

When it comes to small properties (under 10 ha), in the EU-28, they amount to 77.7% of the total, compared to 97.4% in Romania, while the area they utilise represents 11.2% of the European total and 38.7% for Romania, which gives us an image of the prevalent type of agricultural holdings in this country. However, there are other states in the region exhibiting a similar situation.

As for the other end of the spectrum, farms over 100 ha represent 3.3% of all holdings in the EU-28, while, in the case of Romania, they account for 0.4%. The area they utilise amounts to 52.7% at European level, while, for Romania, that percentage is 47,8%, which shows a more accentuated concentration of land in the case of Romania's agricultural holdings.

As can be observed, it is middle-sized agricultural holdings (10-100 ha) which are in the most delicate situation: 19% for the EU-28, compared to 2.2% for Romania; middle-sized properties exploit over one third of the agricultural area in Europe (36.1%), while, in Romania, that percentage is merely 13.2%, i.e. a third of the surface utilised at European level, thus showing the dimension of the failure of the post-revolutionary agrarian reforms to consolidate middle-sized properties in Romania's rural area, which could have led to its economic prosperity, as well as to that of its inhabitants engaged in agricultural activities.

	A 0	ge of agricultural dings	The percentage of utilised area		
	EU-28	Romania	EU-28	Romania	
Under 5 ha	65.6	91.6	6.1	28.7	
5-10 ha	12.1	5.8	5.1	10.4	
10-20 ha	8.3	1.5	7.0	5.3	
20-30 ha	3.5	0.3	5.1	2.1	
30-50 ha	3.6	0.2	8.5	2.3	
50-100 ha	3.6	0.2	15.5	3.4	
Over 100 ha	3.3	0.4	52.7	47.8	

Table 3. The situation of agricultural holdings categorised by size and utilised area in the EU-28 and in Romania

Source: Eurostat, 2018, p. 18

The data above reveal that agricultural holdings in Romania are extremely polarised and that is but one facet of the explanation regarding the poverty of a large portion of the rural population. The second cause derives from the large share of rural population engaged in agriculture, either as employees or as unpaid agricultural workers; the share of the rural population was very high throughout the 20th century, as, even today, it represents almost half of the country's population, as shown by the data in the table below:

Table 4. The share of the population engaged in agriculture

	Total population					
Years	Total (thousands)	Rural %	Urban %	Employed farming population (thousands)		
1950	16,311	76.6	23.4	6,209		
1989	23,159	46.8	53.2	3,012		
2000	22,435	45.4	54.6	3,523		
2015	19,819	46.2	53.8	2,184		

Sources: Romania's Statistical Yearbook, 2016

The data show that the population engaged in agriculture decreased by 1 million people compared to 1989, which is almost a third. Even though the farming population diminished dramatically in comparison to the interwar period, it remains disproportionally large; according to the official data (INS, AMIGO series, 2017), in 2017, the working population in rural areas was distributed as follows: of the 8,671,000 employed people, 1,975,000 were engaged in agriculture, forestry, and fishing, while in the EU-28 nearly 10 million European citizens work in agriculture, which represents 4.2% of the total European population. We can see that Romania ranks first in this respect, with 23% of its employees working in agriculture, compared to Bulgaria's 17.5%, Greece's 10.7%, Poland's 10.1% (Eurostat, 2018, p.25). What should be a cause for alarm as to the excessively large number of people engaged in agriculture is the fact that those two million people in Romania represent almost one fifth of the European total.

This situation is emblematic for the inefficiency of the Romanian agricultural sector: Vladimir Pasti (2006, p. 125-126) shows that, in 1930, 10.5 million peasants (over half of them illiterate, lacking modern equipment, irrigation, or fertilisers) produced approximately 10.5 million tons of cereals, which means an average of 1,000 kg per peasant. In 1999, one peasant produced 4,300 kg, i.e. four times more, while, in France, one French farmer produced 53,000 kg (12 times more) and an American one 86,000 kg (i.e. 20 times more). Moreover, he (*ibid.*, p. 433-434) believed that the current structure of the agricultural sector is increasingly polarised due to the large-scale dispossession of small and medium-sized agricultural holdings, which will free a large mass of the active farming population, which will no longer be able to be absorbed by the labour market in the developed states of the European Union; modern agriculture would require half a million people, which raises the question of what can be done with the surplus of one and a half million people.

The situation is more complicated when analysing the status of the people engaged in agriculture, forestry, and fishing: only 10% have employee status (compared to 73.7% of the total employed population in Romania), while 54.8% are self-employed and 35.2% are unpaid family workers. The 'unpaid family workers' phenomenon was constantly present throughout the 20th century (Larionescu, Mărginean and Neagu, 2006, p.210), their number making it nearly impossible for peasant households to become profitable, with the exception of villages located near cities, which allowed for agricultural activities to be combined with paid employment in the neighbouring city.

The current structure of the agricultural sector: a lack of records as to owners and agricultural areas

The registration of properties in Romania is deficient, especially in the case of rural properties located in the open countryside, which constitute the overwhelming majority of land areas utilised by agricultural holdings. The causes of this state of affairs are numerous (Mihalache, 2020, p. 59), having built up along the thirty years which passed since the beginning of the restoration of private property following the agrarian reform of 1991; the most significant of them are related to the difficulty of identifying the owners of the plots of land and to the precarious legal regime regarding land. An

exhaustive – yet obviously incomplete – presentation of these causes shows the multitude of problems generated by the laws of the post-revolutionary reform, which will take a long time to solve; until such a time as they are solved, the issues of the agricultural sector will persist:

- the failure to complete the process of granting title deeds;
- the inconsistent application of land legislation;
- the legal provisions as to the granting of ownership over land in the old locations being impossible to enforce in a great many cases;
- a lack of documents attesting to land ownership;
- the impossibility of identifying the owners/actual possessors/rightful heirs of certain properties (not found in the village/town, lack of succession documentation, etc.);
- inconsistencies between extant and allotted areas (allotment was carried out based on the declarative records in agricultural registries);
- dysfunctionalities of the local administration;
- modifications caused by land-use work conducted during the communist era (deforestation, drainage of bodies of water, the building of irrigation systems and means of access, etc.);
- the use of obsolete land-registry maps made in 1970-1980 or the complete lack thereof;
- the numerous disputes and trials between owners or their successors;
- civil status errors (particularly regarding the correct names of people and their overlapping in the records);
- the large number of owners and the fragmentation of land areas (as a consequence of agrarian reform laws, as already shown), which entailed a large work volume;
- lacking/poorly trained specialists used by local rural authorities;
- the reluctance of part of the population to have properties registered (particularly the fear of their subsequent overtaxation);
- ill will.

The problem of a lacking land register and the impossibility of legal land trade, as well as the inexistence of other clear records as to the size of agricultural properties, is an older one, particularly in certain regions of Romania. It was invoked in the interwar period as well, for instance, and in the 1948 agricultural census, when the specialists conducting the data collection operations complained that many heads of agricultural holdings estimated their size based on the number of days it took to plough or mow them (Golopenția and Onică, 1999, p. 474). Even today, there is only an estimation of the general number of properties in Romania: approximately 40 million, 80% of which are located in rural areas, of which 12% are registered, as opposed to 45% in urban areas. This problem became much more serious after 1990, as plots of land were transferred as private property to their post-World War II owners without bringing any significant improvements to the records thereof. The situation began to change substantially only after Romania's integration into the European Union, as a result of external pressure.

One of the targets of all the governing programmes of the last decade has been to increase the percentage of systematically registered properties. Thus, the investment programme for services of cadastre and systematic registration are included in a National Cadastre and Land Register Programme (Programul Național de Cadastru și Carte Funciară - PNCCF), which, for 2018-2020, is allocated 913 million euro in funding (313 million from grants and 600 million from the state budget). The funding based on external non-reimbursable funds, through the major project included in Priority axis 11 of the ROP 2014-2020, called 'Geographical Expansion of the System for Registering Properties in the Cadastre and Land Register', approved by the European Commission in 2018, will provide citizens with free registration in the integrated cadastre and land register system for all the properties in 660 communes, amounting to a total area of 5,758,314 ha. The systematic registration work can be done at cadastral-sector level as well, so that, at present, it is being carried out in 2.039 ATUs (administrative territorial units), with 2,311,690 ha completed and 4,732,290 ha in progress.

The pressure to carry out the registration of properties in Romania, especially of those in rural areas, came from the European Union; starting with the new programming stage, agricultural land subject to PIAA (Paying and Intervention Agency for Agriculture) subsidies will have to be registered into the integrated cadastre and land register system: of the total 9.54 million ha receiving subsidies, 5.22 million ha (54.66%) have been registered up to the present time, while another 4.10 million ha (43%) are to be processed under contract, the deadline being the end of 2020, which means that 98% of the subsidised agricultural land will have been registered (i.e. almost three quarters of the country's agricultural land).

The lacking registration of properties prevents their legal trading (title transfers are carried out without meeting legal requirements, which constitutes a new problem as to the subsequent identification of the true owners), which is the modern equivalent of the inalienability of the first agrarian reforms in Romania. All these factors represent an impediment for business opportunities, the taxation of the respective land, the elaboration of strategies for sustainable development, or the commission of infrastructure works, including the possibility of attracting European funds.

The situation of the registration of rural properties in Romania is significantly inferior to that in neighbouring countries, which constitutes a red flag for future developments in the Romanian agricultural sector (Eurostat, 2018, p. 30). This represents an important, though not exclusive, cause of the costs of arable land in Romania being the lowest in the European Union, with an average price of 1,956 euro per hectare (compared to an average above 20,000 euro for most Western-European states or nearly 80,000 euro for the Netherlands, which finds itself at the other end of the spectrum).

Final remarks

Romanian agrarian reforms sought nothing other than to consolidate Romanian small properties, yet failed to ensure their economic independence at the same time: thirty years after the restoration of land ownership rights, over 95% of all the agricultural holdings in Romania qualify as small (under 10 ha), while over 70% of them qualify as very small and dwarfish (under 5 ha and under 1 ha, respectively). Thus, the result was the survival on the verge of – sometimes severe – poverty of the rural population.

One paradox of post-revolutionary agrarian reforms is that, even though, at least at declarative level, the creation of large agricultural holdings was not desired, they emerged spontaneously and ended up utilising almost half of the country's agricultural land. Thus, the situation returned to its form before the 1921 reform, which abolished, at that time, large agricultural properties/holdings in Romania: in 1921, 22,523 estates totalling 6 million hectares were expropriated, which is the equivalent of the land utilised today by a number of 12,310 large holdings (over 100 ha). The concentration of land within large agricultural holdings is all the more significant considering that, at present, the number of holdings is half of that of the early 20th century, while utilising approximately the same agricultural area.

As a consequence, the current Romanian agricultural sector is highly polarised, formed of two types of entities with different characteristics and functionalities: small agricultural holdings, the production of which is low in terms of quantity and quality, and directed especially towards their own consumption, and large farms, which own approximately half of the agricultural land and feature mechanised production, which is oriented towards the commercialisation of products. However, what is scarcely present is the transitional link which constitutes the key element in Western Europe, namely family farms, cooperatives, or small-producer associations (Mihalache, 2020, p. 51). Thus, the sector of medium-sized farms continues to lack growth prospects, at least in the near future, given that the developments in the last few years point towards a process of pooling and growth of large holdings.

As we have shown, Romania possesses the highest number of agricultural holdings in the European Union (about one third of them, yet which utilise merely 8% of the agricultural area), which means that the average area of these holdings positions the country last among member states: 3.6 ha, followed only by Cyprus, with 3.1 ha, and Malta, respectively, with 1.2 ha. The average area of agricultural holdings in the other former communist states is two or three times larger (Slovenia, 6.7 ha; Hungary, 9.5 ha; Croatia, 10 ha; Poland 10.1 ha), while most states feature average areas of over 30-50 hectare, with the Czech Republic having the largest average area of agricultural holdings, 133 ha (Mihalache, 2020, p. 62).

Otiman (2012, p. 341) rightfully believes that the effects of the agrarian reforms, combined with the post-1990 agrarian policies, generated an underperforming, weak, non-competitive, mostly subsistence-oriented agriculture, with the following economic and social effects: the significant reduction of agricultural areas due to a large portion of arable land not being utilised (in the last ten years, the utilised agricultural area decreased by three million hectares, which is a fifth of the utilised area); the drastic

diminution of livestock; physical and social desertification, as a maximum of 8-10% of the country's irrigation potential is being used; depopulation, the ageing of the rural population, the qualitative and professional decrease of the agricultural workforce; the persistence of zones of extreme poverty (overlapping those regions in particular where the most accentuated polarisation of agricultural holdings is present); the prevalence of primary agriculture; the quasi-complete disappearance of social rural economy.

The employment situation in rural areas is also especially complex: over two thirds of the rural population is still either self-employed or performing unpaid work, while 54% of these individuals are engaged in subsistence agriculture. The Romanian agricultural sector has the lowest rate of wage employment – 5.2%, while in Poland it is almost double, in Bulgaria it surpasses 46%, and in Slovenia it reaches over 80% (ICCV, 2017, p.12).

The future of agricultural holdings is an uncertain one: although, in the last few years, it has seen a spectacular increase in the number of properties registered in rural areas, particularly agricultural properties, it has not reached the initially envisaged targets. The impact of this situation on Romania's rural world may be significant, considering that the subsidies granted to agricultural producers in the next programming stage will be conditioned by the registration of their respective land areas, which will lead to a lack of funding for certain agricultural holdings, thus negatively impacting their activity.

Furthermore, the post-1989 system of property restitution a has generated a new class of intermediaries, who became the main beneficiaries of restitutions instead of the true former owners. This system has brought about high inequality and corruption, eventually leading to the emergence of a *nonvean riche class* and a veritable *'neofendal'* system (Zamfir, 2015, p. 34).

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