

CHARACTERISTICS OF AGRICULTURE IN SLOVENIA

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The basic characteristic of Slovenia's agriculture is that for a long time it developed in exactly the opposite direction than taken by agriculture in the majority of other European countries. This applies especially for the agrarian structure and its development. While in developed western European countries, together with the improvement of agricultural technology, the process of enlargement of farms and concentration and specialization of production were going on relatively fast, in Slovenia the exact opposite process occurred right up to the beginning of the 1990's, largely in the private sector of Slovene agriculture. This process is characterized by permanent decrease and fragmentation of the land property, by low working intensity of production and, in some areas, by gradual abandoning of production and the consequent overgrowing of farm land. Although Slovene agriculture is forced to manage in more difficult production circumstances due to the natural conditions, it is primarily socio-economic factors such as poor size and property structures of farms, the low level of professionalization, and the still relatively low work intensity, that decisively obstruct more rapid technological progress and modernization.

Natural conditions for agricultural production

Due to the distinctive dissection of the relief, Slovenia most certainly does not rank among the countries with natural assets favourable to agricultural production. On the contrary, in the European space Slovenia belongs to the circle of countries with the most unfavorable production conditions because of its diverse and mountainous relief and large proportion of karst areas. While poorer production conditions do not necessarily make agricultural production impossible, they result in the lower production capability of farms and a smaller choice of cultures and production orientations, and in general they weaken the adaptability and competitiveness of Slovene agriculture.

The quite specific and variegated structure of the use of farm land also influences the low level of adaptability of agriculture. With the exception of the flatlands of the sub-Pannonian region in the north-east and smaller consolidated areas in the bottoms of valleys and plains, Slovenia has no significant areas suitable for crop production. In spite of an advantageous geographical position that allows extensive and mostly qualitative production in fruit-growing and winegrowing, the proportion of land under permanent orchards and vineyards is much lower than in countries with similar production conditions. Some two thirds of all farm land is grassland that is poorly exploited on the average relative to the frequency and the manner of use, which is dominated by two- and three-harvest meadows, extensive pastures, and hayfields.

The significance of agriculture in the general economy

Just as in other developed countries, the significance of agriculture in the general economy is constantly decreasing in Slovenia. This is evident for all of the three indicators usually used to define the economic and social role of an activity:

- the proportion of agriculture in the total Gross Domestic Product (GDP),
- the proportion of people employed in agriculture,
- the proportion of agriculture in foreign trade exchange.

Table 1: Proportion of agriculture in GDP, employment, and trade balance in Slovenia (in %).

	1990	1995	2000
Agriculture in GDP	4.8	4.6	3.5
Employed in agriculture (registered employment)	7.0	6.4	4.8
Agriculture in total value of			
export	4.2	4.0	3.7
import	8.7	8.4	6.4

Source: Institute for Macro-economic Analyses and Development

The 3.5% proportion of the total GDP ranks Slovene agriculture on the level of the less developed countries of the European Union and, with the exception of Poland and Hungary, is comparable with other countries of Central and Eastern Europe. Compared with the European Union, Slovene agriculture produces almost 10% less GDP per hectare of farm land or 2.2 times less per employee in the agriculture sector.

The proportion of Slovenia in the international exchange of farm produce is practically negligible. It generally applies that Slovenia is net importer of food because the value of imported farm produce is almost twice the size of its export.

Production structure of Slovene agriculture

Because the natural and structural conditions in Slovenia to a large extent dictate the orientation of agriculture production, stock farming dominates with approximately 61% of the value of total agriculture production. In the framework of vegetable production, the production of field crops dominates, although the production of fruit, grapes, and wine (all together about 12%) also represents an important part of the total agricultural production.

Table 2: Structure of value of total agricultural production in Slovenia (in %).

	1990	1995	2000
Total agricultural production	100.0	100.0	100.0
Vegetable production	47.1	44.3	38.7
field crops	39.3	35.8	26.8
fruit	3.7	4.7	6.0
grapes and wine	4.1	3.8	5.9
Livestock production	52.9	55.7	61.3
beef and milk	25.5	31.9	36.7
pigs	11.5	12.2	11.2
other	15.9	11.6	13.4

Source: SURS and Institute of Agriculture of Slovenia.

The extent and structure of vegetable production is to a large degree connected with livestock production: fodder comprises almost half of the total production. Corn is the prevailing field crop, covering about 40% of cultivated land, followed by cereals (20%) and potato (10% of cultivated land). Sugar

beet and hops also represent an important part of field produce; the latter is traditionally export-oriented. The intensity of production is constantly increasing, although the average harvest still lags behind harvests in the European Union.

The extent of fruit production has high annual oscillations, largely due to different climate conditions. Diverse natural conditions enable the production of various types of fruit, but in general the structure of production is dominated by apples, followed by pears, peaches, sour cherries, and cherries. Annual oscillations are also evident in the production of grapes and wine, where white wine varieties account for more than 70% of the production.

In the structure of stock farming, cattle breeding dominates, mostly the combined production of milk and beef. According to the value of production pig breeding and poultry breeding follow, and recently the significance of sheep breeding and goat breeding has increased. Relative to a fall in production, important changes have become visible recently in poultry breeding, largely the result of the loss of former Yugoslav markets.

Agrarian structure

During the Farm Census in 2000, there were somewhat more than 86,300 farms in Slovenia. According to the European scale of Standard Economic Power (ESU), which considers the production capability of operations, these farms are directly comparable with European farms.

Compared with the majority of European Union countries, farms in Slovenia are extremely small. The size of the average Slovene farm was very close to the size of the average Central European farm only in 1931, and today, with an average of 5.6 hectares of farm land in use per household, it is some five times smaller than similar farms in the European Union. In spite of the great relative significance

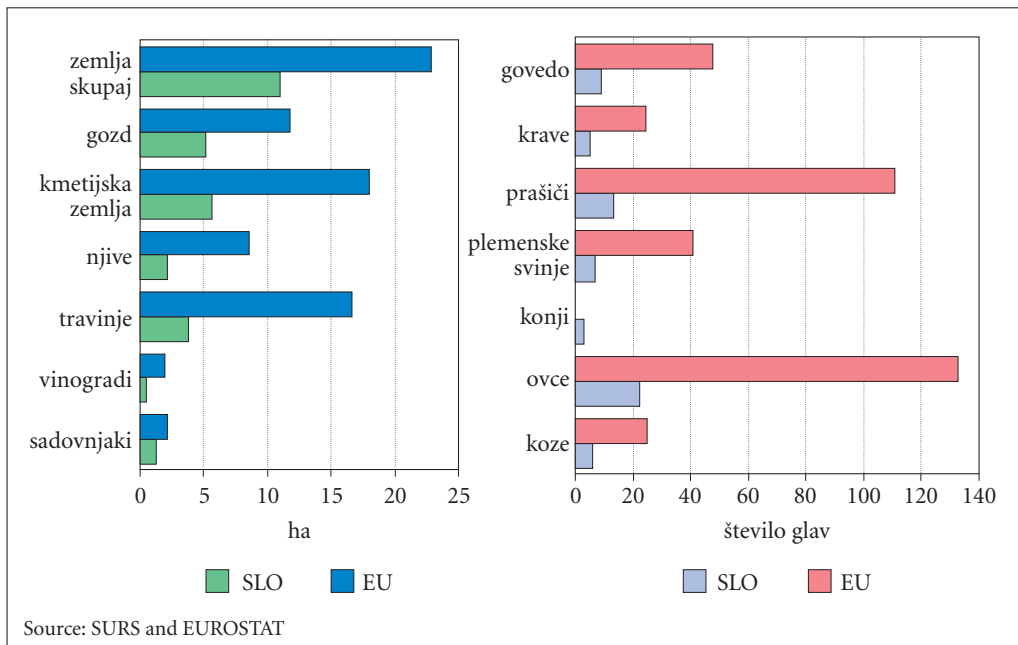
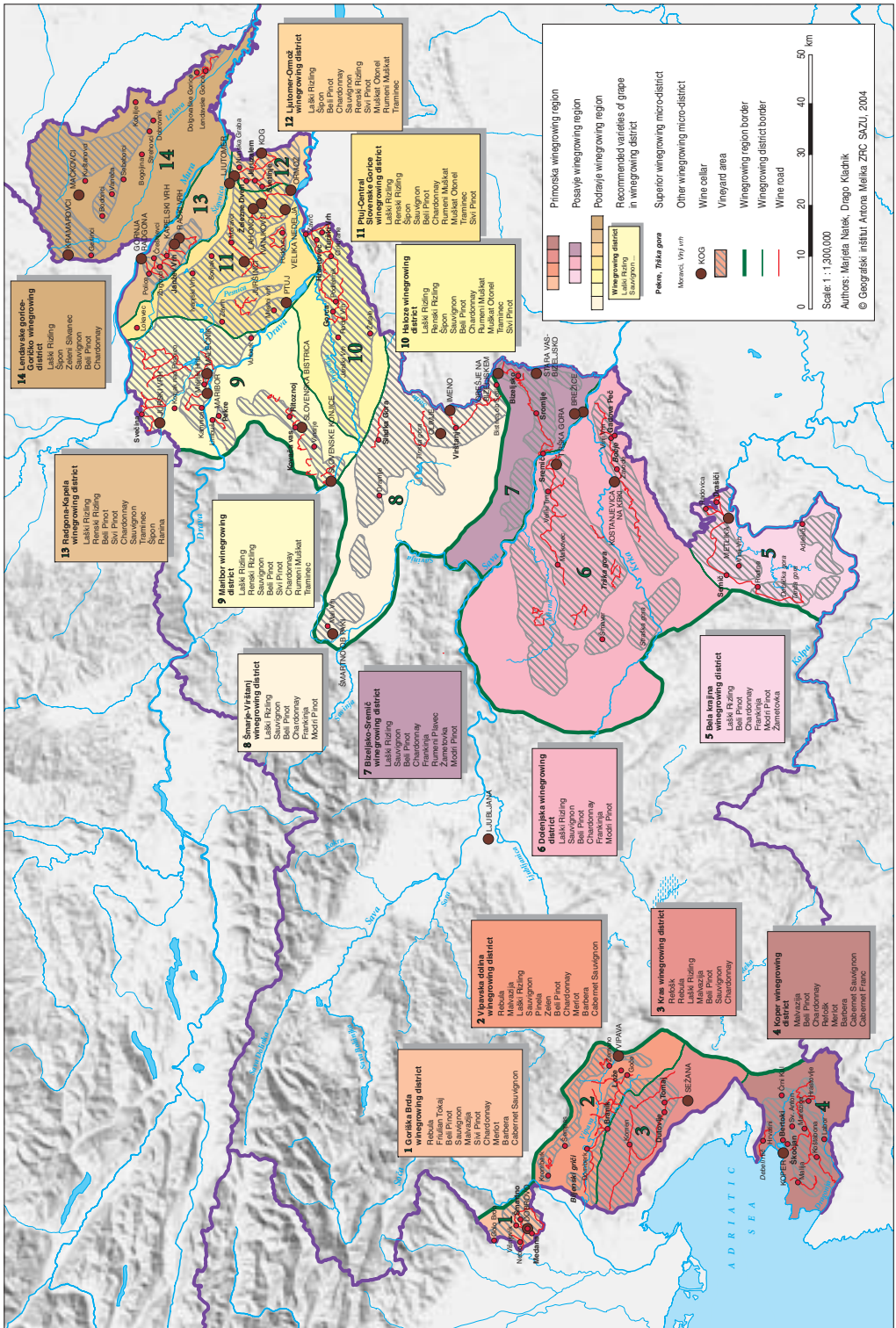


Figure 1: Size of farms in Slovenia and in the European Union relative to average area of land and number of livestock.



◀ *Figure 2: Winegrowing regions.*

of stock breeding, the difference in the number of cattle is even larger since the average European farm raises some six times more cattle per farm than the average Slovene farm.

While in the period between 1981 and 1991 censuses the average size of farms in Slovenia did not change significantly, a period of moderate concentration of property and land began in the 1990's. In the period between the population census in 1991 and the Farm Census in 2000, the area of farm land in use thus increased by 0.7 hectares or a good 15%.

The size structure of farms in Slovenia is practically incomparable with the size structure of farms in the European Union. Farms that have between five and ten hectares of farm land in use (25.5%) and farms that have between three and five hectares of farm land in use (21.0%) dominate. These farms comprise the foundation of agricultural production in Slovenia and manage some two thirds of all agricultural land in Slovenia.

Along with this unfavourable structure, a major problem in Slovenia is also the considerable fragmentation of property. It is interesting that in spite of various measures for greater land concentration, this fragmentation is even increasing. The data from land cadastres in Slovenia shows that on one hand the average size of parcels is continuing to decrease while on the other the average number of parcels per farm is increasing.

The consequences of the unfavourable size structure of Slovene farms are evident in the social, economic, and production structure. Since the farms are too small to ensure the necessary income from farming alone, supplementary farms dominate. Only 20% of the farms in Slovenia are pure (full-time) farms.

According to the data from the Farm Census in 2000, farming in Slovenia employs something over 100,000 full-time workers (annual working units/AWU), which means that the average farm in Slovenia employs almost 10% more AWU than the average farm in the European Union. The number of AWU per hectare of farm land reflects the low working efficiency in Slovene agriculture. On average, four times more AWU are employed per hectare in Slovenia than in the European Union. Difficult production conditions, poorer technological equipment, a low level of professional skills among farm workers, and above all the extremely unfavourable socio-economic structure of farms all have a major influence on this.

Conclusions

Insufficient income for full employment and the corresponding unattractiveness of agriculture on the one hand and the immobility of production factors, primarily the land and the labour force on the other are the basic structural problems of agriculture in Slovenia. The increase of efficiency and competitiveness of agriculture is therefore the basic task of the agricultural structure policy, which also requires more explicit and target-oriented efforts by the country.

The fact is that it is necessary to enlarge farms which are capable of development, improve their efficiency and increase general market orientation of agriculture. For this purpose, government policy has numerous mechanisms at its disposal ranging from investment support and land policy to supporting market organization and the transfer of knowledge. In the restructuring of farms, the basic question arises of how and in what way to achieve improvement in the agrarian structure of farms in Slovenia. The real fact is that the country does not have many mechanisms for the effective general enlargement of farms. Possible measures are either too large an intervention in legal regulations (limitation of land purchases or a restrictive tax policy) or very demanding measures relative to the budget (life annuities or subsidy on land renting. Here, the Fund for Agricultural Land and Forests must play an important role with more carefully planned work.



Figure 3: Cultivated areas on gravel separate extensive patches of forest on conglomerate (photography Igor Maher).

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