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# Structure and Ownership of Agricultural Land in Poland in the First Years of New Millennium

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**Abstract:** Poland is characterized by a high share of agricultural land in total surface. This is the effect of the socio-economic relations, existing in the past, low level of economic development, compared to the countries of Western Europe, and rural overpopulation. Concentration of agricultural land is observed on areas with fertile soils and in the less industrialized central and eastern parts of the country. The lowest shares of agricultural land are observed on areas featuring natural conditions disadvantageous for farming, the highly forested North-Western Poland, and the areas characterized by high degree of industrialization and urbanization. The contemporary ownership structure in Poland is the effect of historical transformations of the social, economic and political relations. The pattern of the ownership structure developed over the centuries, and it is the resultant of the diverse socio-economic processes.

Key words: Land use, agriculture, Poland, land ownership.

#### 1. Introduction

Poland is a country situated in Central Europe, with majority of its territory on the lowland plains. That is why two fundamental categories dominate in the land use structure: agricultural land and forest areas. Lack of political and economic stability caused that in the historical perspective land economy in Poland has been undergoing dynamic transformations. This concerned land use structure, ownership forms and ways of managing the land. The present report is devoted to these issues.

The last two decades are characterised by dynamic social and economic change in Poland. Among the more important attendant phenomena is the process of land structure and land ownership change [1]. Farmland has obviously been one of the key agricultural assets subjected to transfers in the period of transformation, and hence also to frequent and

The article concentrates on the changes of land structure and ownership ongoing in Polish agriculture in the first years of new millennium. A detailed analysis of changes in ownership over the market economy period is preceded by a discussion of the history of land ownership in Polish agriculture, with particular emphasis being placed on the communist era. The spatial differentiations of land use and land market are also discussed.

# 2. Structure and the Spatial Differentiation of Land Use

Natural conditions favouring agriculture, an increase in the number of people and a relatively low level of economic development (as compared with

detailed study [2-5]. The main issues connected to ownership transformation on the market for land have been privatisation, the restitution of land, restructuring and land registration [6]. During the same period, agricultural lands were slightly, but steadily decreasing. This phenomenon was clearly visible in the suburban and unfavorable for agriculture areas [3].

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Western European countries) are all elements that previously led to a rapid increase in the area of agricultural land in Poland [7]. This mainly occurred at the expense of forests, to the extent that the occupation of ever-greater areas by agriculture led to excessive deforestation in many parts of the country. The landscape changed as a result, with a diverse natural vegetation giving way to monocultures.

Today, agricultural land remains the dominant form of land use in Poland (Table 1). It is above all concentrated in the uplands, where natural conditions are highly suitable for agriculture. The result is that more than 80% of such areas in the country have been brought under agricultural management (Fig. 1).

An equally high concentration of agricultural land is to be found in central Poland. The quality of productive agricultural space is not as favourable here as in the uplands, so the high share of the land that has been brought under agricultural use needs rather to be associated with a greater role for non-natural factors like the high proportion of the population that is rural, limited industrialisation and conditioning stretching back to the times of Poland's partitioning among Prussia, Russia and Austria.

Crop production plays a very important role in Polish agriculture (Fig. 2). Arable land is concentrated in the areas with good soil conditions. The share they take of all agricultural land even exceeds 90% in the

Table 1 Land use in Poland, 2006.

Category	Area (1,000 ha)	Share of total land	ha per inhabitant
Agricultural land	18.375	58.7	0.49
Forests, woody and bushy land	9.389	30.4	0.25
Land under waters	637	2.0	0.02
Build-up and urbanized areas	2.010	6.4	0.04
Wasteland	493	1.6	0.01
Other	28	0.1	0.00

Source: Statistical Yearbook 2006, Central Statistical Office, Warsaw, Poland.

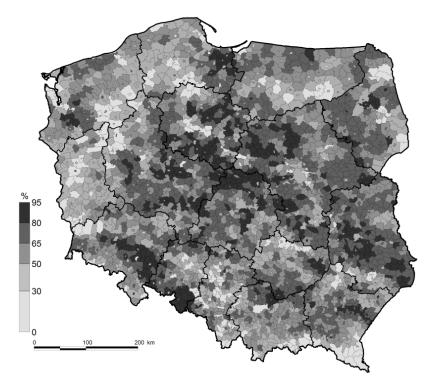


Fig. 1 Share of agricultural land in the total area of communes (Agricultural Census 2002). Source: Central Statistical Office.

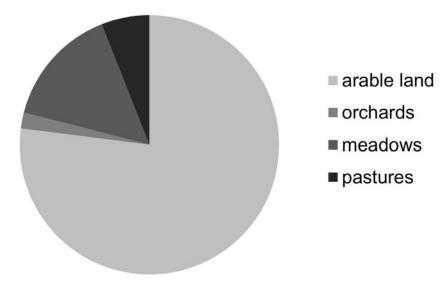


Fig. 2 Structure of agricultural land, 2006.

Source: Central Statistical Office.

aforementioned areas—a situation that must be regarded as unfavourable, since it encourages soil erosion, steppification and a deterioration in water relations.

The small area of orchards results not only from the relatively unfavourable cultivation conditions offered by nature, but also from the lack of any great tradition and experience in the pursuit of this kind of activity. In only a few parts of the country (mainly in the Vistula valley) are there larger areas of orchard cultivation.

The share of all Polish agricultural land that is taken by agricultural grasslands would seem to be relatively low. A limited degree of urbanisation, rural overpopulation and limited opportunities to find work in other branches of the economy have all combined together to encourage the agricultural population to bring every scrap of land under field cultivation.

The area under forests or planted trees and bushy land amounted to 9,389,000 ha in 2006. The highest level of forest cover is to be found in the West and North-West of Poland, as well as in the mountainous areas. In contrast, the share taken by forests falls well below the national average in the centre of the country, with many areas having cover of less than 10%.

Coniferous species prevail in c. 77% of the forest

by area, with Scots pine being predominant (accounting for c. 65% of the area). This is in fact the main species across the Polish lowland, and it is only in mountainous areas or—to some extent—the uplands, that a more diverse species composition of tree stands holds sway.

Other forms of land use include settled areas, areas associated with transport, waters, mining areas and wastelands of various sorts. The first two categories are naturally concentrated in urban and suburban areas, as well as in the industrialised agglomerations. Waters and wastelands take up the greatest areas in the lakeland and Baltic coastal belts. Elsewhere, the share taken by other forms of land use usually does not exceed 5%-6%.

# 3. Changes in Agricultural Land Use

During successive centuries, until the World War II, total area of agricultural land in Poland had been constantly increasing, mainly at the cost of forest areas. Economic development of the country after the war slowed down and stopped this process. Expanding industry, growing urban areas and new transport lines absorbed increasingly large surfaces of agricultural land. Besides, the poorest quality pieces of land were subject to forestation.

Altogether, in the years 1950-2000 the area of agricultural land decreased from roughly 20.4 million hectares to 18.4 million hectares. The biggest decreases took place within the lake districts and in the Carpathians, where the poor agricultural land has been, as a rule, forested. On the remaining parts of the country agricultural land has been mainly transferred to residential, industrial and transport use.

The changes in the economic and political system in Poland after 1989 (passage from the socialist to the market economy) added to the dynamics of transformations in land use. The phenomenon of reduction of the areas used by farming was especially clearly visible in the neighbourhood of urban agglomerations, where agricultural land has been taken over primarily for housing construction, shopping malls, wholesale outlets and production plants. There have also been relatively important decreases of the area of agricultural land on the territories characterised by low quality of agricultural production space. Side by side with forestation, pieces of land in such areas were taken over for recreational developments.

The recent period is characterised by the increase of area of fallowed and waste land. In the years 1990-2002 the surface area of such land increased from 163,000 hectares to 2.2 million hectares. In the opinion of the specialists, who analyse this problem, the fundamental cause for the thus dynamic increase of the area of waste and fallow land was the worsening of the macroeconomic conditions for farming activity [8, 9].

The largest surfaces of the unused agricultural land exist in the North and West of the country, that is—there, where until quite recently a significant proportion of the land was used by the state-owned sector. Lack of interest in these areas from the side of private farmers, resulting from the lack of profitability of farming production, causes that these areas shall most probably be forested.

In other parts of the country the area of land

temporarily not used for farming has also been increasing, but this was due to a number of diverse reasons. Side by side with the lack of profitability of production an important reason for the fallowing of land was the wish of taking it formally away from agriculture and assigning to other uses. Owing to such formal de-farming operation land can be sold for a very advantageous price, several or even more than 10 times higher than the price of agricultural land. Thus, for instance, the share of fallow land increased dramatically on the areas neighbouring upon the urban agglomerations, in particular-especially so around Warsaw. Lack of cultivation on agricultural land for a couple of years makes the formal change of land use easier. In the majority of cases this change leads to the residential use.

# 4. Contemporary Changes in the Land Ownership Structure

The contemporary ownership structure in Poland is the effect of historical transformations of the social, economic and political relations. The pattern of the ownership structure developed over the centuries, and it is the resultant of the diverse socio-economic processes. It is difficult to explain ownership relations in a short report, and so we shall limit ourselves to selected issues from this domain.

The ownership structure of land can best be explained on the example of ownership of agricultural land, within which an entire spectrum of property forms exists. After the World War II, Poland found itself in the Soviet Block and started to build a socialist state. Owing to the agrarian reform, large land estates were liquidated, their place taken over by the private family farms and the farms of the so-called socialised sector (collective and state-owned). Despite the policy of the state, aiming at the strengthening of the significance of the state-owned farms at the cost of the private farming sector, private land property played the most important role in the entire farming sector during the whole period of the socialist economy.

Collectivisation of agriculture succeeded in the majority of countries of the Eastern Bloc [10], but the forms and the ways of implementing it were different [11, 12]. In Poland, all the activities aimed at "socialisation" of farming encountered strong opposition from the farmers. Attachment to the land that the farmer families had not so long before obtained as their property, as well as lack of traditions of joint farming, were the main reasons slowing down the process of collectivisation of farming in Poland. Only in Poland and in former Yugoslavia over the entire period of the socialist economy private farming retained the primary importance (Table 2). Collective farming developed first of all in the Western and Northern parts of the country, where large areas remained after the World War II without their previous owners.

The basis for the ownership changes after the collapse of the socialist economy was constituted by freeing of the land market, which made possible the transfer of land, first of all from the state to the private sector. Until 2003 land could be purchased in Poland by any natural person, who could buy land without any limitation as to the area. The law on the farming system, enacted in 2003, introduced definite limitations in this respect. Nowadays, agricultural land can be purchased by persons with basic training in agriculture, with any kind of secondary or higher education, or persons with experience of working in farming, while farms cannot exceed 500 hectares.

Table 2 The place of the socialised sector in the structure of ownership of agricultural land in the countries of the former Eastern Bloc.

Country	Share of agricultural land administered by the socialised sector (in %)		
	1960	1988	
Bulgaria	91.0	89.9	
Czechoslovakia	88.0	93.9	
German Democratic Republic	92.4	90.2	
Hungary	95.5	85.8	
Poland	13.1	22.8	
Romania	94.2	90.5	
USSR	99.0	98.2	
Yugoslavia	14.0	15.7	

Source: Historia Polski w liczbach (1991).

Private agriculture in Poland is dominated by the family farm ownership. A farm is usually inherited by a family member. Some 90% of farms function in terms of family descent. The major other way of acquiring the rights to agricultural land is purchase.

The rights of foreigners to land purchase are limited. Until 2004 a foreign person wishing to purchase land in Poland had to obtain a license. Getting such license was, in addition, made dependent upon fulfillment of a number of necessary conditions by the foreign purchaser. After Poland joined the EU in 2004 the limitations concerning the estate purchase by the citizens of the European Union were abolished, but for the case of agricultural and forest land the 12-year-long transitory period was introduced. After the end of this period foreigners will be able to buy land on exactly the same principles as the citizens of Poland. In other countries, which joined the EU together with Poland (e.g., Czechia, Lithuania, Latvia, Estonia, Slovakia) this transitory period is shorter and amounts to seven years [13].

After 1989 the place of the ownership forms to date has been replaced by two forms, defined anew: the private and the public. The public sector includes first of all the land taken over by the State Treasury from the former state farms and the land of the state forest estates, as well as the municipal property. In the private sector the fundamental role is played by the private farms, followed by the agricultural production cooperatives and the commercial law companies (Table 3). The situation is decidedly different in the case of forests, which are in a vast majority a public property. In 2000 publicly owned forests accounted for 82.3% of the total forest surface area in Poland, of which, in turn, almost 90% was owned by the State Treasury.

After 1989 the concept of liquidation of the state farms took the upper hand, these farms having had at their disposal more than half of the total agricultural land in the West and North of the country. In 1991 the Agricultural Property Agency (APA) of the State Treasury

Land ownership form	Surface area (in thousand hectares) Share in total area	
Total area of agricultural land with buildings	19,044.3	100.0
Property of the state treasury	3,269.4	17.2
Municipalities and municipality associations	318.4	1.7
Private farms	14,775.2	77.7
Agricultural production cooperatives	245.6	1.3
Commercial law companies	287.4	1.5
Churches and religious communities	95.3	0.4
Land ownership communities	53.0	0.2

Table 3 Ownership structure of agricultural land in the year 2002.

Source: own elaboration on the basis of Krajowy wykaz gruntów (2002); Sprawozdanie o stanie mienia Skarbu Państwa (2002).

was established with the purpose of taking over the land of the liquidated state-owned farms. The APA was in 2003 transformed into the Agricultural Estate Agency.

All the estate taken over by the agency forms the so-called Agricultural Property Inventory of the State Treasury. Side by side with land, the agency took over the agricultural industry plants, service outlets, historical buildings and housing stock.

Until 2005 the agency took into the Agricultural Property Inventory of the State Treasury land of total area of 4,709,000 hectares, of which 1,479,000 hectares have been shed away in a permanent manner. The biggest surfaces of land have been sold in the provinces of Warmia-Masuria and Western Pomerania (Fig. 3). This land passed over first of all to the legal persons (mainly capital stock companies), and to a lesser degree—to the natural persons. The legal persons usually purchased larger pieces of land, exceeding 100 hectares, while natural persons, mainly private farmers, would buy smaller plots of land.

In the years 1996-2004 between 100,000 and 190,000 hectares of land were sold per annum. In the earlier years low intensity of sales was associated with the incomplete preparation of privatisation in the formal-legal terms (land surveying plans and boundaries, updating or establishment of the estate registers, etc.).

One of the fundamental problems in the domain of land use in Poland is fragmentation of land. The average area of a farm in Poland is 8.6 hectares. This agrarian fragmentation is due, in particular, to the

agrarian reforms, in which the landless and the smallest holders were preferred, to rural overpopulation, to land hunger, and to freedom in dividing land among the members of the owner's family. In terms of average size of land property Polish farming differs from the neighbouring countries (Slovakia, Czechia, Germany). In Czechia and Slovakia more than 3/4 of the agricultural land is owned by large entities [14, 15].

### 5. Land Market

Land market in Poland has always been strongly supply dependent. The number of transactions depended and still depends primarily upon the owners of land, and their propensity to sell. High unemployment rate and lack of certainty as to employment strengthened the risk aversion attitudes. That is why owners have not been readily selling their land.

Land prices are highly differentiated. The highest prices are quoted for the land in towns and in the suburban zones, while the lowest ones—in the peripheral areas. It can generally be admitted that land prices decrease with the distance from the urban centres. Relatively high land prices are quoted on the areas attractive in tourist terms, where high demand pressure is observed. Land is purchased their first of all for the construction of second homes, or as a long-term investment.

Prices of agricultural land depend primarily upon land quality, location and plot dimensions. The average price of one hectare of agricultural land sold on private market in 2004 was 6,634 PLN (1USD =

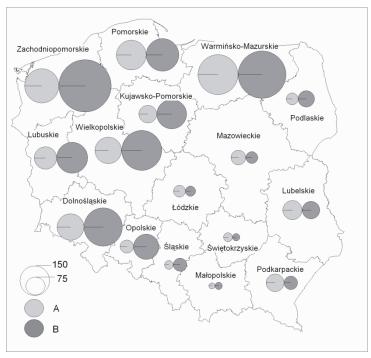


Fig. 3 Land of the State Treasury sold (A) and leased out (B) until 2005 according to provinces (in thousand hectares).

Table 4 Farm acreage classes in 2002.

Acreage classes (in hectares)	Number of farms (in thousand)	Share in total number of farms (in %)	er Area of agricultural land <sup>a</sup> (in thousand hectares)	Share in total of agricultural land (in %)
Up to 1 hectare	977.1	33.2	426.6	2.9
1-2	517.0	17.6	707.8	4.9
2-5	629.8	21.5	1,947.0	13.5
5-10	426.9	14.6	2,853.9	19.8
10-15	182.7	6.2	2,038.1	14.1
15-20	83.9	2.9	1,278.3	8.8
20-50	95.9	3.3	2,202.0	15.2
In excess of 50	19.8	0.7	2,996.4	20.7

<sup>&</sup>lt;sup>a</sup> Exclusively owned agricultural land, without the leased land.

Source: own elaboration on the basis of data from the Central Statistical Office, GUS, 2002.

3.1 PLN in 2013). In the case of good quality land the price of one hectare amounted to 9,040 PLN, while for the poor quality land—4,194 PLN, that is less than half.

The relatively highest prices are attained by the land situated in the Southern and Central parts of the country. Side by side with the location rent, these high prices are the effect of the very low supply. Situation is different in Northern Poland, where large areas of agricultural land in disposal of the State Treasury have been put to sale.

The most expensive agricultural land is observed in the provinces of Małopolska and Wielkopolska (the average prices being, respectively, 8,811 PLN and 8,479 PLN). In both cases the biggest impact on the level of land prices is exerted by the popularity of the customary ways of transmitting the family property to the younger generation, resulting in the very limited land supply. Prices of land are much lower in the North and in the West of the country, where high supply of the state-owned land persists, accompanied by relatively low demand. Average price of agricultural land does not exceed there 4,000 PLN per hectare.

During the entire period of the market economy a gradual increase of the land price has been observed.

In the case of agricultural land there has been, especially after Poland joined the European Union, an abrupt increase of prices, which was associated with the limited supply and the possibility of gaining agricultural subsidies. Record-breaking prices are quoted for the plots situated in the vicinity of large towns and main transport routes. It is interesting to note that the highest increases of prices (even up to 20% per year) are observed for the lowest quality agricultural land. It is namely easy to shift such areas away from agricultural use (to de-farm them), towards, for instance, housing [5]. After the change of function the price of land may increase even a dozen or more times. This land is then divided up into construction plots and sold for very advantageous prices. Thus, for instance, close to Warsaw or Cracow, construction plots attain the prices of 100-150USD/m<sup>2</sup>. The development of residential building on rural areas, neighbouring upon large agglomerations, constitutes nowadays the strongest stimulus for the land price increase [16].

There have been apprehensions in Poland that foreigners may dominate the land market on some areas, since prices of the agricultural land are much lower than in the countries of Western Europe (Fig. 4). These apprehensions proved, as of today, not justified.

# 6. Conclusions

Poland belongs among the countries, in which land

use structure is dominated by the land used for farming. That is why the problems of ownership structure and the dynamics of the land market are associated first of all with agricultural land.

Although for more than 40 years socialist economy functioned in Poland, having as one of the most important objectives to collectivise property, Poland remained the territory (contrary to the majority of countries of the Eastern Bloc), where private ownership played the major role. This concerned, first of all, land. More than half of land remained in private hands. After the downfall of socialism the significance of private property has been increasing. This is the effect of taking over the agricultural land belonging to the state by private farmers or by investors acting in the non-agricultural sectors.

During the period of economic transformation the phenomenon of constant increase of land prices has been observed. Supply of land in towns is limited, and prices are very high, and so many investors move to the suburban areas. Housing construction develops dynamically. Consequently, prices of land in the suburban areas increased during the last decade a dozen or even several tens of times. Local law-making does not catch up with the new projects. There is a definite shortage of the up-to-date spatial development plans at the municipality level. This is not conducive to the preservation of spatial order.

Land market is spatially diversified. In the South of

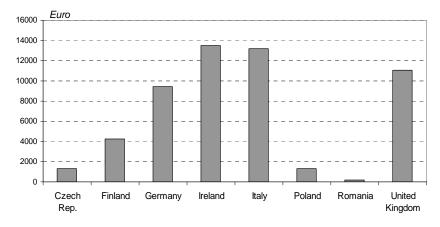


Fig. 4 Examples of prices of 1 hectare of agricultural land in selected countries of the European Union in 2002 (Czechia-2004; Germany-2001).

Poland land supply is limited. Owners dispose, as a rule, of small land areas and treat them as a long-term investment or an insurance for the "hard times". An important factor is constituted by the attachment to land, resulting from the centuries of land hunger. In the North and West of Poland, where until the end of the 1980s the leading role in terms of ownership was played by the state, land market is more balanced. On the areas featuring low soil quality, land supply has been higher than demand. That is why prices of such land have been very low. After Poland joined the European Union and the agricultural direct payments have been introduced, interest in land ownership increased. This interest, however, is frequently of a purely speculative nature.

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