

CHANGING SPATIAL PATTERNS OF POLISH AGRICULTURE AND SOME COMPARISONS WITH EU AGRICULTURE

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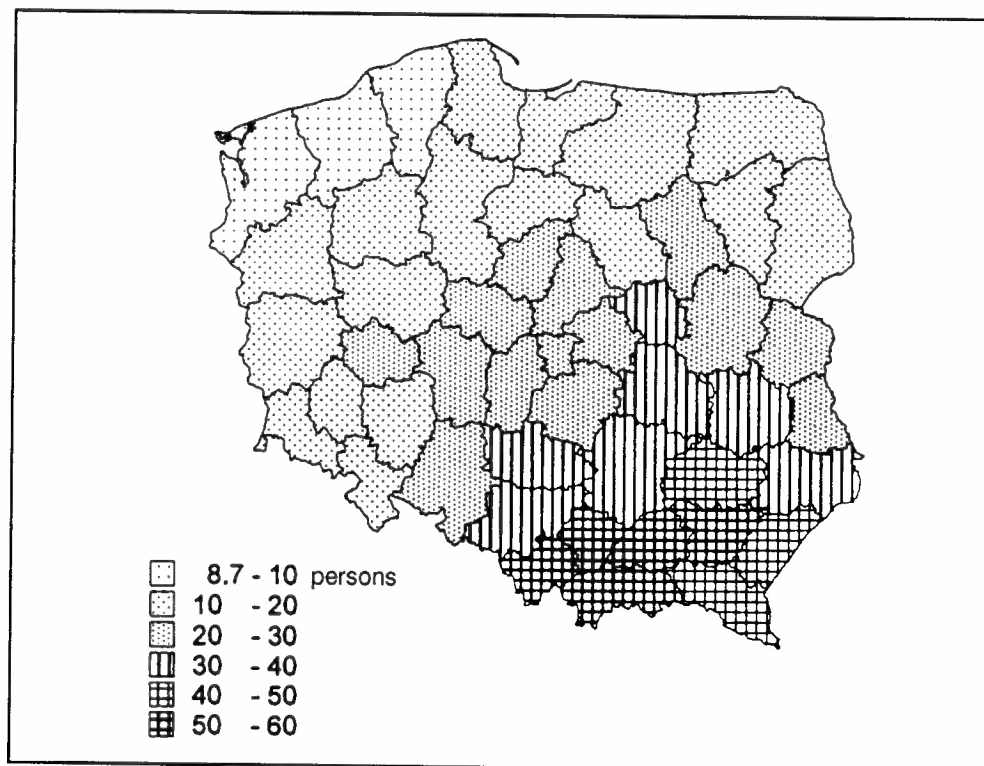
The political changes which took place in Poland after 1989 initiated a number of processes which aim at the transition to a market economy. Alongside this, Polish agriculture faced significant problems resulting from the need to adapt it to integration with Western European structures. Although the analysis of structural and spatial changes in agriculture in the period 1989-1996 shows the generally limited scope of such changes, they take on quite significant dimensions in some areas of the country, and are not always a cause for optimism. This applies particularly to the areas of Northern and Western Poland, where large proportions of land belonged previously to the state farms.

The share of farming in the Gross Domestic Product has been quickly decreasing – from 12.1% in 1989 to 6.2% in 1996, and this was largely due to the production collapse in the liquidated state farms and to the more dynamic growth of other branches of national economy. The indicator mentioned was spatially differentiated and ranged between 1.5-3.5% in the highly urbanised voivodships such as Warsaw metropolitan voivodship, Łódź, Cracow and Katowice, up to 20-28% in some eastern Polish provinces.

Agriculture still makes up some 25% of total employment, and in some voivodships of the eastern part of the country this share exceeds 50% (Ciechanów, Ostrołęka, Biała Podlaska and Łomża voivodships). At the same time in Warsaw, Łódź and Katowice voivodships this index was contained between 5-7%. (The average for the EU countries is about 6%.) Employment in the whole sector of food economy in Poland is at slightly more than 30% of total employment in national economy, while in the EU countries it is contained between 10-15%.

In the period of 1989-1995, notwithstanding the continuing decline of natural increase, the population of rural areas increased by 110,000 in Poland, and the population within private farming by 2% (190,000). The average level of employment in private farms increased by 2.5% between 1989-1994 and was 37 persons per 100 hectares of agricultural land at the end of this period, thus exceeding threefold the value of this indicator for the EU countries. The highest increase of employment was characterised by the agricultural holdings with an average area of up to 5 hectares. However, the spatial setting of the employment level has not undergone more important changes (*Figure 1*) and its value is still very high in South-Eastern Poland (more than 50 per-

Figure 1
Employed in Polish individual agriculture per 100 hectares of agricultural land, 1996

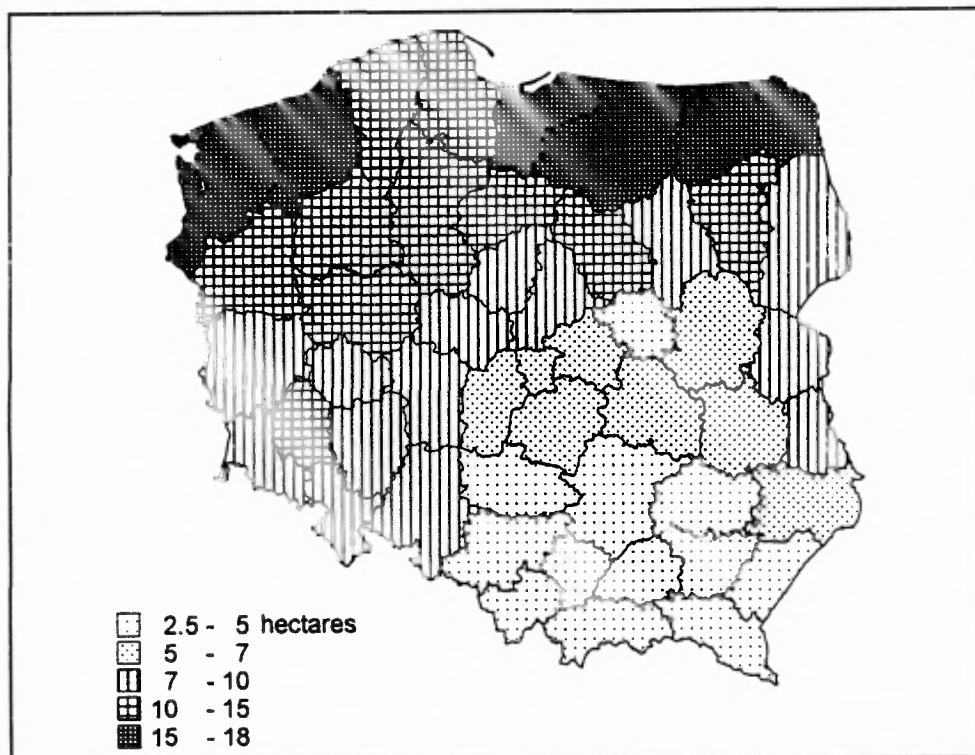


sons), whilst it is average in the central and eastern parts of the country (34-39 persons) and low in the northern and western regions (14-25 persons). A disadvantageous tendency, from the point of view of labour reserves, has been constituted by the continuing ageing of the agricultural population. This above-mentioned negative phenomenon was observed especially in the south-eastern and central parts of the country.

Owing to restructuring of the state-run agriculture in the years 1989-1996 there have occurred essential changes in the ownership and use of land. In 1989 socialised farming (state + co-operative) administered 24% of agricultural land (with the farming co-operatives accounting for a mere 3.8%), whilst in 1997 the public sector had in use only 6.7% of the total of the agricultural land. 17% of agricultural land was under public sector administration in that year. The greatest shares of agricultural land used by the public sector were observed in the north-western and western voivodships. (Kulikowski 1997, pp. 73-75.)

Private farming used 92.3% of agricultural land in 1997, this share being split between family farms whose total number is still about 2 million, and agricultural pro-

Figure 2
Average size of Polish individual farms, 1996



duction co-operatives. The area of agricultural land administrated by agricultural production co-operatives diminished by a mere one quarter in the last five years. In the years 1989-1996 the number of family farms decreased by almost 5%, while the process of acreage polarisation progressed, as witnessed by the increase of the number of farms with less than 2 hectares surface (by 22%), and of the number of farms exceeding 15 hectares in area (by some 6%), accompanied by the decrease of the number of farms having 5-15 hectares in area (by approximately 13%). Consequently, the average farm acreage in Poland increased in this period from 6.6 to 7.9 hectares. The smallest acreage of farms (Figure 2) were still observed in the southern provinces of the country (Bielsko-Biała, Cracow, Nowy Sącz, Rzeszów, Krosno: from 2.5 to 4.0 hectares). The provinces featuring the largest average acreage of family farms were as follows: Szczecin (17 hectares), Koszalin, Elbląg, Olsztyn and Suwałki (15-16.5 hectares). In spite of these positive changes the average acreage of a private farm in Poland was nonetheless more than half the average of the countries of the European Union

(though in the latter these averages ranged from 4 hectares in Greece up to 64 hectares in the United Kingdom).

The greatest transformations in this period occurred in the agriculture of the former state farms. (Figure 3) During the last five years the Agency for Treasury Agricultural Property has put to use almost 85% out of 3,743,000 hectares of the former state farm land that had been taken over by the Agency. Out of this share more than 7% of land was sold and nearly two thirds (2.9 million hectares) were leased out. The farms administrated by the Agency now comprise 8.5% (320,000 hectares). The land still waiting for permanent use is composed of 280,000 hectares used currently by the farms of the temporary administration and some 400,000 hectares of fallow land. Most of the fallow land and farms under Agency temporary administration are located in the northern part of the country.

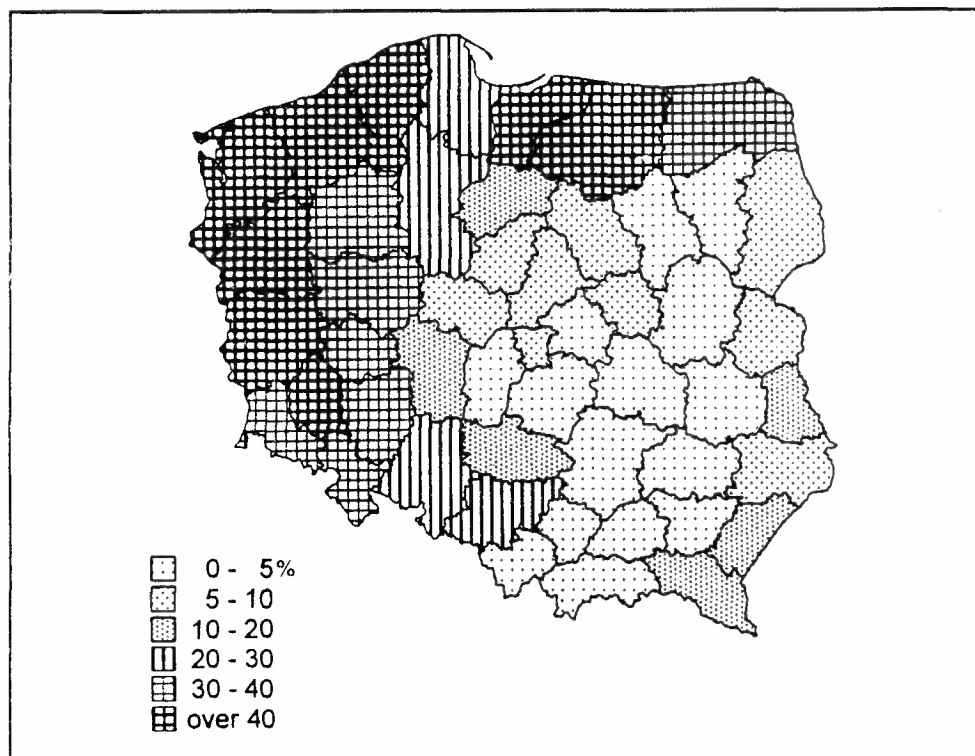
The negative effect of the transformation of state farming and partly because of the decrease of employment outside of agriculture (the number of persons linking work in agriculture with employment outside of it decreased by almost 12% in the years 1989-1995) is constituted by unemployment in rural areas, which amounted at the end of 1995 to 1,084,500 persons, i.e. 42% of total unemployment number in Poland. Rural unemployment concentrates in the southern voivodships with small acreage of farms and in the post-state-farm provinces of Northern Poland. The hidden unemployment in private farming was estimated at some 500,000 persons in 1994. (Stasiak-Zgliński 1997, p. 13.)

The processes of economic transformations and the decreasing profitability of agricultural production resulted, in accordance with the report of the Ministry of Agriculture and Food Economy, in the impoverishment of rural population. In comparison with 1989 there has been an 30% increase of the number of persons receiving welfare benefits. (*op. cit.* p. 38.)

The effectiveness of agriculture in Poland, as measured with an average annual production value per hectare of agricultural land (land productivity), was three times lower than the average for the European Union, while the value of gross agricultural production per single person actively employed in agriculture (labour productivity) was five times lower. Labour productivity in Polish agriculture is closely correlated with the size of farms and with the level of development and specialisation of agricultural production. The value of this index is the highest in Wielkopolska and in the western and northern parts of the country, as well as in agricultural suburban zones of big agglomerations. A single person employed in Polish farming produced food for 8.6 persons of non-agricultural population, while in the countries of the European Union food was produced for 50 persons. At the same time the state subsidies connected directly with agricultural production were, however, almost four times lower in Poland than in the countries of the EU.

In the years 1989-1995 there has been a distinct collapse of agricultural production in Poland. Global product in agriculture was 12.5% lower in 1995 than in 1989, and commercial product even 19.3% lower. In the public sector of agriculture the decrease amounted to as much as 70% and the share of this sector in the country's agricultural

Figure 3
State farming in Poland as a percentage rate of total agricultural land, 1989



production decreased in this period fourfold. Gross agricultural product per farm in Poland was at that time nearly 7 times lower than the same index for the EU farming.

In the years 1989-1995 the area under plant crops decreased by 1,452,000 hectares, mainly owing to fallowing of land. In the last year of this period fallow lands in farming made up approximately 1.4 million hectares and occurred both in public agriculture (almost 53% of arable land) and in private one (5.4%). The greatest share of fallow land was observed in the northern and western regions of the country, and their appearance resulted from cessation of crop raising in the restructured state farms. From among the basic crops it is wheat and fodder cereals that somewhat increased their area in this period, while the surface under rye, oats and potatoes decreased. In the years 1989-1995 there has also been an important decrease in yields and production of cereals and potatoes, largely influenced by the lower application of mineral fertilisers, decreased from 170 kg of NPK content per hectare of agricultural land in 1989 down to 72 kg in 1994 and 80 kg in 1995. The greatest decrease of volume of mineral

fertilisers applied in this period has been observed in the northern and western territories of Poland.

Side by side with the afore-mentioned decline in plant production, there has also been an even more pronounced decline in animal production in this period. Thus in the years 1989-1994 the number of cattle decreased by as much as 33%, and the most significant decrease was mainly caused by the liquidation of cattle raising in the former state farms and in the private farming in the western part of the country. As a consequence of the general drop in the cattle numbers the respective indicators per 100 hectares of agricultural land were in 1995 very low indeed – from 20 heads in northern and western areas and in Warsaw metropolitan voivodship, to more than 50 in some voivodships of the north-eastern parts of the country. In 1995 more than half the farms would not raise cattle (only 29% in 1990).

The number of pigs increased in this time by 3.4%, although in the western and northern areas an important decrease in numbers has been observed, attaining in some provinces 30% and even 50%. At the same time within Wielkopolska, Kujawy and in the central-eastern part of the country there has been a significant increase in the pig numbers.

There has been a drastic reduction of the number of sheep (from 4,837,000 in 1985 and 4,400,000 in 1989 to 713,000 in 1995). It must be admitted, though, that sheep husbandry had not constituted a very important branch of animal production in the preceding periods.

Owing to these changes in the values of basic indicators of agricultural production Poland regressed in the domain of plant production by 15-20 years, in meat production by a dozen years, in milk and egg production by almost 35 years, and in cattle numbers even back to the level of the mid-fifties. (*Kulikowski-Szczęsny-Tkocz 1997, pp. 121-127.*)

Stagnation or even regression in a number of agricultural production branches, brought about by the technological backwardness of this sector of the economy and the worsening profitability of production, caused foreign trade in agricultural and food product from 1993 to note a deficit and negative net balance in trade with the countries of the EU.

Further processes of transformation of Polish agriculture are, however, unavoidable, although they will be significantly distributed over time. The hope for the resolution of this problem resides not so much in agriculture itself as in the remaining links of the food economy, which, following the model of the Western European countries, ought to form with time a food system chain united by the common interest, rather than a set of isolated links.

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