

Changes in agricultural land ownership in Poland in the period of the market economy

Změny ve vlastnictví půdy v Polsku v období tržní ekonomiky

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Abstract: The article concentrates on the changes of ownership ongoing in Polish agriculture in the period 1989–2004. Since Polish agriculture was above all private in nature throughout the period of communism, the changes in question were actually more limited than in other Central and East European Countries (CEEC). Those that have taken place have first and foremost involved the privatisation of the old State Farms, whose assets were taken over by individually-owned farms or commercial-law companies, with the intermediation of the Treasury Agricultural Property Agency established for the purpose. A major element of the assets undergoing privatisation was agricultural land. The size of the ownership change has varied from region to region. In the West and North, where more than half of all farmland was in the State Farm hands to 1989, there was a marked increase in the share of land under private ownership. On the other hand, in Central and Eastern Poland, the changes were very limited, concerning only the transfer of land between private farms. Important reasons accounting for the limited activity on the market for land in this part of Poland include the agrarian overpopulation and the widespread treatment of land as a form of the “insurance policy” against job losses. The ownership changes have further encouraged polarisation where farm size structure is concerned. Farms increased in size in the regions where the large average area has long been a typical feature. In turn, the areas characterised by the excessive agrarian fragmentation have not seen any more major changes in the size structure over the recent period. A detailed analysis of the changes in ownership over the market economy period is preceded by a discussion of the history of land ownership in Polish agriculture, with a particular emphasis being placed on the Communist era. The legal and social bases conditioning ownership change are also discussed.

Key words: land ownership, land use, agriculture, land fragmentation, transformation, Central and Eastern Europe, Poland

Abstrakt: Článek se zaměřuje na změny vlastnické struktury půdy probíhající v polském zemědělství v letech 1989–2004. Polské zemědělství bylo v průběhu celého období komunismu převážně soukromé, uvedené změny byly fakticky méně významné než v ostatních zemích střední a východní Evropy (CEEC). Ty, jež se v Polsku uskutečnily, se týkaly primárně a převážně privatizace původních státních statků, jejichž majetek převzaly podniky fyzických osob nebo obchodní společnosti za spoluúčasti agentury Fondu zemědělského majetku, jež byla pro tento účel zřízena. Hlavním prvkem probíhající privatizace byla privatizace zemědělské půdy. Rozsah vlastnických změn se lišil mezi jednotlivými regiony. Na západě a na severu Polska, kde více než polovina zemědělského půdního fondu byla do roku 1989 ve vlastnictví státních statků, se projevil významný nárůst půdy v soukromém vlastnictví. Na druhé straně ve středním a jižním Polsku byly vlastnické změny velmi omezené a týkaly se většinou pouze transferů mezi jednotlivými soukromými hospodářstvími. Významnými důvody vysvětlujícími nízkou míru aktivity trhu půdy v této části Polska byl vysoký podíl zemědělské populace a rozšířený způsob udržení vlastnictví zemědělské půdy jako určité “pojistky proti nezaměstnanosti”. Změny vlastnictví byly dále podporovány polarizací jejich velikostní struktury. Průměrná velikost farem se zvyšovala v oblastech, kde velké podniky byly dlouhodobě typické, a naopak v oblastech s výraznou fragmentací půdy nebyly v posledním období zaznamenány žádné významnější změny velikostní struktury. Diskutovány jsou také právní a společenské základy podmiňující vlastnické změny.

Klíčová slova: vlastnictví půdy, užívání půdy, zemědělství, fragmentace půdy, transformace, střední a východní Evropa, Polsko

The last decade of the 20th century and the first decade of the 21st century were characterised by the dynamic social and economic change throughout the Central and East European Countries (CEEC). The fall of the “Iron Curtain” marked the starting point for these former-communist countries’ changing from the centrally-planned to market economy. Among the more important attendant phenomena, there is the process of ownership change, whereby public assets have been privatised and those seized previously by the Communist authorities returned.

The ownership changes have taken place in all spheres of the economy, but they have been at their broadest in agriculture, a sector in which the near-complete state control had characterised the Communist era in most of the countries of the Central and Eastern Europe. Equally, it is true that the scenarios for the changes have differed from one country in the region to another, these changes being the subject of such studies as Bański (1998, 2003), Lerman (2001), Ingram and Ingram (2002) and Kovacs (2005).

Farmland has obviously been one of the key agricultural assets subject to transfers in the period, and hence also to the frequent and detailed study (Swinnen 1996, Swinnen et al. 1997, Tillack and Schulze 2000; Burger 2001, 2005; van Dijk 2003). The main issues connected with the ownership transformation regarding land have been privatisation, the restitution of land, restructuring, the types of transaction on the market and land registration (Csaki and Lerman 2000). If these elements are taken for study together, it is possible for the state policy as regards the present land market to be evaluated.

This article is thus devoted to the ownership changes in Polish agriculture, the basis of its thesis being that the said changes over the last 10+ years will have reduced regional disparities as regards the farmland ownership structure, while at the same time polarising yet further the spatial differences to be observed where the farm size is concerned. While the ownership change has first and foremost entailed the privatisation of the state-owned agricultural land, the flow of land between the individually-owned farms and the establishment of new forms of ownership, the fact that Polish agriculture was always a primarily privately-owned affair means that the scale of the changes here was more modest than in the other CEECs.

The period of economic transition under study is that between 1989 and 2004, the former year heralding the political, social and economic transformation of Poland and the latter being memorable as the year the country acceded to the EU. To facilitate understanding of ownership changes, a short history of the development of land ownership in agriculture is first

provided, a particular attention of course being paid to the period under the centrally-planned economy.

THE CONDITIONING OF OWNERSHIP CHANGES POST 1989

Up to 1989, the farm economy in Poland was based on two main forms of land ownership: the nationalised (involving cooperatives or the State Farms) and the non-nationalised as represented by the individually-owned farms. The most important element to the farm ownership structure in Poland comprised the individually-owned farms, which accounted for c. 76% of the total area of agricultural land in the late 1980s. The overwhelming majority of such farms were small – of just several or a few hectares. Some of them did little more than to offer supplementary work to those living on them. The major role in the nationalised agricultural sector was that played by the *Państwowe Gospodarstwa Rolne* or State Farms established from January 1949. These were most typically founded on the formerly-German land estates. The assets in the State Farm hands grew steadily as the abandoned land was incorporated into them, then the land of different state and Church institutions. Individual farms were also taken on in the exchange for a pension. By 1960, the State Farms had 2.4 million ha at their disposal, the figure rising still further to c. 4.3 million ha in 1989 (Bański 2007). Of the latter, 3.5 million ha were actually farmland.

The basis for the ownership changes post 1989 was provided by the freeing up of the market for land, this allowing for the flow between the state-controlled and private sectors above all. The most important legal instruments as regards buying and selling of land are the 1997 *Constitution of the Republic of Poland* (Konstytucja... 1997), which recognises the family farm as a fundament of the country’s agricultural system, the 1991 *Act on the Management of Treasury Agricultural Property* (Ustawa... 1991) and the 2003 *Act on the Shaping of the Agricultural System* (Ustawa... 2003).

Up to 2003, any natural person could buy land in Poland, with no limits being set on the area held. However, the aforesaid 2003 Act on the agricultural system did introduce certain restrictions. Today, farmland may be purchased by those with a basic agricultural education, be this at the secondary or tertiary level, or else someone with the experience of farm work. The farm in question may not exceed 500 ha in area. Similar limitations seeking to maintain a proper agricultural land-use structure are also present in the Western European countries (Grynberg et al. 2001).

Among the Poland's individually-owned farms, it is those that are the private property of a given family that dominate. It is usual for a family member to inherit. Around 90% of the small farms operate as a family heritage. Among other ways of obtaining the right of ownership is also of course the purchase of farmland. This is usually done with the view of the farm being enlarged. The private buy-and-sell transaction is mostly achieved through the conclusion of an agreement between the two parties. However, the sales of state-owned farmland are mainly achieved by the means of tendering. Auctions are usually held so that the highest land prices are obtained. It is ever more common for the limited tendering to take place, this being solely open to small farmers intent on increasing their family holdings. The aim here is therefore to improve the size structure where farms are concerned.

Foreigners have limited entitlements to purchase land. Until 2004, a foreigner wishing to buy land in Poland was required to obtain the permission to do so from the Minister of Internal Affairs, with the consent of the Minister of Agriculture and Rural Development. Indeed, this was by no means the end of the list of the requirements that the foreign purchaser was required to meet. These restrictions on land purchases were lifted following the Poland's 2004 accession to the EU, though a 12-year transition period remains in place where buying of agricultural and forest land is concerned. Once the period has elapsed, foreigners will enjoy the same rights to buy land as Polish citizens. Similar if shorter (7-year) transition periods apply in other countries that have acceded to the EU (e.g. the Czech Republic, Lithuania, Latvia, Estonia and Slovakia) (Burger 2006).

The (quite distinct) fear in Poland was that the markets for land in certain parts of the country would become dominated by foreign purchasers, by whose standards the prices would seem very low. In the event, these worries proved unfounded, a 2005 study by Rudnicki making it clear that – as of 2002 – foreign capital (from foreigners or companies) had come to account for some 327 600 ha of Treasury land, of which 292 400 ha was leased, and only 35 200 ha purchased. There is the prevalence of German capital (accounting for 15 000 ha), followed by Swedish (5900 ha), Danish (3800 ha) and Dutch (3500 ha). Representatives of other countries together account for less than 1500 ha of land.

A manifestation of the state intervention on the market for land concerns the possibility of credit being taken on the preferential terms if there is farmland to be bought. The preference in fact entails a lower rate of interest on the loan than would otherwise be the case. Such credit can be sought by any natural or legal person engaged in or taking up productive activity in agriculture.

Prices for farmland depend first and foremost on the quality, location and the plot size. The average price of one hectare of land sold privately in 2004 was 6634 zł (i.e. 1818 USD, since the mean 2004 rate had \$1 equal to 3.65 zł). In the case of good-quality land, the average price per one ha was 9040 zł, as compared with 4194 zł (or less than half as much) in the case of poorer soil.

Relatively the highest prices are obtained for the land located in the Southern and Central parts of Poland. Alongside the benefits accruing from the location, the high prices also reflect very low levels of supply. A different situation applies in Northern

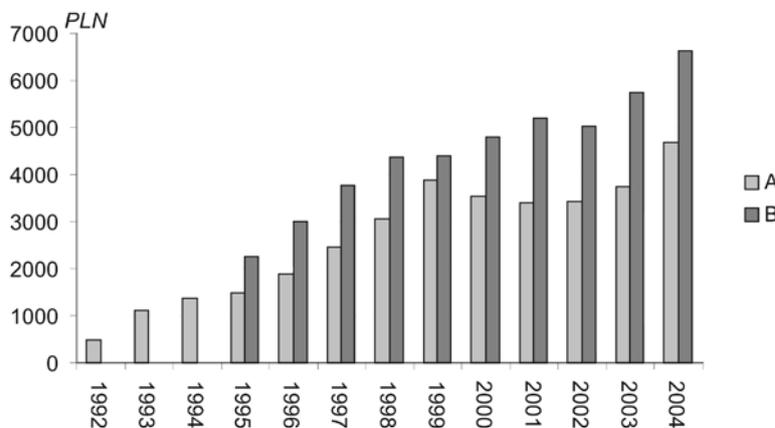


Figure 1. Average prices for farmland on sale from the Treasury Agricultural Property Resource (A) and in sales between neighbours (B)

Source: Rynek ziemi rolniczej (2005)

Poland, where large areas belonging to the Treasury have been put up for sale.

The whole period of market economy has been associated with a steady increase in the average prices for farmland (Figure 1). Following Poland's EU accession in particular, prices rose dramatically, in connection with limits on supply and the possibilities of taking advantage of direct payments. Record prices are being reached by land located in the vicinity of large cities or along the main transport routes. Interestingly, the largest increases in prices (of even 20% in the course of a year) apply to the land of the most limited suitability for agriculture (low soil quality classes). Such land can easily be taken out of agricultural production and be made subject to a change of designation, primarily to meet the needs of housing construction (Wasilewski and Krukowski 2004). Following the change of function, the prices of land may rise more than 10-fold. Parcels are thus divided into very small building plots and sold at very attractive prices. For example, building plots near Warsaw and Krakow can sell for 100–150 USD per m². The development of housing in rural areas adjacent to the large agglomeration is currently the strongest stimulant to land prices (Mayer and Somerville 2000; Ihlanfeldt 2007).

Alongside the buy-and-sell transactions on the land market, leasing is also a popular method. This is above all true of the land remaining in Treasury hands, though recently the interest in leasing privately-owned land has also been increasing. According to the 2002 Agricultural Census, c. 16% of 14 300 000 ha of farmland was being leased out.

Where the agriculture of individually-owned farms is concerned, leasing of land usually takes on an informal character, the agreement as regards price being determined by verbal agreements only. In the case

of land leased from the Treasury, the rent is usually determined on the market basis, by way of tendering. The price level is determined by the reference to current and average prices for wheat announced by the Central Statistical Office.

CONTEMPORARY OWNERSHIP CHANGES AND THE FORMS OF OWNERSHIP

Post-1989, the place of the forms of ownership present previously (nationalised or non-nationalised) was taken by two new forms known as private or public. The public sector first and foremost included the land taken on by the Treasury in the wake of the collapse of the State Farms and the State Land Fund, as well as the land under the management of the "State Forests" National Forest Holding or under the communal/municipal ownership. The key role in the private sector was played by the individually-owned farms, followed by the agricultural cooperatives and the commercial-law companies (Table 1).

Post-1989, it was the concept of closing down the State Farms altogether that emerged victorious, even though (or because) these managed around half of all agricultural land in the West and North. Thus, 1991 saw the establishment of the Agricultural Property Agency of the State Treasury to take on the State Land Fund land and the closed-down State Farms (see Bogaerts et al. 2002). Enactment of the *2003 Act on the Shaping of the Agricultural System* (Ustawa... 2003) resulted in the transformation of this body into the Agricultural Property Agency.

All the real estate taken on by the Agency gave rise to the so-called Treasury Agricultural Property Resource (*Zasób Własności Rolnej Skarbu Państwa*). Along with the land, the Agency assumed responsi-

Table 1. 2002 ownership structure of agricultural land

Form of land ownership	Area (ha)	% share of all land
All agricultural land	19 044 300	100.0
Treasury-owned	3 269 400	17.2
Owned by gminas or unions of gminas	318 400	1.7
Individually-owned farms	14 775 200	77.7
Production cooperatives	245 600	1.3
Commercial-law companies	287 400	1.5
Catholic Church and other faith-related	95 300	0.4
Land cooperatives	53 000	0.2

Source: author's own analysis based on the Krajowy wykaz gruntów (2002) and Sprawozdanie o stanie mienia Skarbu Państwa (2002)

bility for the processing plants, the enterprises offering services, the heritage architectural items and residential buildings. Most of the dwellings were sold off, while other property assets held by the Agency passed over to companies engaged in crop-growing or livestock rearing, or else involved in processing, the provision of services or trade. It is anticipated that all of these companies will have been privatised by 2010.

Some 100 000 to 190 000 ha of land per year were sold in the period 1996–2004. The low incidence of sales before that time may be linked to the lack of full preparation of the privatisation programme in terms of its formal and legal aspects (there were no survey designations and demarcations of boundaries, and hence a need to update or even found land registers).

A major part of the Treasury Agricultural Property Resource (as much as 2.1 million ha) is leased. In the first years of the operations of the Agency, leasing was the main form by which the state-owned land was taken on. In the years 1993–1995 alone, the total of 3 million ha of agricultural land was leased out. The area fell markedly thereafter, however, since there was much less free land to bring under new management in this way.

Up to the end of 2004, some 289 000 land leasing agreements had been signed up to, almost half of these concerned the plots of 1 ha or less. Some of the agreements in question have now elapsed, while others have been terminated. In general, however, the real estate returned after being leased is utilised anew some time after that.

As of 2002, every fifth hectare of land used by individual farmers was leased. The leaders here were the large commercially-viable farms located in the West and North. Some 960 000 ha of farmland had been leased by the individually-owned farms (Głębocki 2005).

The State Farms were finally closed down in 1994, under the decision that was viewed in various ways then, as it is now. Its proponents have maintained that, as a product of the communist era, the PGRs simply could not fit in with the developing market economy. On the other hand, the opponents of the close-down argue most volubly against the way it was done. Since some of the farms were in a sound economic condition, they might have been reformable, and hence successful in adjusting to the new economic reality. The human factor of course offers a valuable ammunition to the critics, since the abrupt closure process deprived thousands people of their livelihoods, without offering them any possible alternative source of the upkeep.

The ownership changes post 1989 did not do much to change the picture where the distribution of the state-owned agricultural land was concerned. The greatest areas under the state ownership continue to lie in the lands (re)gained by Poland in 1945, though the role they play within the overall ownership structure has indeed declined. There are also relatively large shares of the state-owned farmland in the Wielkopolska region, in Kujawy and in the South-Eastern corner of Poland. In the case of the first two regions, this reflects the post-War nationalisation of the large landed estates, while in the South-East; it was mainly the abandonment of land by its former Ukrainian owners that gave rise to the situation.

When the Communist era passed into history (and the successive rulers' distaste for the individually-owned farms with it), there was a u-turn of the state attitude to this sort of ownership. The present Polish Constitution extends a particular protection to the individually-owned farms, regarding them as the foundation of the country's agricultural system. It is nevertheless true that private farms felt the negative effects of the economic transformation more than most, though the last period has been offering a steady improvement in their economic situation.

Changes in ownership structure post 1989 make it very clear that the greatest increase in the share of the individually-owned farms has occurred in the areas that were until recently the part of the state farming sector to the greatest extent (i.e. with the greatest land resources in the Treasury ownership). In turn, the Central and Eastern parts (away from the Eastern borderland) have recently witnessed a gradual small decline in the percentage of farmland that is individually-owned. This above all reflects the sale of plots for other forms of use.

One of the major problems with Polish agriculture is the fragmentation of farms and their land. The total number of households managing some farmland as of 2002 was as high as 2 933 200, including 1 956 100 farms that covered more than 1 ha of agricultural land. The average area of one farm was 9.6 ha, of which 8.6 ha is the actual farmland. Among the contributory factors where the agrarian fragmentation is concerned are the agricultural reforms pursued during the period of partitioning and in 1944, rural overpopulation, land hunger and the freedom to divide plots and farms among family members.

In numerical terms, the size structure of farms is dominated by the smallest examples (Table 2). For example, farms with 5 ha of farmland or less account for more than 70% of the Polish total, even though they together account for just 20% of all land in agriculture. The large entities covering more than 20 ha

Table 2. Distribution of farms by the farm-size categories as of 2002

Farm-size categories (ha)	Number of farms	Share of all farms (%)	Area of farmland* (ha)
Up to 1 ha	977 100	33.2	426 600
1–2	517 000	17.6	707 800
2–5	629 800	21.5	1 947 000
5–10	426 900	14.6	2 853 900
10–15	182 700	6.2	2 038 100
15–20	83 900	2.9	1 278 300
20–50	95 900	3.3	2 202 000
Over 50 ha	19 800	0.7	2 996 400

*owned farmland only (excluding leased land)

Source: author's own work on the basis of data from the Central Statistical Office (Powszechny Spis Rolny 2002 – the 2002 Agricultural Census)

in turn account for about 35% of all farmland, even though they represent just 4% of farms.

From the point of view of the average size of the parcels of land, Polish agriculture bears a resemblance to the fragmented farming going on in the post-communist Balkans. It is much less like the agriculture of such neighbouring countries as Slovakia and the Czech Republic. In Bulgaria and Romania, more than half of the farmland is operated by farms covering less than 3 ha (Ilieva and Mladenov 2003; Rusu and Florian 2003), while in the Czech Republic and Slovakia, more than ¾ of all farmland are owned by large units (Doucha and Divila 2005; Spišiak 2007). The most recent period, most especially that following the Poland's 2004 EU accession, has been one of the increased interest in the leasing of land among the individually-owned farms. For this reason, the average size of farms is becoming a "pure" statistical value not corresponding to the real area being utilised by farms.

The transfer of land from the public sector to individual farmers had only a limited effect in resolving the problem of the farmland fragmentation. It was mainly the farms in the North and West that grew in size, and these had been relatively large even before the opportunity for a further expansion arose. No more major changes at all took place in the South of Poland, small or very small farms continuing to prevail there.

Except in the Wielkopolska and Opole regions, cooperative ownership was not of a great significance through the post-War period. When the systemic changes came along at the beginning of the 1990s, many cooperative farms (which were moved over into the private sector) proved unequal to the task of adjusting to the new economic reality. Some of those that folded sold most of their assets to, or were taken

over by, the Treasury Agricultural Property Agency. All that remained then were the cooperatives that had been in a good economic condition even before and were able to introduce the appropriate organisational changes. Overall, there was a decline in the area of farmland under the cooperative ownership from 637 000 to 255 000 ha in the years 1990–2002.

The commercial-law company represents a new form of ownership in Polish farming which came into existence after 1989. Examples fall within the private sector, and they are sub-categorised into the domestically-owned companies, the foreign-owned companies and companies under mixed ownership. By 2002, the commercial-law companies were managing some 287 400 ha of farmland, this representing 1.7% of the total area in agricultural use.

The farms run by the commercial-law companies mainly came into existence where the State Farms had been located previously. A very important role in the privatisation process was in fact played by the employees' partnerships, which is to say the workers who had previously been working in the State Farms. The law affords such interests a priority when it comes to the purchase of shares in the privatised farms. Thanks to that, the people in question became the co-owners of the businesses created. It is nevertheless true to say that most shares passed on into the hands of management of the old State Farms, since they had larger sums at their disposal that could be put aside for purchases. A further widespread practice was the buying up of the shares from poor groups of agricultural workers. It was in this way that the managers of the old State Farms became company owners.

Companies with foreign capital represent a new element in Polish agriculture. However, notwith-

standing their short period of existence, they have managed to earn for themselves some very divergent assessments and opinions. The majority of researchers are clear on the fact that they are injecting new methods of production and ways of organising work into agriculture, thereby exerting a positive impact on the farming practices pursued traditionally. Such an influence as regards innovation can only help in reducing the disparities between the agriculture practised in Poland and that in Western Europe. On the other hand, there is a smaller group who has come to regard the company with foreign capital engaging in the aforesaid new methods as polluters of the natural environment and introducers of the technologies no longer considered acceptable in the Western European countries.

Other forms of ownership include land commons, Church or other faith-related ownership and communal property (i.e. that in the ownership of the individual gminas or unions between two or more of these local authority areas). Land commons are a relict of the feudal period, in other words of a time when ownership was conceptualised quite differently from the way it is now. The largest area of such land is to be found in the East of Poland – in the areas previously partitioned off by the Russian Empire. In the areas in question, more than 0.3% of all agricultural land is under the ownership of land cooperatives.

Church ownership in fact represents the oldest form present, having been in place since the Christianity first appeared in the country. The history of this kind of ownership and of the regulations providing for the purchase or acquisition of land by the Church is long and complex. Just prior to the World War II, the Roman Catholic Church (all rites combined) owned around 400 000 ha of cultivated land in Poland. Once the War was over, the Sejm passed a 1950 Act providing for the State seizure of Church assets. This allowed the State to take over some 155 000 ha of Church land, which was taken to leave the latter with some 32 000 ha. In the immediate aftermath of the 1989 transition, a decision was taken to allow the partial restoration to the Church of the land taken away from it in 1950. Much of this land came from the Treasury Agricultural Property resource.

The land belonging to the Church has in the main been leased off to individual farmers. Small areas are under the management of religious orders (mainly in association with monasteries and convents in rural areas), and these may engage in farming, though mainly to meet their own needs.

Communal ownership was reactivated in 1990. Previously, the land representing communal property was state-owned, but the State has now put it at the

disposal of a variety of State bodies or organisations in society. Land under communal ownership is not any more of a major significance to agriculture, since the functions served are invariably unconnected with farming.

CONCLUSION

The most important change of land ownership in Poland resulted from the abrupt closure of the State Farms and the transfer of their land and assets to the Treasury Agricultural Property Agency. It was through the activities of the Agency that land was transferred to individual farmers or commercial-law companies. The amounts of land privatised in this way varied markedly from region to region. In the West and North, where more than half of all agricultural land passed into the hands of the Agency, a situation in which the supply exceeded demand developed, this offering good opportunities for the individually-owned farms to extend their land holdings. In contrast, in the Eastern and Central parts of Poland, it was demand that prevailed, ensuring that any changes that took place were very limited and mainly entailed the transfers between the individually-owned farms. The limited changes in the land market in this part of the country also reflect the agrarian overpopulation and the fact that land there is treated as a kind of economic insurance policy, should the employment elsewhere be lost.

The ownership changes (or the lack of the same) have tended to polarise Polish agriculture when it comes to the size structure of farms. Farms that have been able to grow larger are located in the areas where the average size tended to be greater from the outset, while the areas in which there has long been the over-fragmentation of farms have witnessed no more major agrarian reforms of the farm size in the recent period.

New forms of ownership also emerged after 1989. These in the first place included the commercial-law companies (*spółki prawa handlowego*), often located on the former State Farm land. Some assets were taken on by those who had previously managed the State Farms and were thus the former members of the Communist Party formations at the local level. We are thus looking at the so-called post-communist *nomenklatura* that changed complexion following the fall of the People's Republic.

A significant role among the commercial-law companies is played by those in which foreign capital has been located. Examples of this kind have invested in land in the Northern and Western Poland. In general,

the farms involved are large, engaging in specialised production for commercial purposes, more often than not linked with food processing.

Land prices have increased throughout the period of economic transformation. They peak in the vicinity of large agglomeration and the main transport routes – a phenomenon that links up with the urban expansion and the sprawl and the development of housing. In the areas in question, the remaining agricultural land is the subject of a strong pressure for other economic functions to be taken on or the designations changed altogether. In Poland, too, land has become a favourite place to locate capital.

It is anticipated that, by 2010, virtually all of the Poland's agricultural land will have been privatised. However, this fact will not signal an end to the ownership changes. Rather, the changes of this kind can be expected to gather pace in the Central and Eastern parts, in which land is excessively fragmented. Market competition will favour the large, commercially-orientated farm, which will tend to take land on from the owners of farming operations forced by circumstances to close down.

REFERENCES

- Bański J. (1998): *Gospodarka ziemią w Polsce w okresie restrukturyzacji* (Land management in Poland in the period of transformation). IGiPZ PAN, Warsaw.
- Bański J. (2003): Transforming the functional structure of Poland's rural areas. In: Bański J., Owsiański J. (eds.): *Alternatives for European Rural Areas*. ERDN, 1, IERiGŻ, IGiPZ PAN, Warsaw, pp. 19–37.
- Bański J. (2007): *Geografia rolnictwa Polski* (Agricultural geography of Poland). PWN, Warsaw.
- Bogaerts T., Williamson I.P., Fendel E.M. (2002): The role of land administration in the accession of Central European countries to the European Union. *Land Use Policy*, 19: 29–46.
- Burger A. (2001): Agricultural development and land concentration in a central European country: a case study of Hungary. *Land Use Policy*, 18: 259–268.
- Burger A. (2006): Why is the issue of land ownership still of major concern in East Central European (ECE) transitional countries and particularly in Hungary? *Land Use Policy*, 23: 571–579.
- Csaki C., Lerman Z. (eds.) (2000): *Structural Change in the Farming Sectors in Central and Eastern Europe*. World Bank Technical Paper No. 465. World Bank, FAO, Washington D.C.
- Doucha T., Divila E. (2005): Possible impacts of the Czech agricultural policy after the EU accession on the land market and land usage. *Agricultural Economics – Czech*, 51: 185–193.
- Ihlanfeldt K.R. (2007): The effect of land use regulation on housing and land prices. *Journal of Urban Economics*, 61: 420–435.
- Głębocki B. (ed.) (2005): *Struktura przestrzenna rolnictwa Polski u progu XXI wieku* (Spatial structure of Polish agriculture at the start of the 21st century). Uniwersytet Adama Mickiewicza, Bogucki Wyd. Naukowe, Poznań.
- Granberg I., Kovach I., Tovey H. (eds.) (2001): *Europe's Green Ring*. Ashgate Publishers, Aldershot.
- Historia Polski w liczbach* History of Poland in numbers. Agriculture. Forestry) (1991). Rolnictwo. Leśnictwo, Warsaw.
- Ingham H., Ingham M. (2002): *EU Expansion to the East. Prospects and Problems*. Edward Elgar Pub., Cheltenham.
- Ilieva M., Mladenov Ch. (2003): Changes in the rural areas in Bulgaria: processes and prospects. In: Gillmor D.A., Bański J. (eds.): *Aspects of changes in European rural space*. *Geographia Polonica*, 76: 97–110. IGSO PAS, Warsaw.
- Konstytucja Rzeczypospolitej Polskiej* (Constitution of the Republic of Poland) (1997). Sejm, Warszawa.
- Kovacs T. (2005): Restructuring Agriculture. In: Barta G., Fekete E., Szorenyine I., Timar J. (eds.): *Hungarian Spaces and Places: Pattern of Transition*. Centre for Regional Studies, Pecs, pp. 259–271.
- Krajowy wykaz gruntów* (National list of land) (2002). Główny Urząd Geodezji i Kartografii, Warszawa.
- Lerman Z. (2001): Agriculture in transition economies: from common heritage to divergence. *Agricultural Economics*, 26: 95–114.
- Mayer C.J., Somerville C.T. (2000): Land use regulation and new construction. *Regional Science and Urban Economics*, 30: 639–662.
- Rudnicki R. (2005): *Gospodarstwa rolne spółek prawa handlowego jako nowy element struktury agrarnej w Polsce* (Farms of commercial companies as a New element of the agrarian structure in Poland). In: Głębocki B. (ed.): *Struktura przestrzenna rolnictwa Polski u progu XXI wieku*. Bogucki Wydawnictwo Naukowe, Poznań, pp. 101–132.
- Rusu M., Florian V. (2003): Rural space and rural development in Romania. In: Bański J., Owsiański J. (eds.): *Alternatives for European Rural Areas*. ERDN, 1, IERiGŻ, IGiPZ PAN, Warsaw, pp. 39–55.
- Rynek ziemi rolniczej* (Market of agricultural land) (2005). Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej, Warsaw.
- Spišiak P. (1997): Agriculture of Slovakia and its Prospects (in Slovak). Second Czech-Slovak Scientific Seminar

- Transformation Processes in Society and Changes in Environment in Europe, Prague, pp. 11–16.
- Sprawozdanie o stanie mienia Skarbu Państwa (Possessions report of State Treasury) (2002). Ministerstwo Skarbu Państwa (Ministry of the Treasury), Warsaw.
- Swinnen J.F.M. (1996): An explanation of land reform choices in Central and Eastern Europe. Working Papers 5, Policy Research Group, Leuven.
- Swinnen J.F.M., Mathijs E., Buckwell A. (eds.) (1997): Agricultural Privatization, Land Reform and Farm Restructuring in Central Europe. Ashgate Publishers, Aldershot.
- Tillack P., Schulze E. (eds.) (2000): Land Ownership, Land Markets and Their Influence on the Efficiency of Agricultural Production in Central and Eastern Europe. Wissenschaftsverlag Vunk, Kiel.
- Ustawa o gospodarowaniu nieruchomościami rolnymi Skarbu Państwa (Act on the Management of Treasury Agricultural Property) (1991). Monitor Polski, 14, Warszawa.
- Ustawa o kształtowaniu ustroju rolnego (Act on the Shaping of the Agricultural System) (2003). Dziennik Ustaw, 64.592, Warszawa.
- Wasilewski A., Krukowski K. (2004): Land conversion for suburban housing: a study of urbanization around Warsaw and Olsztyn, Poland. Environmental Management, 34: 291–303.
- Van Dijk T. (2003): Scenarios of Central European land fragmentation. Land Use Policy, 20: 149–158.

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