

SLOVENIA, ECONOMIC DEVELOPEMENT THROUGH BIODIVERSITY MANAGEMENT

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About Slovenia

Slovenia has a population of 1.9 million and covers an area of 20,250 km². The finest feature of the country as we Slovenes see it is its exceptional diversity of nature and culture. Slovenia is located at the crossroads of several European cultures: the Slav culture meets with the Germanic and Romance in the West, and with the Hungarian in the East. This, coupled with the country's natural circumstances, has greatly influenced its economic and social diversity. Only about one sixth of the territory can be classified as flat (i.e. the Pannonian and the Sub-Pannonian regions). Other parts of the country are mountainous and hilly in landscape, and a large portion of Slovenia belongs to the Kras (Karst) which ends towards the Adriatic coast. Slovenia is one of the leading CEE countries in terms of economic development, and one of the smallest in size and production volume. Its GDP represents 0.2 % of the total GDP in the EU. Its GDP per capita – which amounts to USD 9800 – reaches 68 % of the EU average. Based on the indicators commonly used by the OECD, 89.1 % of Slovenia's territory inhabited by 57.3 % of the population can be classified as rural areas. Agriculture together with forestry accounts for about 120,000 jobs, which is 6.6.% of all employed persons in 1997. Although agriculture only contributes 4.6 % to GDP, we can claim the sector has an important role in the economic transformation of the country.

About Slovenian agriculture

- Great cultural, social, natural and economic diversity. It should be in the interest of Slovenia to preserve this diversity – both for economic (ecosocial system has been declared one of the development objectives) as well as for cultural reasons;
- Forests cover 1.1 million hectares or 56 % of the surface of Slovenia. They have an important ecological, social and economic functions in the rural areas, particularly in mountainous regions;
- Out of the country's total area, agricultural land has a 42 % share. 65 % of the agricultural land is grassland, 28 % is arable land, and the rest are orchards and vineyards;
- According to official statistics 785,000 ha of agricultural land is used. Some 110,000 ha of agricultural land are not exploited for agricultural use any more, while additional 40,000 ha are only occasionally used for agricultural production;
- Slovene agricultural holdings are very small, with the majority of holdings generating income from other activities as well. The average size of an agricultural holding is 5 ha;
- Slovenia has a self-sufficiency degree of 80%;
- Due to varied climatic, geological and morphological ground conditions, a considerable share of agricultural land in Slovenia is situated in less favoured. While unfavourable conditions for production do not completely hinder farming, they are a cause of the lower production capacity of farms, the narrower selection of cultures and production orientations, and more costly production. Mountain farms are less competitive and, because of specific natural conditions, which are reflected in the structure of agricultural land use, also less adaptable. **Despite lower production potentials these areas**

nevertheless play a significant role in the preservation of the rural population and the cultural landscape, and in the maintenance of ecological balance.

- Due to its diverse land conditions, a large share of mountainous and karstic areas, Slovenia can be described as a country with quite demanding production conditions. Even though the typology for determination of less favoured areas in Slovenia and in the EU are not directly comparable, it can be ascertained that Slovenia is one of the countries with a larger share of these areas (about 80 %).
- According to the latest available statistical data from year 1997 slightly less than 43% of the national territory, i.e. 780,000 ha, is characterised as agricultural land. Only about a third of this land, is used for cultivation. Covering just under three-quarters of the agricultural land in use, grassland and permanent meadows predominate strongly within the structure of agricultural land. Intensive used arable land is mainly focused on bigger farms on lowlands;
- In comparison to the most of the EU countries, farms in Slovenia are extremely small (average is about 5 ha). In 1931 the average Slovene farm was almost the same size as the average central European farm; however, it is five times smaller than in the EU in terms of agricultural land today. Despite the fact that Slovenia is an explicitly cattle-breeding country, the difference in the number of livestock is even greater, since the average European farm breeds as many as six times more LU than the average Slovene farm (6,3 LU/farm in Slovenia).

About the state of the environment

The general state of the environment in Slovenia could be estimated as satisfactory since it does not represent a major threat to human health and ecosystems. In some segments, positive results of environmental policy are already evident, while on the other hand attention has to be given to some trends, which still demand a more successful and more effective public response in line with the principles of environmental sustainability.

Expert assessments rank Slovenia as an area of above-average biotic diversity, with about 24,000 living species inhabiting the area. Estimates of the potential number of species range between 45,000 and 120,000. Of these, 800 animal and 46 plant species are endemic. Forests, underground and water ecosystems, swamplands, sea, alpine and mountain areas, dry-lands, etc. are particularly characteristic.

The state and trends of biodiversity are hard to assess due to insufficient time sequences.

However, some current systematic investigations (red lists, etc.) confirm the basic assessment of a serious endangering of plant and animal species (particularly some amphibians and reptiles). The endangering of biotic diversity is directly connected to the unregulated management of genetic material. There exists an increased danger of the uncontrolled intrusion of alien or altered organisms, which represents a threat to BD.

Slovenia is rich in non-living natural elements (minerals, fossils) and with geo-morphological and hydrological phenomena, which represent the fund of natural wealth (canyons, caves, waterfalls, etc.). Their attractiveness forms the basis for various activities connected to these phenomena. These activities generally take place in the most vulnerable areas, thus endangering the fundamental phenomenon of biotic diversity.

About Slovenian agricultural and environmental policy

Until it declared independence in 1991, Slovenia did not have an agricultural policy of its own. Since independence, development of agricultural policy has closely followed the

example set by the Common Agricultural Policy (CAP) of the EU in both its objectives and the content of measures. Mechanisms and ways of implementing the policy, however, show fewer similarities.

The foundations of agricultural policy and rural development policy were laid by the **Strategy for Agricultural Development in Slovenia** (1992), which provides for the development of eco-social agriculture. This was the first document to acknowledge that, in addition to production, agriculture also plays an important role in shaping and preservation of the cultural landscape and countryside settlement structure as well as in preservation of the environment.

To strengthen the role of the countryside, a Rural Development Programme (CPROV) was introduced in the same period and has greatly contributed to the systematic approach to development issues in the countryside.

Another important document is the **Programme of Slovenian Agricultural Policy Reform** (1998), which is based on four pillars: the marketing-price policy, **Slovenian nature conservation programme for agriculture**, the programme for restructuring of agriculture and food industry, and **the rural development programme**.

The new proposals for protected areas adopted by the Ministry of Environment and Physical Planning are also worth mentioning. They foresee an increase in the share of protected areas in Slovenia (national parks, regional parks, landscape parks etc.) from the current 8 % to 22 % of the country's area in the future, which will make the need for a systematic approach to solving agriculture and rural development issues with the inclusion of environmental programmes even more urgent.

When Slovenia is compared with other European countries it becomes clear that one of its greatest advantages is relatively good conservation of natural resources, especially soil, water and biodiversity. It is partly due to Slovenia's natural conditions that agriculture (except in some low flat areas) is not very intensive and the effects of agricultural environment pollution are therefore restricted to certain plains. In all other areas, in particular where the land is less suitable for agricultural use (LFA) (for reasons of inclination, distance, climate, soil structure..), extensive agriculture is practised.

On the other hand, eight per cent of Slovenia's territory enjoys the status of a protected area (4.2% of this is covered by Triglav National Park, the rest by Škocjanske jame and Kozjansko Regional Park and some). There are further 22 % of Slovenia's territory planned to be designated as various types of protected areas according to the National Environmental Action Programme. Further 20 % of territory is protected as water catchment area.

Following is a list of some of the most typical examples representing an basis for good rural development:

- **Programme of Integrated Rural Development and Village Renovation** – Slovenia definitely has a comparative advantage to other candidate countries in this field. In rural areas this programme has given rise to an important movement aimed at coordinating social, environmental, cultural, educational and other elements towards one objective, i.e. development. The persisting problem is the short-term nature of state policy on rural areas, unclear division of sectorial responsibilities and the financing of rural projects. The role of the Government - which has key responsibility for long-term rural policy – has been inadequate, which is definitely not to the advantage of developmental decisions.
- **Programme of additional activities:** structural changes in Slovene agriculture are only possible if we manage to connect agriculture with additional activities, and thus improve income generated on farms. The smallness of our agricultural holdings, the poor income

structure of farmers and, consequently, a low potential for investment call for farmers' associating, particularly as regards planning the processing and sales of agricultural crops and products;

- **Public services:** Slovenia has a long tradition of counselling services in agriculture and forestry. The two services should necessarily set up contacts with other public services, which beyond doubt is a prerequisite for efficient development policy.
- **Agri-environmental programmes:** all documents on agriculture policy lay great emphasis on environmental preservation in Slovene rural areas. The development of environmentally acceptable agriculture is top priority, while forest and grass spreading is regarded one of the key rural problems. The idea on agri-environmental programmes with clearly set environmental priorities on the one hand, giving special priority to the diversity of environment and landscape as well as natural circumstances, and taking into account the agricultural structure and type of agricultural production, may also be the right way for achieving higher income in agriculture.

Case study Triglav National Park

Triglav National park is situated at northwest of Slovenia near Italian and Austrian state borders and it covers 4,1 % of Slovenia's surface. The area of the Triglav National Park (TNP) has been partially protected by way of special agreements and laws for 70 years, since 1981 in its present size (84,000 ha). It covers almost complete Slovenian part of Julian Alps. It includes parts of 6 municipalities and reaches into two regions, Primorska and Gorenjska. In Triglav national park permanently live 2000 inhabitants in 25 settlements. The National Park attracts around 2 millions of visitors per year.

Park Authority controls violations of the Triglav National Park Act and takes care for nature protection, research, education, wildlife management, the infrastructure. Currently, the Park Authority is a consulting body for physical planning, regional policy, rural development, agriculture and protection of natural and cultural heritage.

A successful development of municipalities within the Triglav National Park and the Park itself is inseparable from the conscious choice of an integral approach presenting the principle of man's actions in relation to both, development issues and nature. This can be achieved only through an integral concept which establishes a connection between different environmental interests and activities – economic, cultural, social, and those relating to nature protection. The underlying principle of development activities should therefore be the search for models of efficient, premeditated and environmentally sound use of regional, natural and economic resources, to which the concern for the environment is the primary source of activities.

Preservation and the permanent value of natural resources are thus the core and the essential element of development.

It should be noted that in mountain and hill areas success is granted only to the development which considers all aspects of life and work, is based on the nature protection principles and uses the advantages (while not forgetting the disadvantages) of individual areas – to the development which, in short, finds correct solutions for individual problems.

Agriculture plays a multiple role, and its becoming a constituent part of development programmes is of special importance to country areas. The functions of agriculture are not limited merely to production and economic purpose. Just the opposite – agriculture is highly important also because of its social value and the impact it has on settlement culture and nature conservation.

Successful development of country areas can be achieved if the local inhabitants are provided with an attractive environment to live and work in. Satisfying income and suitable job positions are of key importance. Therefore it is necessary to:

- **provide and maintain job positions in country areas (on the farms and in the surrounding areas)**
 - in agriculture and forestry
 - by developing supplementary activities (processing, tourism, craft, catering)
 - by developing additional opportunities for getting a job in the country (organising the sales of agricultural crops and produce, service activities, guiding..)
- **encourage ecologically appropriate methods of agricultural production and processing – organic farming**
- **introduce direct payments** – ecologically, economically and socially motivated direct payments are a means to a satisfying total income
- **develop trade marks for mountain and hill areas, and regional trade marks (the Triglav National Park trade mark)**
- **consider the sociocultural diversity and ecological potential of the territory together with the quality of life** as being important elements of integral and permanent development, and **to encourage and preserve local and regional self-confidence.**

To achieve aims mentioned before, an agri-environmental program was adopted and introduced. It is based on the following conclusions:

- One of the biggest advantages of agri-environmental schemes lies in the fact that on the basis of these programmes development of agriculture can take into account both ecological and economic components, especially as regards ecologically sensitive areas.
- Since in Slovenia ecological awareness is still not expressed, hiding behind the veil of everyday problems typical of states in transition, concrete projects can, through public nature of their implementation and by disseminating information, greatly affect public awareness about the issue.
- Agri-environmental schemes help to inform the public about the importance of agriculture for non-agricultural activities and for the protection of the environment;
- to introduce nature conservation as a “positive” notion into the concept of agriculture;
- Ecological farming is certainly one of the rare development possibilities of otherwise structurally weak agriculture: excessive fragmentation of agricultural holdings, small farms, low educational background, low accumulation of profit, ageing, depopulation of marginal areas.
- tourism – conservation of cultural landscape and consequently, the need for conservation of agricultural use is of central importance for development of tourism
- Agricultural use is conditioned by conservation of agriculture and development of supplementary activities (established tradition of cheese-making, keen interest in organic farming, grazing on mountain pastures,...)
- tourism and agriculture provide many jobs, which is extremely important in the area where jobs are scarce or, at best, only to be found in distant towns and cities.
- the area is important for the protection of bird populations (IBA), its importance is also acknowledged in documents which Slovenia has prepared within the framework of NATURA 2000.
- to encourage farmers to the use of environmental planning in farming practices and to choose ways of utilising agricultural land which are compatible with the protection and

improvement of the environment, landscape and its features, natural resources, soil and genetic diversity;

- positive effects on the income situation of farmers;
- conservation of farming, population and landscape;
- conservation of high nature value farmed environments which are under threat;
- conservation of fertile soil as a part of mosaic landscape with rich biodiversity;
- conservation of landscape and historical features on agricultural land;
- reduction in the input of chemicals into soil and groundwater,

Long-term policy measures for rural areas are crucial if the development strategies shall succeed. Suitable legal basis, which would ensure a long-term security for people living and working in rural areas, would also contribute to higher agreement of the people to development decisions and related risks. Furthermore development programmes should concentrate on the needs of the local people so that the people can identify themselves with and benefit from the development programmes. It should be noted that in mountain and hilly areas development can be only successful when considering all aspects of life and work and when the programmes are based on the nature protection principles and uses the advantages (while not forgetting the disadvantages) of individual areas – to the development which, in short, finds correct solutions for individual problems.

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