

## The Polarization Process of Polish Agriculture in the Latter Half of 1990's

- Hobby-farmer, Week-end-farmer, Euro-farmer or Euthanasia-

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### Summary

This paper reports on Polish agriculture in the latter half of the 1990's. It should be noted that the state of Polish agriculture in the latter half of 1990's is quite different from the situation in the first half of the 1990's. The conclusion of this paper is very simple: Polish agriculture is now in a critical state and the polarization process began in the latter half of the 1990's.

1. The polarizational transformation of Polish agriculture in the latter half of the 1990's.

Initially I would like to present some shocking statistical data concerning Polish agriculture in the latter half of the 1990's. Table 1 shows the number of farmers in Poland during the 1990's. It is important to bear in mind the limitations of this table.

Table 1

**Number of farmers and unemployed in Poland:** People who worked mainly in individual farms (in thousands) and unemployed people in rural areas (in thousands)

|                        | farmers - unemployed |      |
|------------------------|----------------------|------|
| 1992 May               | 3344                 | 652  |
| 1993 May               | 3325                 | 740  |
| 1994 May               | 3140                 | 762  |
| 1995 May               | 3036                 | 738  |
| 1996 May               | 3014                 | 725  |
| 1997 May               | 2847                 | 678  |
| 1998 May               | 2656                 | 619  |
| 1999 February          | 2433                 | 763  |
| 2000 the first quarter | 2317                 | 1027 |

- 1) Farmers who worked more than 1 hour per week.
  - 2) The number of farmers does not include people who work predominantly outside of the farm.
  - 3) The number of farmers includes people who work predominantly on his own farm, but also worked outside of the farm as a part-time worker.
  - 4) The individual farm includes those Farms which utilize under 1 ha.
- source: Aktywnosc Ekonomiczna Ludnosci Polski I kwartal 2000, GUS, Warszawa, 2000. pageXXXVIII, LVII

Firstly, the word “farmer” indicates a person who devotes the majority of a week's working hours to agriculture. Someone who works longer hours at the factory than in the field is not included within the category of farmer.

Secondly, the word “farmer” can apply to people who work at a factory part-time for 10 or 20 hours per week (for example) and then works a further 30 hours or more in the field.

Thirdly, in table1 the word “farm” includes small farms with an area of one hectare or less. So a person who works on a farm of less than one hectare is included in table 1, despite the fact that farms of less than one hectare are not included in the category of “farm” in Polish agricultural statistics.

With these limitations in mind, we can observe that according to table 1, the number of farmers has decreased from 3,344,000 in 1992 to 3,036,000 in 1995. And that the number of farmers decreased even further to 2,317,000 in 2000. However, we should not base our conclusions on table 1 alone. It is possible that many farmers have only changed from fulltime farmwork to working part-time outside of the farm - at a factory, for example. The number of farmers in a real sense may not have decreased.

Table 2  
**Number of people who work predominantly on individual farms by age  
(in thousands) in Poland**

| Year        | 1995 May | 2000 the first quarter |
|-------------|----------|------------------------|
| 15-19       | 86       | 40                     |
| 20-24       | 221      | 141                    |
| 25-29       | 257      | 216                    |
| 30-34       | 289      | 243                    |
| 35-44       | 672      | 596                    |
| 45-54       | 511      | 554                    |
| 55-59       | 298      | 150                    |
| 60-64       | 276      | 138                    |
| 65 and more | 427      | 238                    |
| 30-54       | 1472     |                        |
| 35-59       |          | 1300                   |

1) See the footnoes for table 1:that is those who work mainly on their own farm of which the area is more than 0.1ha.

Source) Aktywnosc Ekonomiczna Ludnosci Polski Maj 1995, GUS, Warszawa, 1995. Page.10.

Source) Aktywnosc Ekonomiczna Ludnosci Polski I kwartal 2000, GUS, Warszawa, 2000. Page.13.

Moreover, we can see from table 1 that the number of unemployed in rural districts begins to increase from 1998. Table 2 shows the number of farmers in 1995, sorted by farmer's age, and compares this to the number in 2000. The definition of "farmer" is the same as in table 1. In table 2, it should be noted that the number of farmers who are younger than 44, has decreased in the last 5 years. Moreover, the number of farmers who are older than 55, also decreases significantly in the last 5 years. It is important to note that those who belong to the 30 to 54 age group, numbered 1,472,000 in 1995, should be numbered among the current 35-39 age group in 2000, however, according to the data shown for 2000 there were only 1,300,000 farmers within this age-range. In other words, 172,000 farmers have disappeared in the last 5 years. It is rare for a middle-aged farmer to suddenly change his occupation in either Europe or Japan. Should we surmise that 172,000 farmers died? The answer is no. 172,000 middle-aged farmers began to work primarily in factories or shops etc. These farmers sold off the main part of their land and began to farm smaller plots while also working in a factory or shop. We should note that although these people continued to work on the land, according to the definition of Polish agricultural statisticians, they are not included within the category of "farmer".

This is confirmed by table 3. The number of farms which cultivate a land area of more than one hectare, decreased to 1,989,000 in 1998, even though there were 2,048,000 farms of this type in 1995. It may seem strange that only 59,000 farms disappeared during this period, on the other hand, as is shown in table 1, in the same period (from 1995 to 1998) the number of farmers decreased by as may as 380,000. Table 3 shows some surprising statistical data: the number of farms with 1-2 hectares increased during the 1990's while the number of farms with an area of 2-5 hectares has not changed. The number of farms with 15 hectares or more has increased significantly. The number of farms with 5-15 hectares has shown a marked decline.

This demonstrates that the polarization process of private farms in Poland began in the latter half of the 1990's. This process is illustrated in figure 1.

To investigate this process further it is necessary to analyze the garden-agriculture of farms with an area of one hectare or less. However, there is no statistical data in existence after 1997 because garden-agriculture is not included within the category of "farmer". Table 3-b presents the total number and the total area involved in garden-agriculture from 1990 to 1996. The total number of garden-agriculture type farms has barely changed between 970,000 and 984,000. We can note that the total number of garden-farmers has also not changed. However, the average area of garden-agriculture farms decreased drastically in 1996 in comparison to those of 1995. The author believes a new process concerning garden-agriculture began in 1996, however, statistical data after 1997 does not exist. The author theorises that many elderly people died in this new process and that their families sold off the land. The consistent number of garden-agriculture farms suggests that many new people became garden-agriculture "farmer" at the same time. The author suggests that these newcomers to garden-agriculture are

farmers who sold off their former, larger plots. It is possible to imagine how these people sold off their medium-scale agricultural land and began hobby-agriculture with a much smaller plot, for example, 0.2 hectares. Thus, the total number of garden-farms has not changed even though the total area has drastically decreased.

Table 4 demonstrates the big difference, in row C, between the numerical value of farms with less than one hectare and the numerical value of farms with 1-2 hectares. Most garden-farmers with less than one hectare of land produce food only for self-consumption. The ratio of farms that do not produce any agricultural products reaches 17.4%. A typical scenario for this type of farm would be: A ruined cottage with a few apple trees tended by one old man or woman.

The author calls the farm with less than one hectare a hobby-farm. The hobby farm never disappears as a result of changes in the national economy because its agricultural production is a hobby. The author believes that hobby-agriculture can survive even in the 21st century.

In table 4, we can observe in row D, that there is a big difference between the farms with 4-5 hectares and the farms with 5-7 hectares and there is also a notable difference between the farms with 5-7 hectares and the farms with 7-10 hectares. This seems to suggest that the character of individual Polish farms changes depending on their size, specifically whether they have an area greater or smaller than 5-7 hectares.

Similarly, there are big differences, in row E, between the farms with 4-5 hectares and the farms with 5-7 hectares and a big difference between the farms with 5-7 hectares and the farms with 7-10 hectares. The author calls the group of farms with 5 or 7 hectares or less a 'weekend-farm'.

When we study those farms with 5 or 7 hectares or more, we find that 80% of this group produces agricultural products only for sale on the local market. Farms of this size hope to survive in EU community agricultural trading, however farms which cultivate less than 15 hectares are unlikely to survive in the EU. Thus those farmers within the 7-15 hectares bracket have to decide whether to expand their land and join the category of Euro-agricultural farmer or to sell off some of their land and become garden or weekend-farmers.

In table 5 we can determine that the farmer with 4 hectares or less earns the majority of his income from his paid labor outside of the farm. Thus, the author calls this type of farm a weekend-farm. Furthermore, we can see from table 5 that in the 30% or 40% of farms with 5 hectares or less the main source of income is a form of social transfer such as an old-age pension etc. This group of 1-5 hectares' farm has the character of pension-agriculture as well as of weekend-agriculture. In table 5, in row B, row C, and row D, we can see that there is a big difference between the group of 4-5 hectares and the group of

5-10 hectares. Also, there is a big difference between the group of 5-10 hectares and the group of 20-50 hectares.

Table 6 presents the same result as table 5 from the viewpoint of family structure. In table 6, row D, we can observe that in Poland elderly people cohabit with their children as part of the same household. In table 5 we can also see that in those farms with 15 hectares or more, a farmer with a family member working in a factory or shop is in the minority.

In row B in table 6, it is important to note the number of farms with 50 hectares or more. This number is now increasing. A typical scenario for this group is as follows: The husband manages a farm of 100 hectares while his wife works as a teacher at the school. She does not help with the cultivating work even at the weekend. The husband is able to manage the farm without family help. This is a typical example of the Euro-agricultural farm.

Table 7 is a matrix by which the transfer of land in the first half of the 1990's is shown. During this period 400,000 farms of 2,000,000 total farms changed land area. We should note that the numerical value in table 7 does not refer to land ownership but to the utilization of agricultural land. As is shown by table 10, of the 3,750,000 hectares of the former state-owned farm "sokhoz" PGR, 3,100,000 hectares was sold off or offered for lease to the private sector. Therefore, in table 7, the number of farms, which increased their utilized land, is overwhelmingly larger than the number of farms, which decreased their utilized land. In table 7 we see that in the first half of the 1990's we cannot see this trend towards the polarization of Polish agriculture. In the author's view the polarization process definitely began in the latter half of the 1990's, although the statistics on the matrix of the land transfer in the latter half of 1990's have yet to be published.

## 2. Cause of the polarization transformation.

Why did this polarization of Polish agriculture take place? In table 9 we see that the real gross output index in the individual agriculture sector decreased from 100 in 1995 to 83.8 in 1998. The real gross value-added index has also decreased similarly to 83.8. In the private manufacturing sector, the former increased to 153.2 and the latter to 144.8 respectively. The private manufacturing sector in Poland has developed significantly during the latter half of 1990's while the agricultural sector in Poland has fallen into decline.

What has caused this? As already mentioned, there was no big change in the number of individual farms nor in the total area of agricultural land, nor was there any big change in the quantity of agricultural production. It is my understanding that it is the change of relative prices that brought this drastic change in agricultural production in value terms.

Table 8 shows the price index for the agricultural products which farmers sell, and the price index for the commodities which farmers buy. The price ratio between agricultural products and commodities purchased by farmers was unchanged between 1990 and 1995, and for crop production this price ratio even became more advantageous for private farmers.

The situation in the first half of the 1990's, in which the private sector of agriculture was warmly supported, changed completely in 1996. As shown in table 8, the relative price level of agricultural products dropped significantly, in comparison to the relative price level of industrial products. The fall of this relative price level induced the relative decrease of the value-added in Polish agriculture.

In addition, the thorough introduction of the market mechanism made the situation even more difficult for farmers. Table 10 demonstrates the decrease in real disposable income in the private agricultural sector. Private farmers' standard of living has deteriorated considerably, when compared to that of factory workers. This deterioration is a consequence of the increase in rent payment on the land and the increase in the social insurance payment, in addition to the relative decrease in the price level of agricultural products. As shown in table 10, social insurance payments increased consistently. The social insurance payment in 1998 accounted for as much as 5% of the total value-added for the private agricultural sector. The rent payment on borrowed land increased every year, as shown in table 10, and in 1998 accounted for as much as 5% of the total value-added for the private agricultural sector, although in 1998, the private agricultural sector did take leases for as much as 2,400,000 hectares of land from the former state-owned farm "sochoz" PGR. As a result of these two liabilities 10% of the value-added in the private agricultural sector is now siphoned off into the state budget.

As a result of this situation a notable number of private farms with 5-15 hectares abandoned agricultural production. They became hobby or weekend-farmers. Not only was the medium-scale farmer plunged into a crisis but Polish agriculture as a whole was plunged into a crisis. Real investment in the private agricultural sector began to decrease in 1996 and in 1998, as shown in table 10, it had decreased to 75% of its 1996 level. This decline in investment will induce a crisis in Polish agriculture in the future. Since in the latter half of the 1990's investment in the private agricultural sector depended on investment by medium and large-scale farmers, should this tendency continue, Polish agriculture may become destitute in the 21st century.

### 3. The future of Polish agriculture and the solution to the problem

It could be stated that the unfortunate state of present-day Polish agriculture has been brought about by the introduction of a market economy, and this would be correct in its broadest sense. However, I would contend that the main difficulty for Polish agriculture

today, is the decreasing price level of agricultural products. The price of agricultural products has begun to be regulated by the market mechanism rather than by government policy as was the case during the socialist era.

This decline in the price of agricultural products, however, was not caused by the market mechanism alone. It was a result of the disparity between demand and supply in the market. In other words the main cause of this crisis is the decline in demand for domestic agricultural products.

Let us investigate why demand for the domestic product decreased. It would be wrong to place all of the responsibility on to the agricultural protection policy of the EU or against the agricultural policy of the Russian government. The main cause is the change in Polish consumers' demand for domestic foodstuff.

Table 12 shows the importation of fish and fruit. Consumer demand now regulates the importation of fish and fruit, although the amount of meat imported remains under the control of the Polish government in order to protect Polish agriculture. As is shown in table 12, the importation of prepared-foodstuffs has increased considerably. The chief cause of these phenomena is the rapid change in the preferences and lifestyle of the Polish consumer. Many huge supermarkets backed by EU capital were opened in the outskirts of large cities. The purchase of imported foodstuffs became normal behaviour for Polish people. Expecting Polish consumers to return to their old preferences and lifestyle is nonsense.

Some people propose a policy whereby rural industries are established in villages to provide work opportunities for farmers. Such a policy would benefit the weekend and hobby-farmer, and would also bring a more consistent increase in the income of the medium-scale farmer with 5-15ha.

In Japan industrial relocations to rural districts are decided according to the managerial policy of private enterprises. Therefore the above-mentioned policy target is achieved through the construction of a social infrastructure, which the government can implement to support farmers. A typical example is road renovation and construction in rural districts. In Japan most of the workers who work in road construction are farmers. However, industrial policy of this type not only fails as a longterm solution but also prolongs the problem. This type of industrial policy is like a narcotic, it alleviates the patients' pain...soothes the symptom, but fails to find a cure. From the author's opinion an agrarian policy of this nature could be described as a bitter euthanasia of agriculture. The bitter euthanasia policy should not be adopted.

Then what is the appropriate solution? The demand for Polish agricultural products should be expanded to develop an export market. Demand from foreign countries can be expected for agricultural products such as sugar beat, fruit, dairy products and other

labor-intensive products. However, it may take as long as ten years to establish a foreign market for Polish domestic products. Without the adoption of appropriate agrarian policies even able farmers may not survive the ten year adjustment period and Polish agriculture may become nonexistent. The most urgent task is to convert many of the medium-scale farmers (5-15ha) to the category of Euro-farmer. Prevention of the polarization process alone is inadequate. Conversely it is also necessary to promote the polarization process and for this purpose adequate agrarian policies must be adopted.

The recovery of agricultural investment is very important. It may be necessary to introduce a system for low interest rate bank loans specifically for capital investment and for purchasing land. It may also be necessary for the government to provide subsidies to support this initiative. However any price subsidy policy which supports not only able farmers but also incapable farmers should not be introduced.

However such a policy will bring poverty to the majority of Polish farmers. For the purpose of social fairness and social welfare the social transfer of income should support poor farmers.

In conclusion; hobby-agriculture will survive in any case; pension-agriculture will disappear in the future due to the death of older farmers; weekend-agriculture will also survive. However, candidates for Euro-agriculture cannot at present be drawn from the weekend-farmer sector unless they have amassed huge amounts of money in the private commerce sector. The Euro-agricultural candidate with 15-50 hectares has a significant chance of survival in the EU economy, although it must be noted that some candidates will not survive, if the government does not adopt the appropriate measures.

















