

# PORTRAIT OF THE REGIONS

VOLUME 9  
SLOVENIA



# PORTRAIT OF THE REGIONS

VOLUME 9  
SLOVENIA



EUROPEAN COMMISSION

Statistical Office of the European Communities



A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>).

Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 2000

ISBN 92-828-9404-5

© European Communities, 2000

Reproduction is authorised, provided the source is acknowledged.

*Printed in Belgium*

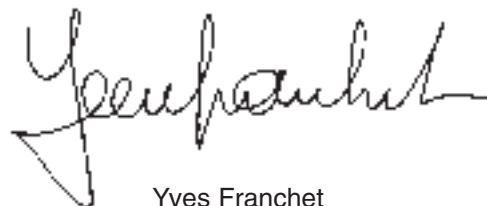
## Foreword

The accession discussions already underway with all ten of the Phare countries of Central and Eastern Europe have further boosted the demand for statistical data concerning them. At the same time, a growing appreciation of regional issues has raised interest in regional differences in each of these countries. This volume of the "Portrait of the Regions" series responds to this need and follows on in a tradition which has seen four volumes devoted to the current Member States, a fifth to Hungary, a sixth volume dedicated to the Czech Republic and Poland, a seventh to the Slovak Republic and the most recent volume covering the Baltic States, Estonia, Latvia and Lithuania.

Examining the 12 statistical regions of Slovenia, this ninth volume in the series has an almost identical structure to Volume 8, itself very similar to earlier publications. Regional topical profiles, enhanced by maps, diagrams and statistical tables, assess key aspects of the region and its strengths and weaknesses in terms of demographic and economic issues, the labour market, education, infrastructure and resources.

This issue of the "Portrait of the Regions" series is the outcome of very full co-operation between Eurostat and the Statistical Office of the Republic of Slovenia. Project supervision was co-ordinated by CESD Communautaire and the preparation of texts, graphs and maps was carried out by Eurogramme.

I would like to express my appreciation to all the individuals and organisations, particularly within the Statistical Office of the Republic of Slovenia, without whose contribution it would not have been possible to produce this valuable reference work.



Yves Franchet  
*Director-General of Eurostat*



This volume was produced with the collaboration of the Statistical Office of the Republic of Slovenia and was co-ordinated by CESD Communautaire. Preparation of texts, maps, graphs and photographs was entrusted to Eurogramme. Its publication was made possible by the financial support of the Phare programme. Its contents do not necessarily reflect the official views of the institutions of the European Communities.

# eurogramme



CESD-Communautaire was in charge of the administrative, financial and contractual co-ordination of the project. CESD-Communautaire is specialised in the implementation of international programmes, establishing and promoting advanced statistical methodologies.

This project is financed by the European Union's Phare Programme, which provides grant finance to support its partner countries in central and eastern Europe to the stage where they are ready to assume the obligations of European Union membership.



Original texts in Slovenian were prepared by staff of the Statistical Office of Slovenia.

## Names of all those who prepared text:

1. Marjeta Natek, author of text
2. Karel Natek, Ph.D., author of text
3. Roman Šimec, translator
4. Matej Gabrovec, Ph.D., reviewer
5. Branko Pavlin, Ph.D., Statistical Office of the Republic of Slovenia, Ljubljana
6. Simona Klasinc, Statistical Office of the Republic of Slovenia, Ljubljana

## Structure of the publication

### Slovenia

In each of Slovenia's 12 Level 3 statistical regions is presented in accordance with a uniform layout on six pages:

#### Page 1:

- regional overview (1)
- strengths and weaknesses (2)

#### Page 2:

- natural resources (3)

#### Page 3:

- population (4)

#### Page 4:

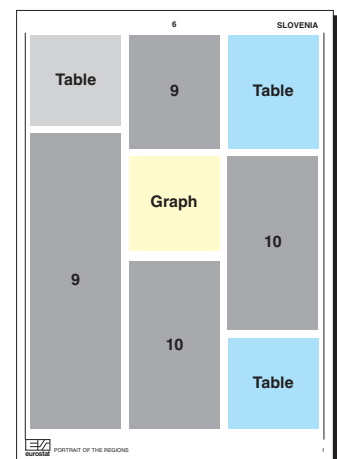
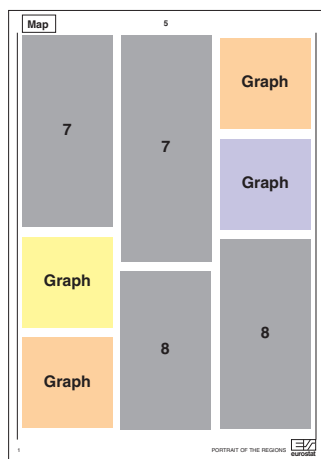
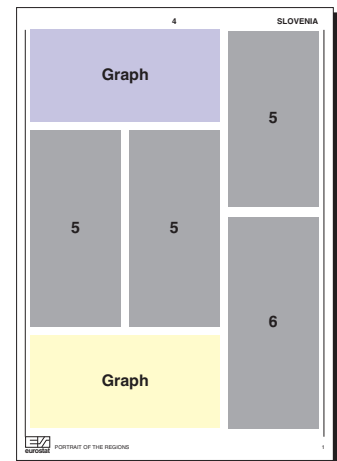
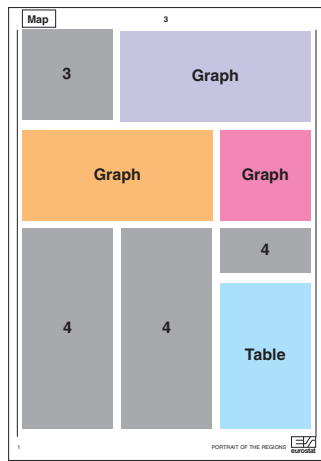
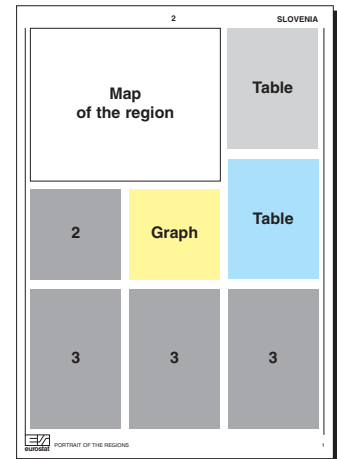
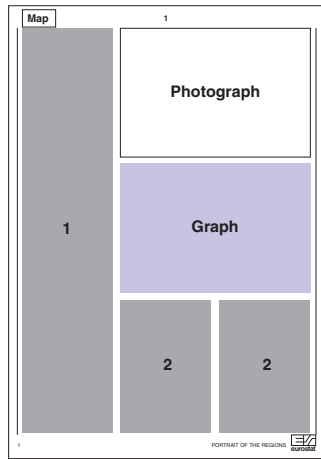
- economic structure (5)
- incomes (6)

#### Page 5:

- employment (7)
- transport (8)

#### Page 6:

- environment (9)
- education, culture (10)



The regional portraits are preceded by a national page: they end with explanatory notes and a bibliography.

The legend for the regional maps is given on the last page of the publication.

The PORTRAIT OF THE REGIONS consists of ten volumes:

|           |   |
|-----------|---|
| Volume 1  | Germany<br>Benelux<br>Denmark   |
| Volume 2  | France<br>United Kingdom<br>Ireland   |
| Volume 3  | Portugal<br>Spain<br>Italy<br>Greece  |
| Volume 4  | Austria<br>Finland<br>Sweden<br>Iceland<br>Liechtenstein<br>Norway<br>Switzerland |
| Volume 5  | Hungary   |
| Volume 6  | Czech Republic<br>Poland  |
| Volume 7  | Slovakia  |
| Volume 8  | Estonia<br>Latvia<br>Lithuania  |
| Volume 9  | Slovenia  |
| Volume 10 | Bulgaria  |

## Table of contents

### REPUBLIC OF SLOVENIA

|                           |    |
|---------------------------|----|
| SLOVENIA                  | 1  |
| Pomurska                  | 2  |
| Podravska                 | 8  |
| Koroška                   | 14 |
| Savinjska                 | 20 |
| Zasavska                  | 26 |
| Spodnjeposavska           | 32 |
| Dolenjska                 | 38 |
| Osrednjeslovenska         | 44 |
| Gorenjska                 | 50 |
| Notranjsko-kraška         | 56 |
| Goriška                   | 62 |
| Obalno-kraška             | 68 |
| Explanatory notes         | 74 |
| Bibliography              | 76 |
| Symbols and abbreviations | 78 |
| Legend to maps            | 78 |





# SLOVENIA



Slovenia, one of Europe's youngest nations, emerged on the political world map in 1991 in turbulent times of political changes caused by the collapse of the Iron Curtain.

On December 1, 1918, after almost 600 years under the rule of the Habsburg Empire, Slovenia joined the Kingdom of Serbs, Croats and Slovenes, later named the Kingdom of Yugoslavia, with Belgrade as its capital. Within the Socialist Federal Republic of Yugoslavia, established after World War II, it was one of the six socialist republics directly subordinated to the federal parliament and the government in Belgrade. Its independence was enhanced by the federal constitution of 1974, however in the maelstrom of inter-ethnic conflicts, deepening economic crisis and disintegration of Yugoslavia that evolved later, a ten-day war in the summer of 1991 by which Slovenia gained its complete independence proved unavoidable.

Even when part of Yugoslavia, Slovenia managed to maintain close economic and cultural ties with Central and Western European countries. It also managed to preserve the intellectual and other cultural resources needed for the fast and relatively successful establishment of a democratic system once independence was gained. Like other countries in transition, Slovenia was faced with numerous problems caused by rapid and fundamental political and economic changes relating to its accession to the European Union. In addition, it carries the heavy burden of its socialist past, which cannot be discarded overnight.

Two important factors also influenced the development of Slovenia in the 1990s. Firstly, the country has a relatively homogenous ethnic structure (88%

Slovenes) and a tolerant attitude towards national minorities and immigrants from other parts of Yugoslavia. Secondly, Slovenia enjoys a favourable position in Central Europe in the extreme north-western part of former Yugoslavia. This enabled Slovenia to largely avoid fratricidal Balkan wars, while its favourable position facilitated its closer ties with other European countries.

In terms of its land area (20 273 km<sup>2</sup>) and population (1.98 million), Slovenia is one of Europe's smaller countries; however, thanks to its unique position it is characterised by great scenic and cultural diversity. At the meeting-point of four large European regions (the Alps, the Pannonian Basin, the Mediterranean and the Dinaric Mountains), a picturesque mosaic of landscapes developed in this naturally diverse area where cultural influences from all sides intertwined throughout the centuries. This

was further stimulated by the country's position astride the "historic draught", the easiest passage from the Pannonian Basin to the Mediterranean and from Western and Central Europe towards South-eastern Europe.

As part of former Yugoslavia, Slovenia was administratively divided among 65 relatively large municipalities, which were the basis of the socialist self-management system and therefore had considerable political power. After independence, the country's administration was centralised, however there has been a constant debate about the establishment of administrative-political regions (provinces) as an intermediate level between the state and the municipalities. The state administration is currently organised into 58 administrative units that are mostly based on the former municipalities.

The old municipalities were abolished with the Act on the Establishment of the Municipalities (1994) and new municipalities were established to undertake local self-government. Slovenia is now divided among 192 municipalities (11 of these are urban municipalities), extremely diverse in terms of population and economic power: the largest in terms of population is the city municipality of Ljubljana (271 000), while Hodoš municipality has a population of only 371.

The division of Slovenia into 12 statistical regions was based on the socio-geographic regionalisation of Slovenia (functional medium-size regions). Statistical regions coincide with the so-called planning regions determined for the purposes of spatial planning. They have no political or administrative function and, apart from several minor exceptions, follow the boundaries of the existing municipalities.



# Pomurska

## Border region with extensive plains

Pomurska, situated in the extreme north-eastern part of Slovenia, is characterised by its extensive plains, which proportionally cover more area than in any other Slovene region. It is essentially a border region, with Austria to the north, Hungary on the east and Croatia to the south.

The central part of the region consists of a wide plain on both sides of the Mura river. Apart from a belt of floodplain forest rich in biodiversity, the region is densely populated and intensively cultivated. With its abundant arable land, it is a real "bread basket" for Slovenia. The hilly part of north Pomurska, called Goričko, is undeveloped and sparsely populated as a result of its poor quality, acidic soil and border position. There are wine-growing hills along the Hungarian border near Lendava, while the southern and western parts of the region extend into the wine-growing hills around Slovenske gorice.

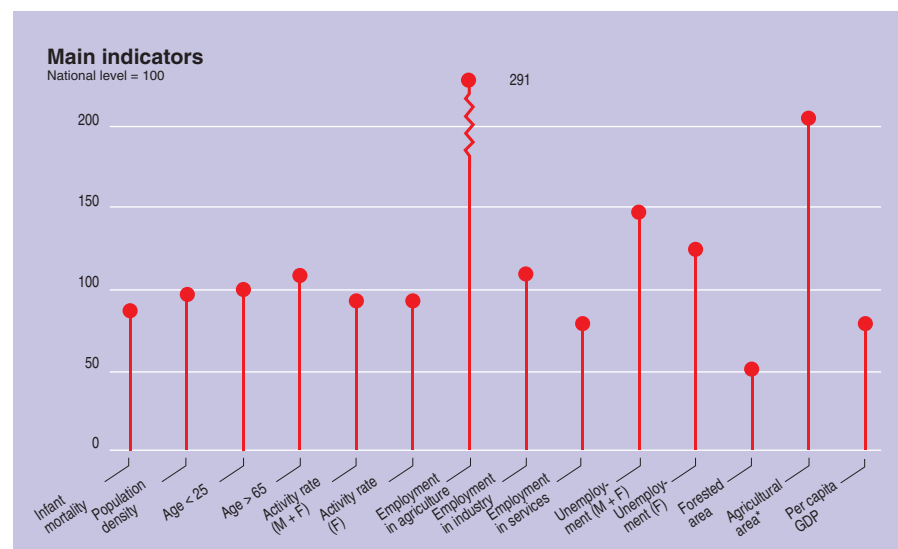
In a geographical, climatic and cultural sense, Pomurska differs somewhat from other Slovene regions since the area to the east of the Mura river was part of Hungary from the 11th century until the end of World War I. It became part of the Yugoslavian state only in 1920 with the Treaty of Trianon. This long separation from the rest of Slovenia is reflected in the name given to the territory – Prekmurje, meaning "the land beyond the Mura river" or "Trans-Mura". It also explains the presence of Protestants (members of the Evangelical Church) in this part of Slovenia since no Counter Reformation took place in Hungary in the 16th and 17th centuries and Protestants were not driven out as they were in other areas ruled by the Habsburgs.

The eastern part of the region is a bilingual area inhabited by Slovenes and Hungarians, with the rights of the latter as an indigenous national minority guaranteed by the Slovene constitution.

In terms of traffic, Pomurska has relatively poor connections with the rest of Slovenia and with other countries. This situation will change radically by 2004 when a motorway will be constructed as part of a European traffic corridor, connecting the region with Ljubljana and later also with Budapest. Furthermore, a railway connection between Slovenia and Hungary is also under construction.



Between the Mura River and its densely populated and cultivated plain is an ecologically rich belt of forest (Photograph: Karel Natek)



## Slovenia's granary remote from the capital

Its extreme north-east position makes Pomurska highly peripheral in centralised Slovenia, far away from the corridors of economic power and political decision-making. Furthermore, the region's peripheral position is also reflected in its modest participation in key economic activities. A further consequence is the emigration of its educated workforce to other parts of the country, especially to Ljubljana and Maribor.

Pomurska is the most agricultural region in Slovenia. Here, the share of gross value added generated by agriculture is three times higher than the national average. The position of the agricultural sector is even

stronger because of its close ties with the food processing industry. The latter is currently facing considerable difficulties since local markets have started to open up to imported goods as part of the process towards free trade within the framework of EU and CEFTA treaties.

Although extensive areas of top-quality agricultural land in the plains are an invaluable natural resource, growth in productivity is hindered by an extremely unfavourable land ownership structure. Most of the land is owned by small part-time farmers, and their farms are further split up into numerous small, widely scattered plots.

The predominance of labour-intensive industries (especially food processing, tex-

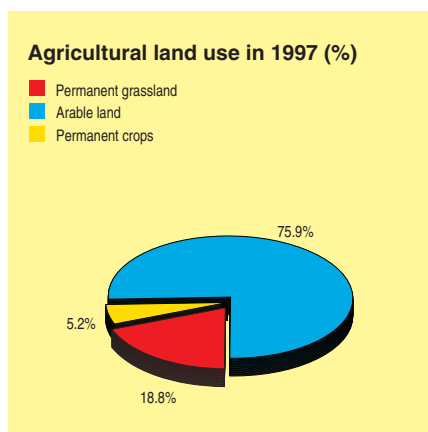


tile and shoemaking) with low capital investment rate is also extremely unfavourable.

Untapped potential currently is cross-border co-operation, especially with Hungary, where a bilingual population of Hungarian and Slovene minorities on both sides of the border could be seen as an important advantage. There are also good prospects for the further development of tourism based on natural mineral and thermal waters as well as farm tourism based on the region's historical, natural and cultural aspects.

### Fertile plain along the Mura river

Almost half of the region, which covers 1 337 km<sup>2</sup> (6.6% of the national territory), is covered by a 50 km long and up to 20 km wide plain on either side of the Mura river. The floodplain along the river is 2 km wide, mostly covered with lowland river-bank forest, while the rest is a fertile plain on gravel and loam river sediments, which tends to be slightly wetter in its eastern part around Lendava. The rest of the region consists of three areas of low hills rising up to 100 m above the surrounding plain. Firstly, Goričko is an area of acidic soil of poor fertility, built predominately of quartz river sediments situated in the north along the Austrian and Hungarian border. Then there are wine-growing hills above the



town of Lendava along the Hungarian border; and finally the Slovenske gorice hills with wide, gently sloping ridges are in the southern part of the region.

Pomurska's climate is moderately continental with annual precipitation ranging from 800 to 900 mm (falling mostly in June and July) and average monthly temperatures between 2.4°C (January) and 19.7°C (July).

Towns here are all situated on the plain, with the regional centre of Murska Sobota with a population of 13 300 right in the middle of the plain. The other main towns are situated close to the hilly areas: Lendava (population 3 600), Ljutomer (3 600) and Gornja Radgona (3 600).

### Which regions are similar to Pomurska?

#### Area:

1 337 km<sup>2</sup>

Jerichower Land (D)  
Novara (I)  
Ifov (RO)

#### Land use:

47% agriculture

Franche-Comté (F)  
Oberösterreich (A)  
Latgale (LV)

#### Employment structure:

12% agriculture

Andalucia (E)  
Banskobystricky (SK)  
Molise (I)

### Agriculture 1997

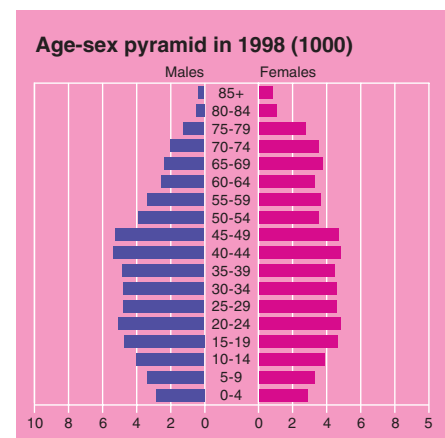
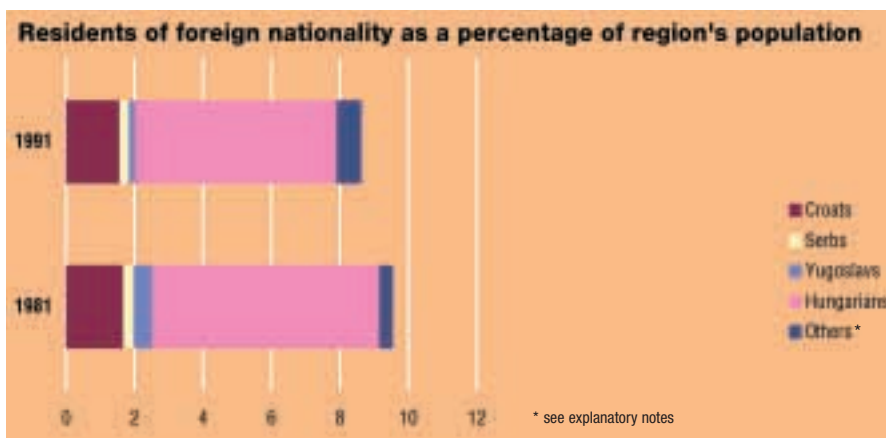
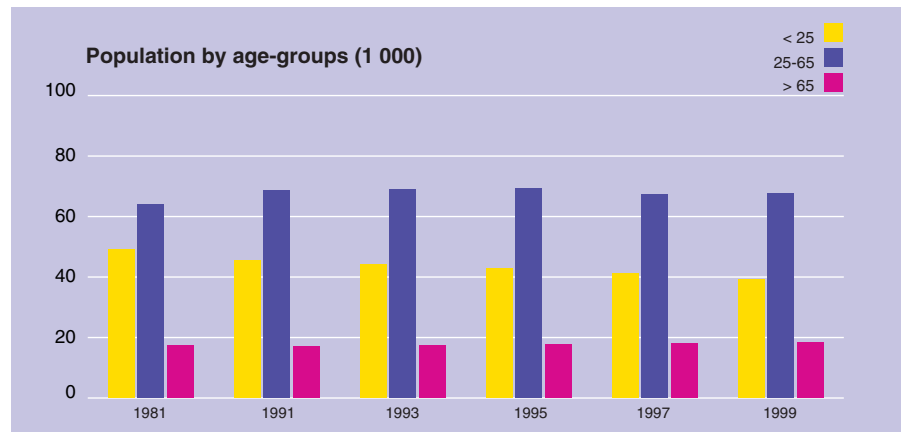
|   |         |
|---|---------|
| Number of private farms   | 11 887  |
| Persons working in agriculture                                      | 5 743   |
| Total agricultural area (ha)  | 62 929  |
| Total livestock   | 264 613 |
| Cattle per 100 ha of total agricultural land                        | 81.5    |
| Pigs per 100 ha of total agricultural land                          | 335.9   |
| Main products - proportion of arable land devoted to production of: |         |
| Cereals   | 75.0    |
| Sugar beet  | 6.9     |
| Fodder plants   | 11.8    |
| Potatoes  | 2.2     |

The most important natural resources are fertile soil on the plains and in the southern hills, and water. Although the Mura river has substantial energy potential, a plan to construct a chain of five hydroelectric plants was dropped because it was strongly opposed by environmentalists and the general public. Rich groundwater supplies, the main source of drinking water, are accumulated in gravel sediments. In several places, large quantities of mineral and thermal water are pumped from great depths, spurring the development of several health resorts. Very small quantities of oil and natural gas have been extracted in the vicinity of Lendava where unexploited lignite deposits are also located.

Arable land covers more than half the plain, and vineyards cover more than 10%



of land in the Lendava and Jeruzalem hills (south of Ljutomer).



### A slight population decline

At the end of 1998, the region's population numbered 125 000 (6.3% of the total Slovene population). Despite extensive plains, the region is relatively sparsely settled (94 people per km<sup>2</sup>). The majority of the population lives in the plains where in some areas population density exceeds 200 people per km<sup>2</sup>, while in hilly areas it ranges between 30-70 people per km<sup>2</sup>.

Since 1985 the population has been decreasing persistently, resulting in a decline of 6.2% in the period between 1985 and 1998. The main reason for this decline is the relatively high mortality rate, which surpasses the region's birth rate. The disparity between the two rates is larger only in neighbouring Podravska. The contribution of migration to the decline of the population is negligible since migratory flows are very weak. Nevertheless, the migration balance in Pomurska during the 1990s has mostly been negative.

Although the percentage of people over the age of 65 is slightly above the national average in Pomurska, their number is increasing more slowly than in other parts of Slovenia. The percentage of people under the age of 25 has been slightly

below the national average since 1981, however this decline is at a faster rate than the national average.

In the border municipalities of Goričko the demographic situation is of particular concern, as the average age of the population is among the highest in Slovenia and approximately one third of the total population is over 65.

Apart from Slovenes, around 8 000 members of the Hungarian minority live in the eastern part of the plain around Lendava and in the villages of eastern Goričko. The cultural centre of this minority, whose rights are guaranteed by the constitution, is Lendava (Lendva). Hungarian is (together with Slovenian) an official language in municipalities settled by the Hungarian minority. Gypsies live in several villages in the central part of the region.

Compared to other regions, very few people migrated to Pomurska from other parts of former Yugoslavia after World War II. Therefore, only 4.9% of the region's population were of non-Slovene or non-Hungarian origin according to the 1991 census.

### Main enterprises

| Name                                    | Activity             |
|---|----------------------|
| Mura Murska Sobota                      | Clothing             |
| Splošna bolnišnica Murska Sobota        | Hospital activities  |
| "Mura Murska Sobota, DE Ljutomer"       | Clothing             |
| "Mura Murska Sobota, DE Gornja Radgona" | Clothing             |
| "Planika d.d. Kranj, obrat Turnišče"    | Footwear             |
| Pomurka Murska Sobota                   | Food products        |
| "Arcont d.d. Gornja Radgona"            | Metal products       |
| Elektromaterial Lendava                 | Electrical equipment |
| Zdravilišče Moravci d.d.                | Spa centres          |
| "Mura Murska Sobota, DE Lendava"        | Clothing             |



### The most agricultural region

In terms of economic power, Pomurska is among the weakest Slovene regions, contributing only 4.9% to national GDP. Furthermore, it has the lowest GDP per capita. Although the highest level of value added from agriculture (12.8%) occurs here, the service sector is the major contributor (47.8%) to the local economy, followed by industry (39.2%).

Agriculture dominates the plains. Apart from wheat, fodder crops such as silage corn and grain corn are mostly grown, forming the basis for dairy farming and pig raising. Large areas are also under sugar beet cultivation. Small farms prevail, while in the central part of the plains large complexes of farmland belong to the Rakičan agricultural company. There are also several large pig farms. Wine growing is important in Lendavske gorice and Slovenske gorice. The relatively strong food-processing industry, located mainly in Murska Sobota, Gornja Radgona and Lendava, has close links with agriculture (flour mills, meat and milk products). There is a large bottling plant for natural mineral water and non-alcoholic beverages in Radenci.

After World War II industry was mostly established in towns on the plains. Labour-

intensive industries (such as textile and footwear) prevail. The most important company is Mura from Murska Sobota with several branches in other parts of the region. It is the largest producer of clothing for men and women in Slovenia. In Lendava there is the only Slovene petroleum refinery, as well as some chemical industries (organic basic chemicals). Other important industrial sectors include the manufacturing of metal products in Gornja Radgona (containers) and electronics in Lendava. The small business and construction sectors are less developed than in other parts of Slovenia.

Value added generated by the services sector is below the national average, however it is similar to the majority of other regions with the exception of Obalno-kraška and Osrednjeslovenska. The position of trade and tourism is relatively strong in Pomurska. Tourism is based on abundant natural mineral and thermal water sources, and health resorts have been developed in Radenci, Moravske Toplice, Lendava and Banovci. The annual agriculture and food industry fair in Gornja Radgona is important within Slovenia and further afield.

Compared to Podravska, Pomurska's

economy was not affected so severely by the transition from a centrally planned to a market economy. The problem, however, is that the region's economy is oriented towards sectors with low capital investment (food production, and other labour-intensive industries). A lack of entrepreneurs has led to low levels of capital investment and few new start-up companies, while skilled labour tends to find work in other regions.

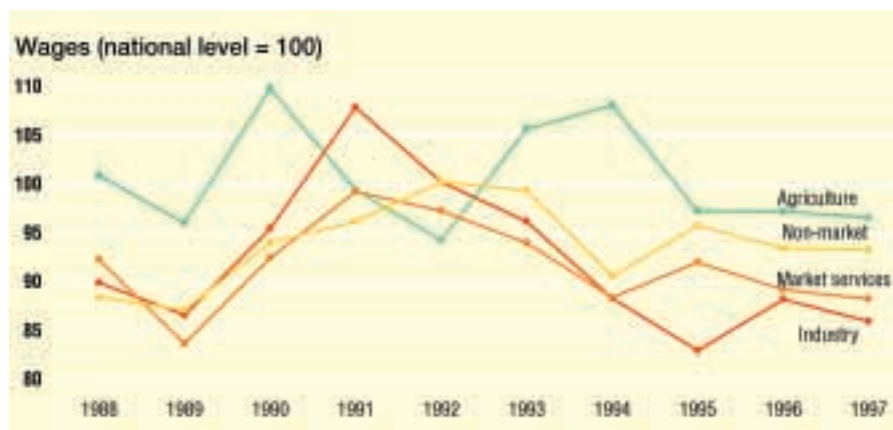
### Below average earnings

Due to the Slovene system of General Collective Agreements on the national level, regional wage inequalities are very small. From these agreements, Branch Collective Agreements - which were also adopted at the national level and are obligatory for all employers - were derived.

A severe economic crisis and high inflation rates at the end of the 1980s and in the early 1990s caused significant fluctuations of wages in real terms. They have been increasing slowly but steadily since 1991 when they reached their lowest level. In the period between 1995 and 1998 wages in Pomurska increased by only 11% which was the smallest increase among all Slovene regions.

In Pomurska, the average net monthly wage at the end of 1998 was 474 ECU which was 12% below the national average. Wages were lower only in Koroška. The lowest wages were recorded in labour-intensive industries, where they reached only two thirds of the average net wage in Slovenia. Average wages in market services in Pomurska are also 12% below the national average.

Wages and salaries represent more than half of all household income, while one third comes from pensions and other social security payments. In rural areas some additional income is brought in to the household from farming since householders produce the majority of the food they consume and then sell the surplus at market.



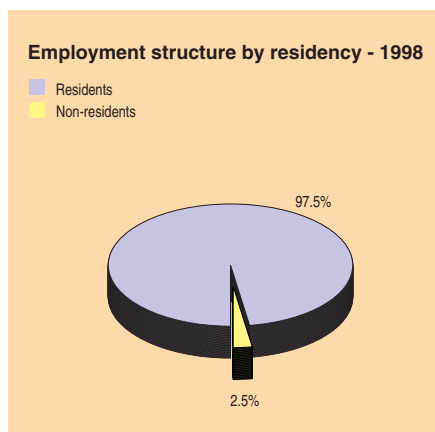
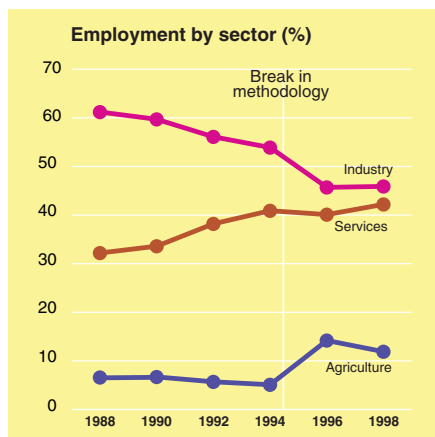


## High unemployment, few new jobs

As a typically agricultural region, Pomurska has throughout the 20th century been permanently faced with a larger workforce than it can use. Before World War II, people used to work as seasonal labourers in the surrounding regions, while in the 1960s and 1970s many found temporary jobs in Austria and Germany. Part of the workforce from rural areas was attracted to local towns, especially where industry was expanding, although there were never enough jobs locally for the entire workforce.

Industry employs the largest share of the workforce (45.9%), especially in labour-intensive industries. 42.2% of the workforce is employed in the service sector which is below the national average, while its share in agriculture is three times the national average. As in other parts of Slovenia, the majority of employees are employed on a full-time basis, with one fifth employed on a temporary basis. The number of employees from other regions is very low.

More than one fifth (20.8%) of the workforce in Pomurska is unemployed, which is



far above the national average. The unemployment rate is higher only in Podravska. The number of people unemployed almost doubled between 1990 and 1991 due to the severe economic crisis in former Yugoslavia and has continued to increase since then. There are two main factors contributing to this persistent rise in unemployment levels. Firstly, workers are being laid off as production processes are rationalised, and then there is a lack of new job opportunities.

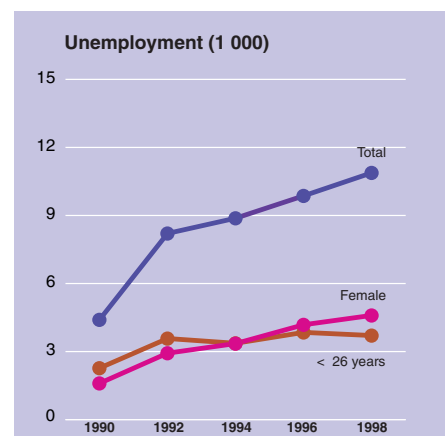
While the share of women among the unemployed in Pomurska is the lowest in Slovenia, it is worrying that the unemployment rate is increasing most rapidly among people who have been seeking a job for a long period of time and among those under 26. No major reduction in unemployment is anticipated in the near future. New job opportunities can be expected only in the service sector and are related to the construction and operation of new railway and motorway connections with Hungary.

## Furthest from the heartland

Pomurska is the region most remote from the central part of the country and remains off the main Slovene traffic axes. Its position along the Austrian and Hungarian borders has become an advantage only recently, almost a decade after the collapse of the Iron Curtain, while in the past it was the main obstacle to cross-border cooperation between neighbouring countries.

During the 1990s, transit freight transport through Pomurska increased dramatically and the existing main road, running from Pesnica, via Lenart, Murska Sobota and Lendava to where it crosses the border at Dolga vas, can hardly cope. The situation will not improve until the motorway connection with Hungary in the direction of the 5th European traffic corridor (Venice-Ljubljana-Budapest-Kiev) is constructed. According to the Slovene National Motorway Construction Programme, the motorway will be constructed by 2004.

Nevertheless, the region has a dense network of local roads. In the plains, they are mostly paved, while in hilly areas there is still a large portion of unpaved local roads. They are very important for commuter traffic between rural areas and the main



employment centres. However, Pomurska, with 42 000 cars, has the lowest level of car ownership with 335 cars per 1 000 persons.

Pomurje has 56 km of railway track. The most important is the Ormož-Ljutomer-Murska Sobota line. The railway connecting Murska Sobota with Hungary, constructed in 1907, was removed in 1968. At present, the Murska Sobota-Hodoš-Zalaöví (Hungary) railway line is being rebuilt along almost the same route.

Pomurje has no airport and the nearest airports are in Maribor and Graz (Austria). Rivers in the region are not navigable.

**Surfaced public roads – 1997**

|  | Pomurska | Slovenia |
|--|----------|----------|
| Length in km per km <sup>2</sup>                             | 0.24     | 0.23     |
| Length in km per 1 000 population                            | 2.5      | 2.4      |
| Length in km per 1 000 private passenger cars                | 7.5      | 6.1      |
| % private passenger cars in total number of vehicles         | 73       | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.6      | 0.5      |

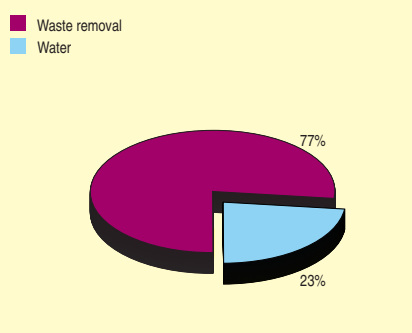
**Agriculture a major polluter**

Pomurska is densely populated in parts and intensively cultivated, which makes agriculture a major source of pollution in the region. Since there is plenty of air movement above the open plains, emissions of harmful substances rarely exceed the legal values. However, intensive agriculture causes high levels of pollution in the groundwater deposits in gravel sediments on both sides of the Mura river which are the only source of drinking water in the region. Especially serious are high and still increasing levels of nitrates and chlorinated organic solvents.

Rivers are also considerably polluted in Pomurska. The Mura is already polluted when it enters Slovenia from Austria. This poses a serious threat to flood-plain forests along the river, where there is a wide range of biodiversity. The most polluted are small rivers such as the Ledava and Ščavnica, which receive municipal waste water and waste water from livestock farms. Conditions are not improving since it is only in several of the larger towns that sewage is treated by municipal treatment plants.

Virtually all settlements in the plains are connected to municipal water supply systems, while in the hilly areas of Goričko and Slovenske gorice wells are also used. Most municipal waste is disposed of at the Puconci landfill, where the first waste sorting and recycling programme in Slovenia was initiated, and at a landfill near Dolga vas.

Almost all households are connected to the national electricity network. The majority of industry in Murska Sobota, Lendava, Gornja Radgona and Ljutomer, as well as an increasing number of households, is connected to the natural gas network. The penetration of telephones is the lowest in Slovenia as Pomurska has only 236 telephone lines per 1 000 inhabitants, which is only two thirds of the national average.

**Current expenditure for environmental protection - 1997****Pannonian culture**

Pomurska has high school centres in Murska Sobota and Lendava, offering various courses at high-school and vocational level. Bilingual education in both Slovene and Hungarian at pre-school, primary and secondary levels was introduced in 1959 in the area settled by both Slovenes and Hungarians.

There are four bilingual kindergartens with about 400 children, 4 bilingual elementary schools with about 1 000 pupils and a bilingual secondary school in Lendava with about 400 students.

Students normally continue their tertiary education at either Maribor or Ljubljana university. There are no large research institutions in the region.

There is a general hospital in Murska Sobota serving the region. Complementary health services are also available in resorts with natural mineral and thermal water, especially in Radenci and Lendava.

Murska Sobota is the main cultural centre in Pomurska, with a regional museum and a study library in a castle built in the 16th century in the Renaissance style and a

**Utilities - 1997**

|   | Pomurska | Slovenia |
|---|----------|----------|
| Dwellings connected to water supply system (%)    | 93.7     | 97.6     |
| Dwellings connected to sewerage system (%)        | 93.7     | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 43.7     | 71.9     |
| Telephone connections per 1000 population         | 236      | 357      |
| Number of doctors per 1000 population             | 1.6      | 2.2      |
| Number of hospital beds per 1000 population       | 4.1      | 5.7      |

local radio station.

Lendava is the cultural centre of the Hungarian ethnic minority in Slovenia. They publish a weekly paper in Hungarian and the local radio station is also of great importance for preserving the national identity and culture of the ethnic minority. There is a local museum and art gallery in the Lendava castle.

**Number of pupils - 1998**

|                                       |        |
|---------------------------------------|--------|
| Pre-school                            | 3 808  |
| Primary                               | 11 856 |
| Lower secondary                       | 1 160  |
| Higher secondary (vocational/general) | 5 314  |
| Tertiary (higher education)           | 2 497  |
| Total                                 | 24 635 |





# Podravska

## Slovenia's second city

Ranking fourth among Slovenian regions by its size and second in terms of population, Podravska is situated between the Austrian border in the north and the Croatian border in the south-east. Its centre, Maribor, was established on the banks of the Drava river where its narrow valley opens up and the river enters the extensive Drava plain.

The region consists of two geographically very different parts. The larger eastern section comprises hills on the western edge of the Pannonian Plain (among them especially the Slovenske gorice hills between the Drava and Mura rivers and the steep Haloze hills along the Croatian border), and the densely populated Drava and Ptuj plains along the Drava river. The western part of the region, geographically belonging to sub-alpine mountains, is entirely different, consisting of the heavily forested and sparsely populated Pohorje and Kozjak ranges, broken up by numerous watercourses and separated from each other by the narrow Drava valley.

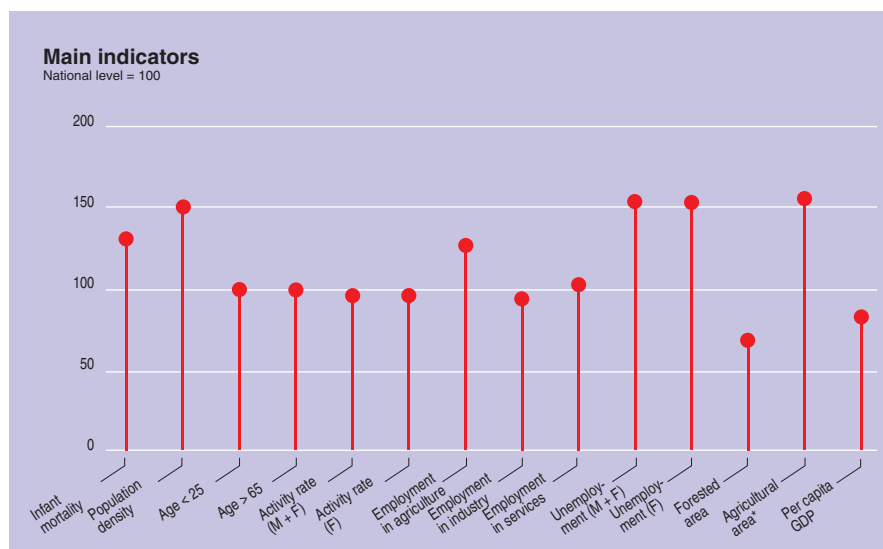
Historically, the region was part of Styria, a hereditary Habsburg possession centred on Graz (Austria), from the beginning of 14th century until the end of World War I. The present border between Austria and Slovenia was drawn up following the disintegration of the Austro-Hungarian Empire in 1918.

Podravska is characterised by its accessibility from all sides since it lies on the main traffic route between the former Habsburg capital, Vienna, and the port of Trieste on the Adriatic coast, which was declared an imperial free port in 1719 by Emperor Charles VI. Its role was further reinforced by the construction of the Southern Railway in the middle of the 19th century. As a consequence, Maribor took over the role of regional centre previously held by the ancient town of Ptuj situated further along the Drava river. The motorway connection between Vienna and Trieste, which will be completed by 2004, follows the old trade route.

The region is divided among 34 municipalities, ranging from the city municipality of Maribor, the second largest municipality in Slovenia in terms of population, to smaller rural municipalities in hilly areas lacking more distinctive local centres since they were established only in 1994.



Old Lent in Maribor, where timber rafts from the mountains once landed, is now a venue for summer festivals (Photograph: Karel Natek)



## Eternally second with severe economic problems

For decades, Maribor has been “condemned” to forever being in second position in the country. Moreover, centralisation even reinforced Ljubljana’s prime position after Slovenia gained its independence. In the socialist period, Maribor was a markedly industrial town when compared to Ljubljana, while during the process of ownership transformation and opening up to the world market several large companies that were established after World War II went bankrupt. This caused above average unemployment and social problems in the town itself. In addition, its smaller population and decreasing purchasing power, in comparison with Ljubljana, also contributed to the fact that the first, large-scale, direct foreign investment in the ser-

vice sector, i.e. trade and banking, avoided Maribor and concentrated on Ljubljana.

To date, Maribor’s weak position as a regional capital for the entire north-eastern part of Slovenia has not improved despite the transfer of certain state administration and governmental functions (such as the National Post Administration and the Ministry of Small Enterprises and Tourism) to Maribor. One of Maribor’s plus points is its successful university providing a substantial share of highly educated graduates for Maribor and neighbouring regions.

Among the advantages of the region, successful specialisation of agriculture in fruit and wine growing in several hilly areas is worth mentioning. In other areas, the unfavourable land ownership structure (such as occurs in Haloze in the southern



part of the region) has accelerated the abandonment of agriculture, depopulation and the decline in cultural facilities.

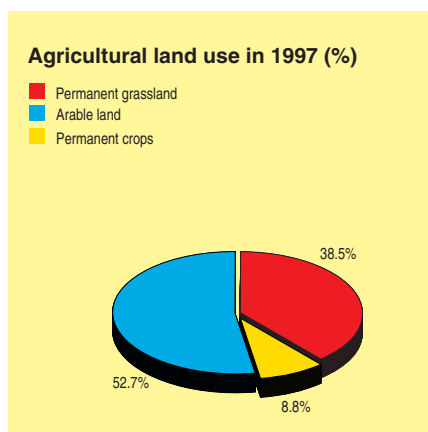
Apart from being the region's most important source of drinking water, the plains are also characterised by their dense population, industry and intensive agriculture. Therefore, one of the essential problems of the region is also the increasing groundwater pollution in gravel sediments on the Drava and Ptuj plains.

### Sub-alpine forests and wine-growing hills

Podravska covers 2 170 km<sup>2</sup> (10.7 % of the national territory) and is composed of two entirely different parts: the plains and hills in the eastern part, and forested mountains in the west. The hilly area can be divided into the low Slovenske gorice hills between the Drava and Mura rivers, and the much more dissected and steeper Haloze hills along the Croatian border in the south-east.

The climate is moderately continental with average temperatures between -1.3°C (January) and 19.6°C (July) and annual precipitation around 1000 mm (falling mostly in June and July).

In the west, Podravska extends into the Pohorje and Kozjak mountains to the south



and north of the Drava river, an area built of metamorphic and igneous rocks and covered with vast coniferous and deciduous forests. Villages are scattered over wide ridges, reaching an altitude of approximately 900 m, while the narrow valleys are mostly uninhabited.

The central part of the region comprises densely settled and intensively cultivated plains along the Drava river. The three main plains are the Drava Plain between Maribor and Ptuj, the Ptuj Plain between Ptuj and Ormož and the Središče Plain on the same side of the river downstream from Ormož. The plains are characterised by numerous roadside villages, some of them several kilometers long. Along the edges of the plains are situated the towns of Maribor (population 101 000), Ptuj (19 500), Slovenska Bistrica (7 000) and Ormož

### Which regions are similar to Podravska?

#### Population:

319 000 inhabitants  
Oost-Zuid-Holland (NL)  
Arezzo (I)  
Pazardzhik (BG)

#### Population density:

147 inhabitants per km<sup>2</sup>  
Isère (F)  
Mansfelder Land (D)  
Łódzkie (PL)

#### Land use:

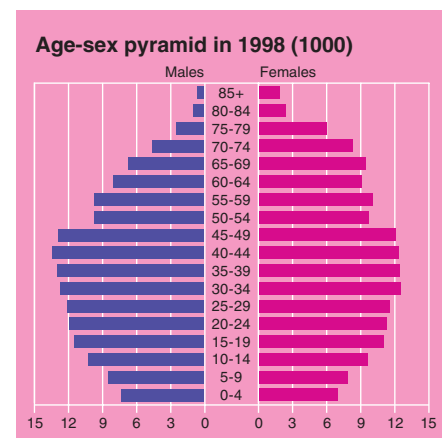
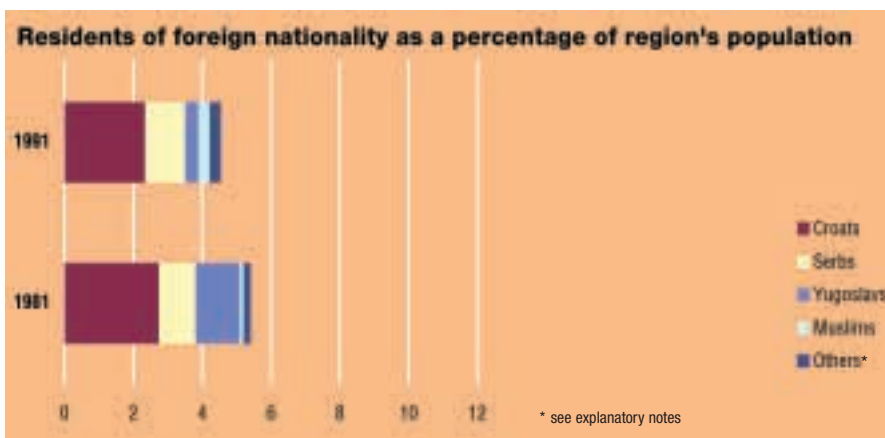
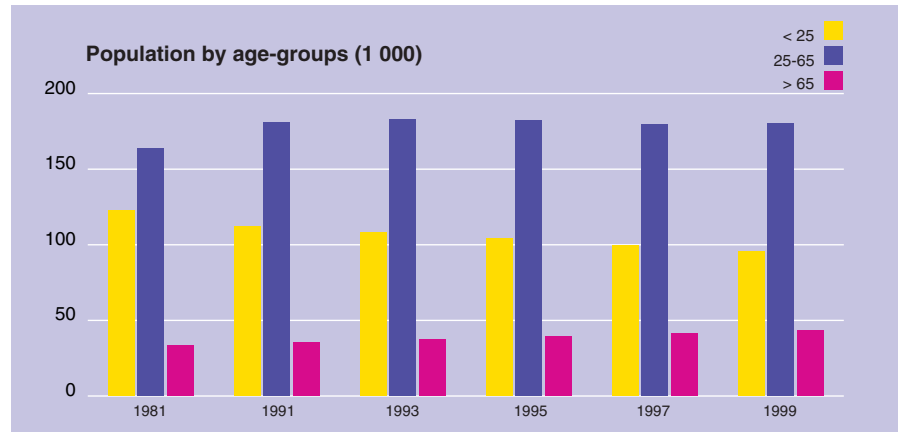
36% agriculture  
Thessalia (EL)  
Corse (F)  
Kurzeme (LV)

### Agriculture 1997

|   |         |
|---|---------|
| Number of private farms   | 15 257  |
| Persons working in agriculture                                      | 5 204   |
| Total agricultural area (ha)  | 77 350  |
| Total livestock   | 246 927 |
| Cattle per 100 ha of total agricultural land                        | 102.0   |
| Pigs per 100 ha of total agricultural land                          | 210.7   |
| Main products - proportion of arable land devoted to production of: |         |
| Cereals   | 66.8    |
| Sugar beet  | 5.2     |
| Fodder plants   | 21.2    |
| Potatoes  | 2.3     |

(2 300). Only Ruše in the Drava valley (4 700) and Lenart v Slovenskih goricah (2 600) are not located on the plains.

The region has no ore or fossil fuel deposits. Its most important natural resources are the fertile soil, water and forest. Arable land covers more than half of the Ptuj and Središče plains, one third of the Drava Plain and around one fifth of the hills. The Drava river is the most important hydroelectric power source in Slovenia. Three hydroelectric plants are located on the Drava in this region, while the Drava Plain boasts the second most abundant aquifer in Slovenia, the main source of drinking water for most of the region. On the plains, there are several gravel and clay pits for the local building materials industry, while in Cezlak (the Pohorje massif) there is a quarry mining decorative stone.



## Population in slight decline

With 319 000 inhabitants (16.1 % of the national population) at the end of 1998, Podravska is the second largest Slovenian region in terms of population. The region also ranks second by population density, with 147 people per km<sup>2</sup>, which is well above the national average of 98 people per km<sup>2</sup>. Population density is highest in the city municipalities of Ptuj and Maribor and in the plains, where it exceeds 200 people per km<sup>2</sup>, while in hilly parts it ranges between 60 and 100 people per km<sup>2</sup>.

Podravska's population decreased by 2.7 % in the period between 1990 and 1998 (1.1 % in Slovenia as a whole). As the region's economic problems escalated in the mid-1990s, this decline became more rapid. The main cause of the declining population is the low birth rate, which is lower only in Obalno-kraška. By 1997 the mortality rate exceeded the birth rate by 25 %. Population decline cannot really be attributed to migratory factors, since the region, as well as Slovenia as a whole, is characterised by weak migratory flows.

The age structure of the population is very close to the national average, the only

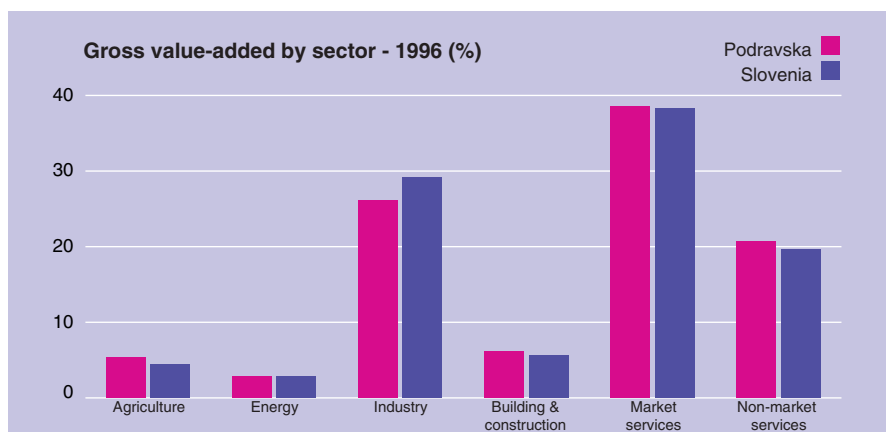
exception being the percentage of people under the age of 25 which is slightly below the national average. The age structure has altered considerably in the last decade, as in the period between 1990 and 1998, the number of young people decreased more rapidly than in other parts of Slovenia (a 14.8 % decrease) which is already reflected in the below-average birth rate.

According to the 1991 census, the percentage of non-Slovenes in the population was 8%. These are mostly immigrants from other parts of former Yugoslavia, Croats (2.3 %) and Serbs (1.2 %) and their descendants, who live almost exclusively in the larger towns.

Before World War II, an economically powerful German minority (approximately 10 000 people) lived mainly in Maribor, Ptuj and some other Slovenian towns. However, most of them had emigrated by the end of the war. The remaining Germans, who are now scattered all over Slovenia (in Maribor they number 115), continue to strive to gain ethnic minority status.

## Main enterprises

| Name                                | Activity                    |
|-------------------------------------|-----------------------------|
| Splošna bolnišnica Maribor          | Hospital activities         |
| Paloma-Sladkogorska tovarna papirja | Paper products              |
| ISS-Servisystem d.o.o. Maribor      | Industrial cleaning         |
| ZD dr. Adolfa Drolca Maribor        | Medical practice activities |
| Talum d.d. Kidričevo                | Aluminium production        |
| Impol d.d. Slovenska Bistrica       | Metal products              |
| Perutnina Ptuj d.d                  | Poultry products            |
| Carrera Optyl d.o.o.                | Optical instruments         |
| Schmidt Kidričevo                   | Leather goods               |
| Nova kreditna banka Maribor         | Financial services          |



### Second weakest region; industry facing crisis

In the past, Podravška's economy was based both on industry and agriculture. Today service activities generate more than half (59.6 %) of the region's gross value added, followed by the secondary sector (35.1 %), while agriculture and forestry contribute 5.4 %. Heavy industry, car manufacturing, machine-building and other industries, established in the socialist period after World War II, largely failed to survive the demanding transition to a modern, market-oriented economy. This is also the main reason why the region's per capita GDP is the second lowest in Slovenia, followed only by Pomurska.

The most important agricultural areas are the plains along the Drava and surrounding hills. However, despite abundant land, small farms prevail, and only about 10 % of farms have more than 5 hectares of agricultural land. Agriculture is quite diverse, a number of different crops are grown and today there is a tendency towards dairy farming and poultry production. A substantial part of the food processing industry depends on the latter. Fodder crops (silage corn and grain corn) are grown on most of the fields, while sugar beet is becoming more and more popular.

Fruit growing areas (apples and pears) can be found in the northern parts of Slovenske gorice and the Pohorje foothills, while the main wine growing areas are around Maribor, in Slovenske gorice to the north-east of Ptuj and in the eastern part of Haloze.

Maribor is the largest industrial town. Metal products are still manufactured here, as well as chemicals (detergents), textiles and wood-processing products. During World War II, a hydrated alumina and aluminium plant was constructed in Kidričevo, which was intended to use Hungarian bauxite and cheap electricity from the nearby hydroelectric power plants on the Drava river. Later, it was transformed into an aluminium plant which today is connected with a semi-manufactured aluminium goods plant in Slovenska Bistrica. Other industries include a paper factory in Sladki Vrh, the manufacturing of spectacles and sugar refining in Ormož and the production of ferro-alloys, carbide and fertilizers in Ruše.

All types of service activities are well developed in Maribor but the region is rather weak in tourist and catering services which are mainly developed in Maribor, in the Pohorje massif (skiing centre) and in Ptuj

(thermal health resort). Several specialised trade-fairs also take place in Maribor.

Following the difficult transition period at the start of the 1990s, Podravška's economy is now gradually beginning to improve, if somewhat slowly. An important advantage for the region is the presence of Maribor university, which covers the majority of the demands from the local economy for highly skilled graduates.

### Wages slightly below the national average

In the period between 1995 and 1998 average net wages in Podravška increased by 13.6 %, which equals the Slovenian average. The highest increase was recorded in agriculture, the construction sector and in non-commercial service activities, while the smallest increases in wages went to those working in the energy sector and in market services.

The lowest wages were recorded in the industrial and construction sectors at 444 and 466 ECU respectively. Those employed in services, and especially non-commercial activities financed from the national and municipal budgets, received salaries which were relatively close to the national average. Wages were above the national average by sector for agricultural workers who were paid an average salary of 551 ECU, representing 4% more than the Slovenian average in this sector.

With wages tied to General Collective Agreements negotiated at a national level, in 1998, the average net monthly wage in Podravška at 511 ECU was 5 % below the national average of 538 ECU. This is also because of the small number of well-paid government jobs in Maribor, since most are concentrated in the capital Ljubljana. In spite of the university, the number of better-paid intellectuals with additional incomes from copyright royalties and similar sources is much smaller here.

To some degree, the people in the countryside are at an advantage over those in towns, because a large number of mixed farmer-employee households get additional income from farming, partly from selling of some market surpluses and partly from the production of the food for own consumption.

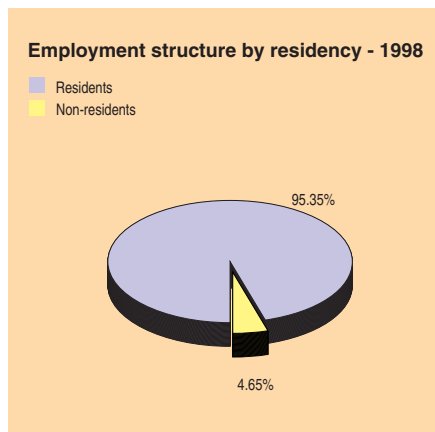
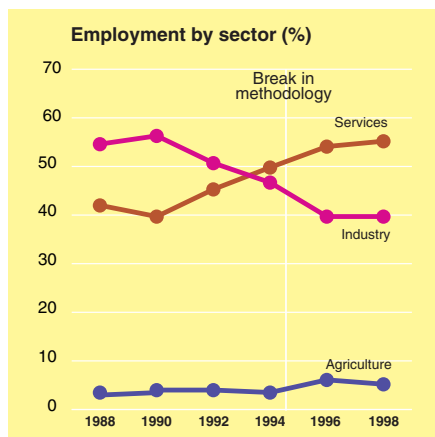




## Worryingly high unemployment

Due to the planned industrial development of Maribor and several other towns after World War II, Podravka became one of the most important industrial areas in Slovenia. New factories employed most of the local workforce who could no longer find work in agriculture and led to widespread immigration from neighbouring regions. A substantial number of smaller industrial plants were also established in less developed parts of Podravka. The employment of at least one family member in such a plant enabled the existence of numerous small farms in hilly areas where there was not enough income generated from the land to enable survival from that alone.

The employment structure changed considerably in the 1990s due to the severe crisis faced by industry during the transition from a planned to a market economy. Between 1991 and 1998 the workforce employed in industry dropped from 54.5 % to 39.7 %, which was below the national average. In the same period the share of the service sector rose from 41.5 % to 55.2 %, making the service sector in Podravka the third strongest in Slovenia,



behind Obalno-kraška and Osrednjeslovenska.

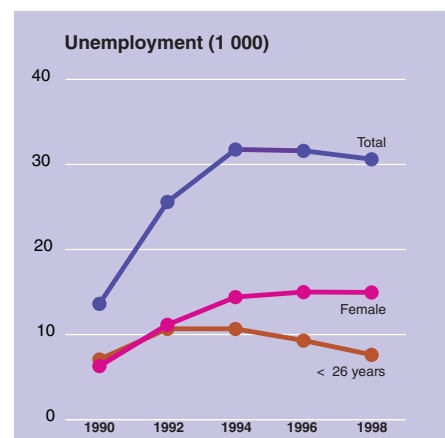
These changes were felt most dramatically in Maribor, which by the end of the 1990s was gradually being transformed from a classical industrial into a service sector economy.

For Podravka the worst period was between 1991 and 1993, when the unemployment rate increased by 132 % and has remained practically unchanged since then. Especially worrying is the trend towards increasing long-term unemployment. Those who lost their jobs from now bankrupt metal manufacturing and machine-building companies remain unemployed, while the rationalisation of production in other branches of the economy adds more people to the long-term unemployed. Skilled labourers, over the age of 40 with vocational and secondary education, form the hard-core of the unemployed. Such people are hard to retrain, while at the same time revitalisation of these industrial sectors is anticipated, as considerable state investment is being made in these areas.

## Important sub-alpine transport route

Podravka is situated on an important sub-alpine traffic route that connects Central Europe with the Mediterranean along the eastern edge of the Alps. The Southern Railway between Vienna and Trieste, constructed between 1841-1857, runs along this route, as well as the main E57 Wels-Graz-Maribor-Ljubljana road and the E59 Vienna-Graz-Maribor-Zagreb road. The Podravka section of the E57 road is almost entirely motorway, while the construction of a section of motorway from Maribor to the Croatian border via Ptuj is planned after 2004. At the moment, however, the region has only 39 km of motorway.

The most important major roads include the Pesnica-Lenart-Murska Sobota-Hungarian border road (the main transit road towards Hungary), the Pragersko-Ptuj-Ormož-Varaždin (Croatia) road and the Maribor-Dravograd-Klagenfurt (Austria) road. There is also a dense network of local roads in the plains and in hilly areas, which are for the most part paved. All settlements are accessible by car, even in mountainous areas.



There are 114 000 cars in Podravka or 357 cars per 1 000 persons which is slightly below the national average. Although passenger cars prevail in commuter traffic, Maribor and Ptuj each has a dense network of local buses connecting the two towns with nearby settlements.

With 130 km of railway track in the region, the Vienna-Trieste railway is the most important line. It is a double-track line, except between Maribor and the Austrian border, and is entirely electrified. From this main railway, two other lines branch off. These are the Pragersko-Čakovec (Croatia)-Nagykanizsa (Hungary) line, constructed in 1860, and the Maribor-Dravograd-Villach (Austria) line, constructed in 1864.

Maribor airport with a 2 500 m long runway was constructed in 1976, but it has never developed into an airport with more than just a marginal role, carrying modest amounts of freight and charter passenger traffic. Furthermore, rivers in Podravka are not navigable.

**Surfaced public roads – 1997**

|  | Podravska | Slovenia |
|--|-----------|----------|
| Length in km per km <sup>2</sup>                             | 0.25      | 0.23     |
| Length in km per 1 000 population                            | 1.7       | 2.4      |
| Length in km per 1 000 private passenger cars                | 4.8       | 6.1      |
| % private passenger cars in total number of vehicles         | 86        | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.4       | 0.5      |

**Serious groundwater pollution**

The densely settled plains in Podravska have intensive agriculture, a lot of industry and a dense road network. Due to frequent winds, air pollution does not represent a serious problem in the region although concentrations of sulphur dioxide, mainly from domestic heating, and nitrogen oxides, from dense traffic, periodically exceed the legal values. The largest industrial air polluter in the region is the aluminium plant in Kidričevo (sulphur dioxide, carbon monoxide, fluorohydrogen), however emissions were reduced considerably with the introduction of improved technology.

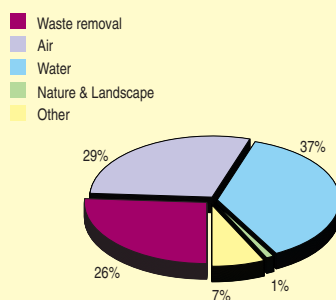
A more serious problem relates to the pollution of groundwater in the Drava and Ptuj plains, the source of drinking water for the majority of the region's population. The nitrate content is still increasing, although high values of pesticides and heavy metals have been decreasing recently. Surface water is considerably polluted as well, with the main sources of pollution coming from agriculture, industry and municipal waste water. There is only one large treatment plant in the region, which is situated in Ptuj.

The majority of municipal waste is disposed of at municipal landfills without having been treated. Illegal waste disposal sites still represent a large problem. Several companies from Podravska collect and process hazardous industrial waste.

On the plains all settlements are connected to municipal water supply systems, while local and private water supply systems and wells are also used in the hilly areas. Municipal water supply systems use groundwater from the Drava and Ptuj plains, therefore disturbances in the supply, caused by groundwater pollution, occur periodically.

All settlements are connected to the national electricity network. Natural gas is becoming more and more important as an

industrial and household energy source, and the largest local natural gas network is in Maribor. There are 322 telephone lines per 1 000 inhabitants in Podravska which is 10 % below the national average.

**Current expenditure for environmental protection - 1997****The University city of Maribor**

Maribor is the second most important cultural and educational centre in Slovenia, following Ljubljana. The university, which currently includes 9 faculties and 17 000 students, was formally established in 1975 when several colleges were united. It also has extensive research activities.

Numerous high schools are also situated in Maribor, ranging from classical grammar schools to various vocational schools, which are also attended by pupils from neighbouring regions. Smaller high-school centres can be found in Ptuj and Ruše.

There is a large regional general hospital in Maribor with approximately 1 700 hospital beds and numerous specialist activities. A smaller general hospital is located in Ptuj. There is also a psychiatric hospital in Ormož, while in Dornava near Ptuj there is an institute for the protection and vocational training of young people who are physically and mentally handicapped.

Maribor and Ptuj are also very active cultural centres. The most distinguished cultural institution in Podravska is the Slovenian National Theatre in Maribor, which also includes opera and ballet.

**Utilities - 1997**

|   | Podravska | Slovenia |
|---|-----------|----------|
| Dwellings connected to water supply system (%)    | 95.8      | 97.6     |
| Dwellings connected to sewerage system (%)        | 95.8      | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 58.9      | 71.9     |
| Telephone connections per 1000 population         | 322       | 357      |
| Number of doctors per 1000 population             | 1.9       | 2.2      |
| Number of hospital beds per 1000 population       | 6.4       | 5.7      |

Other important institutions are a new theatre in Ptuj, the Art Gallery in Maribor and regional museums in Maribor and Ptuj. Several local radio stations as well as the regional radio-television centre which is a part of the National Radio and Television Network operate in Maribor.

**Number of pupils - 1998**

|                                       |        |
|---------------------------------------|--------|
| Pre-school                            | 8 936  |
| Primary                               | 29 871 |
| Lower secondary                       | 3 677  |
| Higher secondary (vocational/general) | 12 979 |
| Tertiary (higher education)           | 7 683  |
| Total                                 | 63 146 |



# Koroška

## 3 regional centres in the 3 valleys

Koroška region is situated in mountainous northern Slovenia along the Austrian border. It comprises heavily forested mountains and three narrow valleys along the Drava, Mislinja and Meža rivers. The highest mountain ranges are the Pohorje (with the highest peak, Črni vrh, at 1543 m) and Kozjak ridges on the southern and northern side of the Drava valley.

While small settlements can be found in the valleys, isolated farmsteads are a typical feature of the mountainous areas. Here harsh natural conditions have been endured for centuries up to altitudes of 1300 m. In spite of roads connecting the highland areas to the valleys below, these areas today face rapid depopulation, a diminishing workforce and tough conditions on the crop and timber markets.

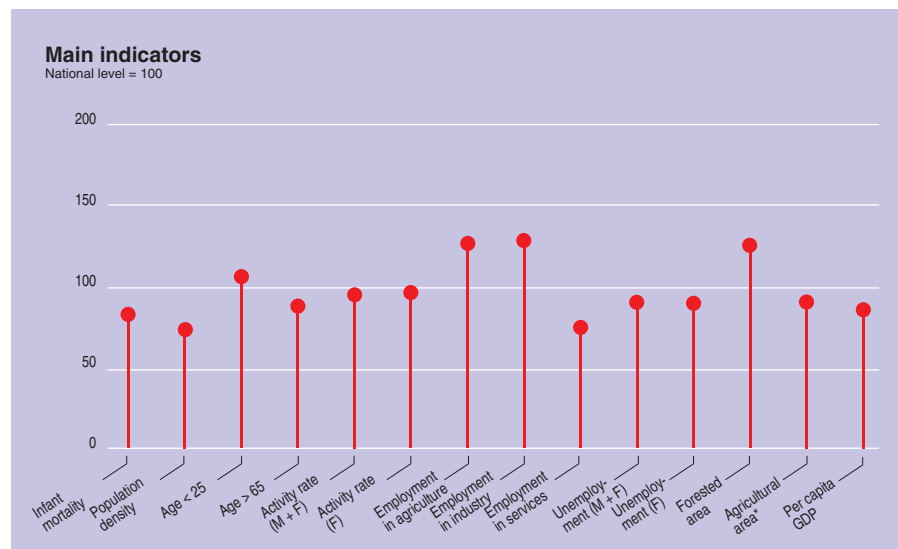
Historically, Koroška was part of the medieval duchy of Carinthia, one of the Habsburg lands since the 14th century. After the disintegration of the Austro-Hungarian Empire in 1918, the present state border was delimited by the Treaty of Saint-Germain (1919).

This is the least accessible of all Slovenian regions, and has very poor links to central Slovenia. Roads connecting the Drava valley to Maribor and to the Austrian state of Carinthia are somewhat better.

The region is divided among 12 municipalities, but due to its mountainous terrain and historical development, Koroška has no single regional centre. Instead, there is a local centre in each valley: Slovenj Gradec in the Mislinja valley, Dravograd in the Drava valley and Ravne na Koroškem in the Meža valley. Moreover, central functions are further dispersed among several other smaller towns.



An isolated mountain farm in the Topla Valley typifies the hardships of settlement in the Slovenian Mountains (Photograph: Karel Natek)



## Forested mountains with industrial centres in the valleys

At present, Koroška is faced with two severe problems that can not be solved by the region alone, and which will not go away by themselves. Its remoteness represents the first problem, as the region has a poor transport infrastructure to central Slovenia and its peripheral position will become even more evident after the construction of the trans-Slovenia motorway which by-passes the region.

The other major problem here relates to the very strong dependency on mining and industry, which together provide almost half the jobs and generate nearly one half of gross value added in the region. The

Meža valley has lived for almost 200 years from lead and zinc mining and iron and steel manufacturing. After the mine was closed down, the Ravne steel mill remained the largest employer in the Meža valley. However it faces similar problems to the rest of the European iron and steel industry. Mining has also caused considerable environmental pollution, which will have to be tackled.

On a more positive note, the reinforcement of cross-border co-operation with the state of Carinthia in neighbouring Austria can be expected in the future.

Farms in this region are relatively large by Slovenian standards, mostly due to the extensive forest covering the region. Following the closure of the mines, the for-

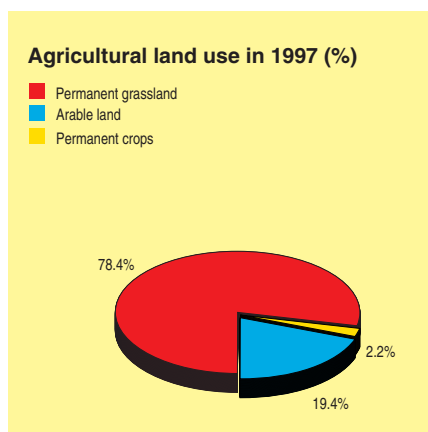


est remains the most important natural resource of Koroška and a very important source of timber for the local wood processing industry.

A particular problem of the region is how to preserve mountain farms and existing patterns of land use, since otherwise the landscape will be overgrown by forest. While diversification could be achieved through beef cattle rearing and agro-tourism, the latter will not be easy due to the competition from similarly picturesque but more easily accessible mountain regions in other parts of Slovenia and in neighbouring Carinthia.

### Most forested region in Slovenia

Koroška covers 1 041 km<sup>2</sup> (5.1% of the national territory) of mountainous land on the south-western edge of the Alps. It mostly consists of forested mountains belonging to the Central Alps, made of metamorphic and igneous rocks, with Košenjak (1 522 m) and Kozjak (1 050 m) to the north of the Drava river, Strojna (1 054 m) and Pohorje (Črni vrh, 1 543 m) on its southern side. In the south-west, the region extends into the high Karavanke mountains with their imposing Peca limestone massif (2 125 m). The region has a moderate mountain climate with annual precipitation between 1 100 and 1 500 mm. During the winter months, snow covers the ground for three months of the year in the



valleys, while it persists longer in higher areas. Temperature inversions are also common in the narrow valleys at this time of the year.

The vast majority of the population lives in the three main valleys where all the towns are situated. Dravograd (population 3 500), Radlje ob Dravi (2 700) and Muta (2 500) are in the Drava valley, Slovenj Gradec (8 000) in the Mislinja valley and Ravne na Koroškem (8 200), Prevalje (4 700) and Mežica (3 600) in the Meža valley.

Forest, covering over 70% of the region, is its most important natural resource and extends from the bottom of the valleys up to 1 800 m. Arable land comprises less than 4% of the region, and is found almost exclusively on river terraces at the bottom

### Which regions are similar to Koroška?

#### Population density:

71 inhabitants per km<sup>2</sup>  
 Mostviertel-Eisenwurzen (A)  
 Ribe amt (DK)  
 Gorj (RO)

#### Age structure:

12% over 65  
 Vilnius (LT)  
 Noord-Brabant (NL)  
 Madeira (P)

#### Employment structure:

40% services  
 Podkarpackie (PL)  
 Centro (P)  
 Dytiki Makedonia (EL)

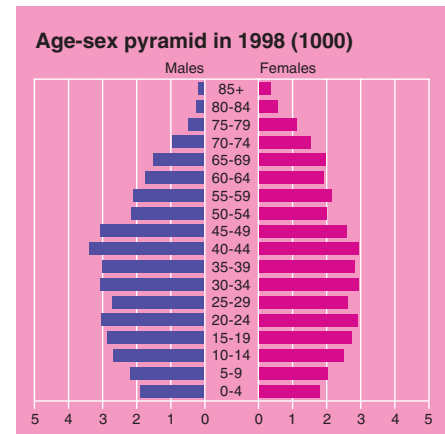
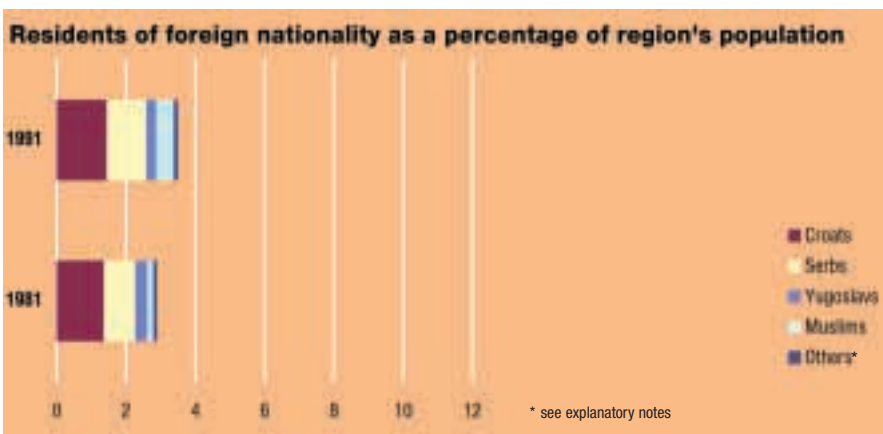
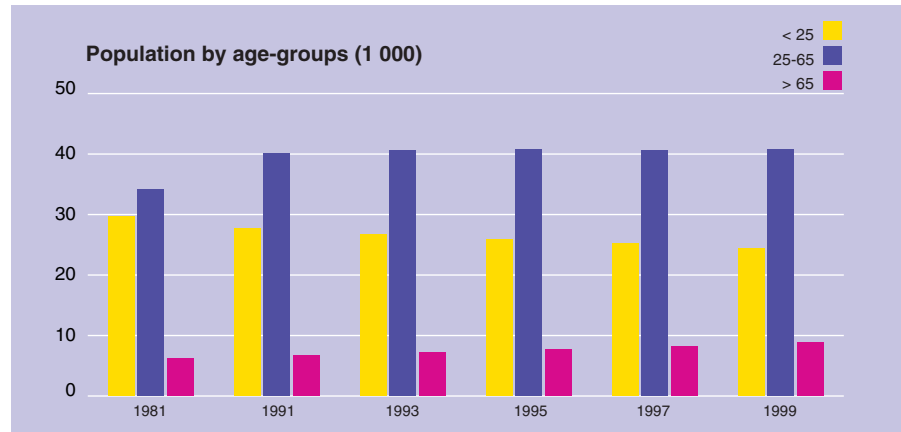
### Agriculture 1997

|   |        |
|---|--------|
| Number of private farms   | 3 082  |
| Persons working in agriculture                                      | 1 693  |
| Total agricultural area (ha)  | 21 320 |
| Total livestock   | 41 716 |
| Cattle per 100 ha of total agricultural land                        | 121.3  |
| Pigs per 100 ha of total agricultural land                          | 53.6   |
| Main products - proportion of arable land devoted to production of: |        |
| Cereals   | 17.6   |
| Sugar beet  | 0.7    |
| Fodder plants   | 66.0   |
| Potatoes  | 12.1   |





ore ran out, and the mine is scheduled to be completely shut down by the year 2000.



### Natural increase offset by high emigration

74 000 inhabitants (3.7% of the national population) lived in this predominantly mountainous region in 1998, resulting in an average density of 71 people per km<sup>2</sup>. The majority of the population is concentrated in the three river valleys, while the surrounding mountains are sparsely settled.

With one third of Koroška's population under the age of 25, this is considerably higher than the national average. In contrast, the percentage of people above the age of 65 (11.9%) is the lowest among the Slovenian regions. Both of these figures are quite stable, and they have remained virtually unchanged since 1990.

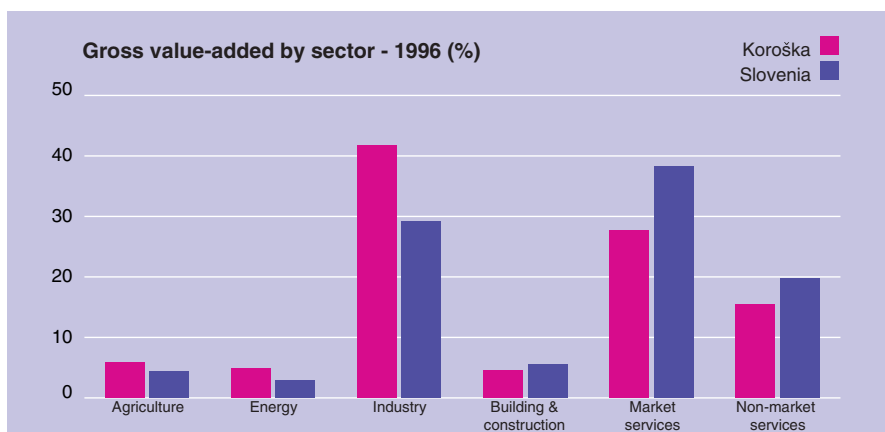
As the region's birth rate still slightly exceeds the mortality rate, this should help to create a positive demographic account, although the number of births is decreasing at the same rate as in other parts of Slovenia and between 1985 and 1997 it dropped by 37%. However, overall demographic trends are rather unfavourable when the migration balance is taken into consideration, as, since 1991, the highest deficits in Slovenia have been recorded in

Koroška. People are migrating predominantly to the regions of Podravska, Savinjska and Osrednjeslovenska. The result of such demographic trends has been a minimal decrease in the population since 1991.

Despite the region's border position, there are no ethnic minorities. According to the 1991 census, the region also has the lowest percentages of non-Slovene inhabitants at 3.1%. Due to its lack of employment opportunities and remoteness, the region was not a popular immigration destination for people from other parts of former Yugoslavia in the 1970s and 1980s.

### Main enterprises

| Name   | Activity                |
|--|-------------------------|
| Tus-Prevent d.d.<br>Slovenj Gradec                 | Textile articles        |
| SZ-Matal Ravne                                     | Iron and steel products |
| Johnson Controls-NTU<br>d.o.o. Slovenj Gradec      | Plastic products        |
| SZ-Stroji in tehnološka<br>opre. Ravne             | Machine-tools           |
| Splošna bolnišnica<br>Slovenj Gradec               | Hospital activities     |
| "Tus-Prevent d.d.<br>Slovenj Gradec,<br>PE Radlje" | Textile articles        |
| Rudnik Mežica TAB<br>d.d. Mežica                   | Vehicle batteries       |
| Livarna Vuzenica                                   | Iron casting            |
| Inpod d.o.o. Otiški Vrh                            | Social work activities  |
| Nova oprema d.d.<br>Slovenj Gradec                 | Furniture               |



### Industrial region with weak services sector

Of all the Slovenian regions, Koroška is the most industrial. Industry generates 50.9% of the region's gross value added. On the other hand, the share of the service sector is the second lowest in Slovenia (42.9%), while the contribution of agriculture and forestry is 5.7%.

In agriculture, dairy and beef cattle farming prevail, as a consequence of which fodder crops (silage corn) are also grown on farmland in the valleys. Isolated farmsteads, characteristic of the region's mountainous parts, are very large by Slovenian standards. They generate most of their income through cattle raising and timber. Although roads were constructed after World War II to connect all of them with the valleys, massive emigration of young people is causing a shortage of labour and is putting the survival of these farms in question.

The Meža valley is the most industrial valley in the region. A steel mill was established in Ravne na Koroškem in the 19th century which was the basis for the development of machine production. In the harsh economic conditions after Slovenia's independence, the mill managed to survive

through specialising in the production of alloy steel, industrial knives and industrial machinery components. It is part of the Slovenske železarne concern and is entirely state owned. A lead smelter operated for many decades at the Mežica lead and zinc mine. After the mine was closed down, only a factory producing batteries in Mežica has remained in operation. Recently, its production was redirected into waste battery processing.

In the past, there was not much industrial development in the Mislinja valley around Slovenj Gradec. It started to flourish only in the 1990s when capital was injected by the European automobile industry to start local production of seat covers for cars and plastic foam for car seats. There are five hydroelectric plants in the Drava valley, with a total capacity of 21-59 MW, and several plants manufacturing metal products in different places in the valley. Vast forests provide a good base for the well developed wood processing industry in the Drava and Mislinja valleys, where sawn timber, fibreboard, plywood, and furniture are produced.

The weak services sector is a result of the peripheral position of Koroška. Among the larger institutions are the regional hospital

and high-school centre in Slovenj Gradec. A fragmented trade sector started to emerge only in 1999 under the pressure of competition from other regions.

Compared to Podravska, Koroška was relatively successful in overcoming the difficulties of the transition period. In part, this was due to considerable funds from the state budget for the closure of the Mežica mine, and the reorganisation of the Ravne steel mill, and partly through the attraction of foreign capital. All its large companies are highly export-oriented, while the smaller ones depend on domestic raw materials and labour. The region has, however, limited possibilities for investment in research

and development due to a lack of capital and a sufficiently educated workforce.

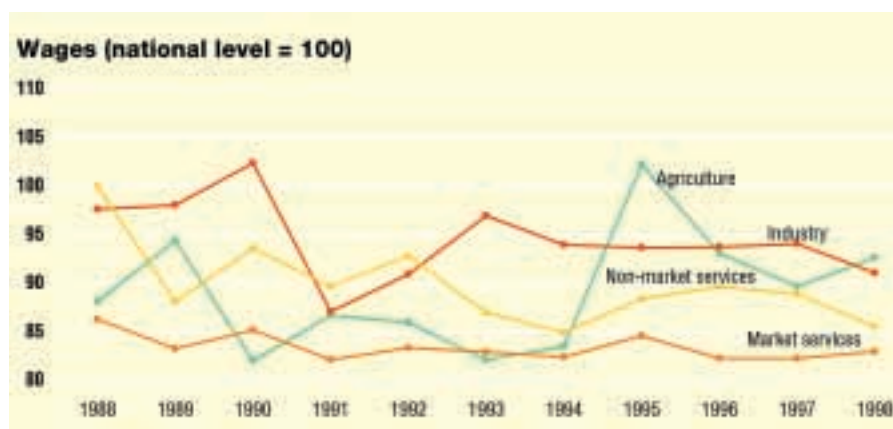
### Monthly salaries are Slovenia's lowest

In the period between 1995 and 1998, the 12.1% increase in average net wages in Koroška was below the national average, mainly due to the weak development of the services sector.

At the end of 1998, employees in Koroška earned the lowest average net monthly wage of all the Slovenian regions. With average earnings running at 472 ECU, they were 12% below the national average.

As in other parts of Slovenia, the lowest net wages recorded here were in the industry and construction sectors. With earnings in the services sector some 15% below the national average, this pulls the overall average earnings downwards. Furthermore, the region has failed to develop service activities of supra-regional importance.

In rural areas, mixed farmer-employee households predominate, where additional income is earned from agriculture and forests and, in some cases, from tourism, too.





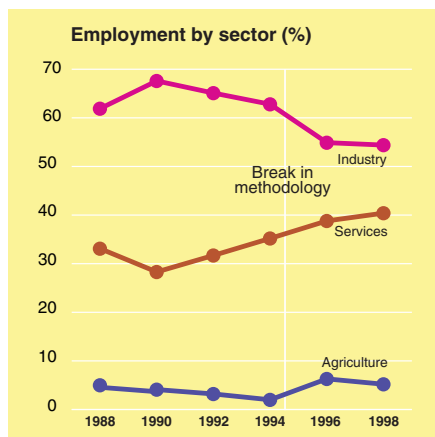
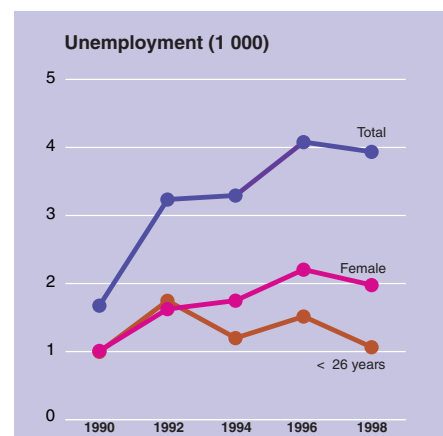
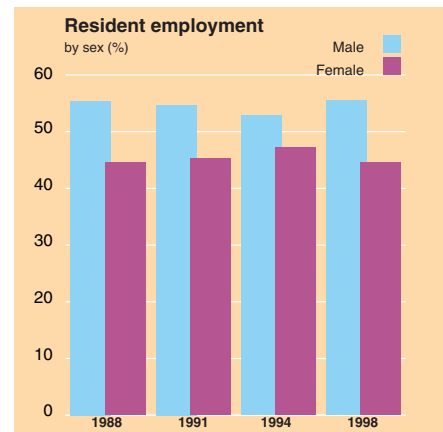
## Highest percentage of industrial employees

Mountainous Koroška has been predominantly a mining and industrial region since the second half of the 19th century. It has the second highest percentage of workers employed in industry in the country as a whole, and at 54.4% this figure is surpassed only in Zasavska. The share of the workforce employed in the services sector is the second lowest in Slovenia (40.4%), and it is lower only in Zasavska. Agriculture and forestry employ slightly over 5% of the workforce.

Among other factors, rapid industrialisation of Koroška after World War II enabled the survival of numerous mountain farms. During this period road connections with the valleys were built, enabling at least one family member in most mountain farms to find a job outside agriculture, predominantly in industry. Such conditions are also the main reason that the share of women among employees is slightly lower than in other parts of Slovenia. While full-time employment still prevails, almost one quarter of employees are now employed on temporary contracts.

In contrast to Podravska, where the eco-

nomics crisis led to a substantial increase in unemployment, the unemployment rate in Koroška (12.8%) is among the lowest in Slovenia and 2 percentage points below the national average. Despite the gradual closure of lead mining and smelting in the Meža valley, a relatively successful retraining programme of redundant workers was carried out with the help of funds from the national budget. A simultaneous boom in light industry in the neighbouring Mislinja valley further off-set rising unemployment, and meant that the overall number of employees in the industrial sector was cut by only 14%, substantially less than in other regions. Some of the unemployed and the majority of new job seekers found jobs in the rapidly developing services sector where the number of employees in the period between 1991 and 1998 increased by 47%. Others were, however, obliged to move to larger Slovenian towns.

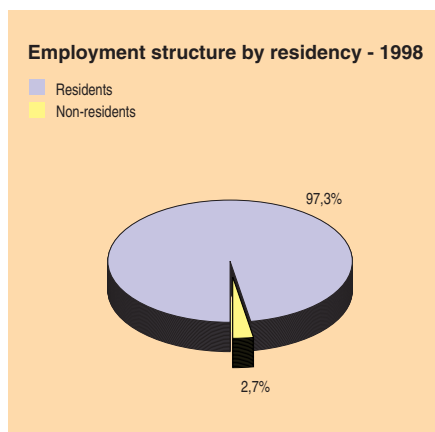


## Region remains inaccessible as motorway links by-pass it

Koroška is the least accessible Slovenian region, connected to the rest of Slovenia only by road and railway through the Drava valley towards Maribor and by road through the Paka valley towards Velenje. After the construction of the Slovenian motorway hub, Koroška and Zasavska will be the only regions without motorway connections. The closest motorway access will be near Maribor (63 km away) and at St. Paul in neighbouring Austria (30 km away).

A single-track railway, constructed in 1864, runs through the Drava and Meža valleys, connecting Maribor, Dravograd and Villach (Austria). However, traffic is relatively light both for passenger and freight transport.

Koroška has no airports or navigable rivers. Dravograd is 120 km from Ljubljana airport and 65 km from Klagenfurt airport.



Main roads running through the three main valleys converge in Dravograd: the road through the Drava valley leads to Maribor and Klagenfurt (Austria), the road through the Mislinja valley connects Koroška with Velenje, while the regional road through the Meža valley leads to Bleiburg in Austria. These roads serve as a back-bone to the network of local and forest roads, which are mostly unpaved and which connect all the settlements and isolated farmsteads with the valleys. With passenger cars of vital importance for the residents who commute daily to the valleys, the region has 26 000 passenger cars or 352 cars per 1 000 persons which is slightly below the national average.

**Surfaced public roads – 1997**

|  | Koroška | Slovenia |
|--|---------|----------|
| Length in km per km <sup>2</sup>                             | 0.15    | 0.23     |
| Length in km per 1 000 population                            | 2.2     | 2.4      |
| Length in km per 1 000 private passenger cars                | 6.1     | 6.1      |
| % private passenger cars in total number of vehicles         | 90      | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.4     | 0.5      |

**Environment upgraded after mine closures**

Two hundred years of lead and zinc ore exploitation and processing have caused considerable environmental damage in the narrow Meža valley. The vegetation has almost entirely disappeared from the surroundings of the Žerjav smelter due to sulphur dioxide emissions, while the Meža and Drava rivers suffered from high lead concentrations. After mining was abandoned in the 1990s, many negative impacts were rectified, as environmental recovery gradually started to occur through natural processes.

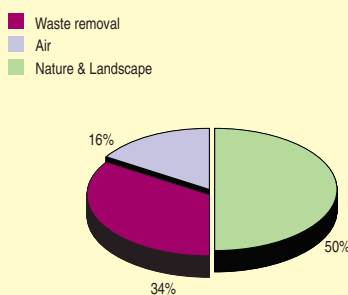
A more serious problem in the entire area of Koroška is the severe damage to forests, especially spruce, due to heavy sulphur dioxide emissions from the Soštanj thermal power plant, the iron works in Ravne na Koroškem and the lead smelter in Žerjav, which is now closed down. In the worst hit areas, 30-40% of the trees are damaged.

Most settlements are located in narrow valleys where the air gets heavily polluted in the autumn and winter as a result of temperature inversions combined with air pollution from households, industry and traffic. Conditions have been improving lately due to the increased use of natural gas.

The majority of municipal waste water ends up in septic tanks, while the conditions in industry have improved considerably with the introduction of modern technology and closed water cycles. Municipal solid waste is mostly disposed of at municipal landfills. Since Koroška is sparsely settled, waste does not represent a major environmental problem in the region.

Due to its mountainous terrain and the prevalence of impermeable rock, water sources are abundant here. Settlements in the valleys are connected to municipal

water supply systems, while almost every farm in the mountains has its own water supply system. Despite the mountainous terrain, all households are connected to the national electricity network. Koroška has 322 telephone lines per 1 000 inhabitants which is 10% below the national average. Nevertheless, almost all isolated farmsteads have telephone lines.

**Current expenditure for environmental protection - 1997****Activities dispersed among smaller towns**

Since the region has no distinct centre, educational establishments and other activities are dispersed among several small towns. Thanks to its successful economic development, Slovenj Gradec has a high-school centre, which includes a grammar school and several other specialised high schools and vocational schools, and is gradually establishing a firmer position as a regional centre. There are smaller high-schools in Ravne na Koroškem and Muta. Students continue their tertiary education at the universities of Maribor and Ljubljana.

There are no large research institutions in Koroška. In Slovenj Gradec there is a general hospital serving the region and in Črna na Koroškem there is a centre for the protection and vocational training of young people who are physically and mentally handicapped.

Other important cultural institutions include the Koroška Central Library and the Koroška Museum in Ravne na Koroškem and the Koroška Regional Museum, the Gallery of Fine Arts and a local radio station in Slovenj Gradec.

**Utilities - 1997**

|   | Koroška | Slovenia |
|---|---------|----------|
| Dwellings connected to water supply system (%)    | 98.4    | 97.6     |
| Dwellings connected to sewerage system (%)        | 98.5    | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 69.4    | 71.9     |
| Telephone connections per 1000 population         | 322     | 357      |
| Number of doctors per 1000 population             | 1.7     | 2.2      |
| Number of hospital beds per 1000 population       | 5.0     | 5.7      |

**Number of pupils - 1998**

|                                       |        |
|---------------------------------------|--------|
| Pre-school                            | 2 058  |
| Primary                               | 7 899  |
| Lower secondary                       | 1 053  |
| Higher secondary (vocational/general) | 3 266  |
| Tertiary (higher education)           | 1 983  |
| Total                                 | 16 259 |



# Savinjska

## From one side of Slovenia to the other

Savinjska is the second largest region in Slovenia, and it is the third in terms of population size. It extends from the Austrian border in the north-west to the Croatian border in the south-east. Its core area is the 30 km long and 10 km wide Lower Savinja valley in the middle part of the Savinja river, where Celje, the third largest Slovenian city and regional centre, was established at the confluence of several rivers.

The region is geographically very diverse, from the high, rugged Kamnik and Savinja Alps in the north-west to low, gently rolling wine-growing hills in the east. The population and economic centres of the region are the hop-growing Lower Savinja Valley with Celje and Žalec as the main towns, and the smaller Velenje Basin, the energy producing centre of Slovenia, with Velenje as its main town.

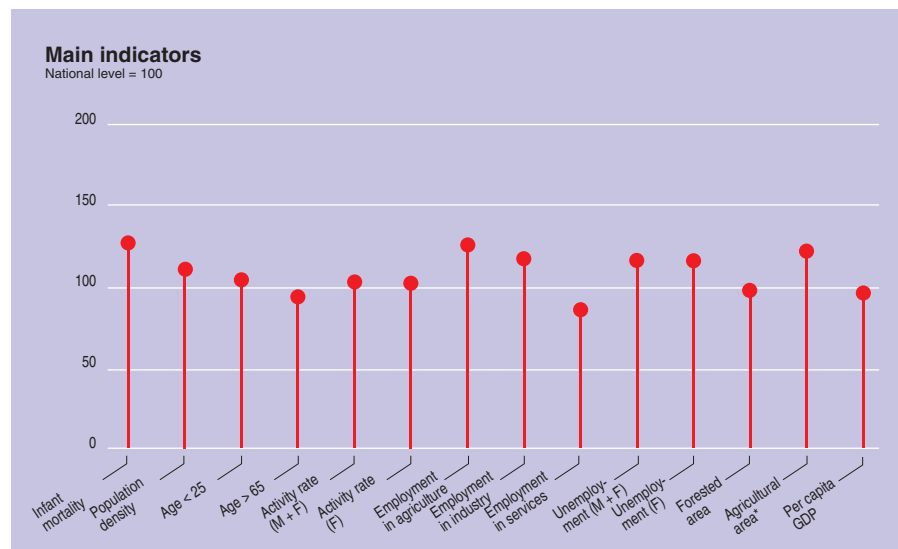
In the late Middle Ages, the region was owned by the local feudal family, the Dukes of Celje. As the allies of the Habsburgs and through strategic family links, the Dukes firmly established themselves in 15th century south-eastern Europe, an area which still resisted the expansion of the Ottoman Empire at that time. After the family had died out (1456), their property was taken over by the Habsburgs and remained part of the Habsburg monarchy until the end of World War I.

Due to its position on the subalpine traffic route, the region is easily accessible from all sides, since numerous routes towards neighbouring regions fork out from the road and railway junctions at Celje. Nevertheless, the mountainous part of the region in the upper reaches of the Savinja is quite far-off and is connected with the rest of Slovenia only by two regional roads, while there is not a single local road connecting the region with Carinthia in Austria.

The national and ethnic border between Slovenia and Croatia is the Sotla river, and there are several border crossings here since the population from both sides has been tightly connected for centuries. The region is administratively divided among 32 municipalities, of which several are among the strongest economically in Slovenia (Velenje, Celje), although the majority of the rural municipalities in the mountainous parts of the region are economically weak and endangered by depopulation.



For more than a century, the Lower Savinja Valley has been an important hop producer and exporter (Photograph: Karel Natek)



## Hop-growing and electricity

The region's diverse landscape and its very location dictate its division into two economically developed nuclei and two economically less developed areas with a weak economy and declining population, each with different advantages and disadvantages.

The Lower Savinja Valley and the Velenje Basin are among the most economically developed areas of Slovenia with a well-developed infrastructure and a large skilled workforce. A considerable share of labour-intensive industry in the Lower Savinja Valley is distributed among rural settlements. In this way, close ties with local communities are maintained, enabling the majority of the local population to combine

intensive agriculture with employment in non-agricultural sectors. In the 1990s, a severe world-wide hop-growing crisis brought a high level of uncertainty into the region, although this should be off-set by the development possibilities afforded by the region's position along the newly constructed motorway.

Lignite is the main source of prosperity and also the main problem of the Velenje Basin. It gives jobs to many people from the area who work in the mine and thermal power plant, which on the other hand are the cause of the highly polluted environment and the loss of a considerable part of the basin floor due to subsidence.

The Alpine part of the region in the upper reach of the Savinja river and the hilly area



## Which regions are similar to Savinjska?

### Land use:

28% agriculture  
Provence-Alpes-Côte d'Azur (F)  
Peloponnisos (EL)  
Kesk-Eesti (EE)

### Population:

255 000 inhabitants  
Göppingen (D)  
Västernorrlands län (S)  
Vratsa (BG)

### Population density:

107 inhabitants per km<sup>2</sup>  
Unterallgäu (D)  
Constanța (RO)  
Udine (I)

## Agriculture 1997

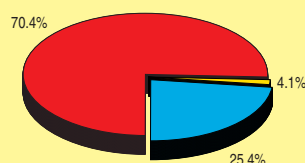
|   |         |
|---|---------|
| Number of private farms   | 13 807  |
| Persons working in agriculture                                      | 5 747   |
| Total agricultural area (ha)  | 67 076  |
| Total livestock   | 131 547 |
| Cattle per 100 ha of total agricultural land                        | 128.8   |
| Pigs per 100 ha of total agricultural land                          | 56.8    |
| Main products - proportion of arable land devoted to production of: |         |
| Cereals   | 39.1    |
| Sugar beet  | 0.7     |
| Fodder plants   | 42.6    |
| Potatoes  | 5.6     |

south-east of Celje are economically very weak since it is virtually impossible to make a living from agriculture due to the unfavourable natural conditions and the structure of land ownership.

Despite the fact that agro-tourism (combined with forestry) has been an important source of income for mountain farms in the Upper Savinja Valley and surrounding mountains since the end of World War I, it is now facing difficulties, mainly because of a decreasing demand for such recreational and holiday activities among the Slovenian population.

## Agricultural land use in 1997 (%)

- Permanent grassland
- Arable land
- Permanent crops



## In the Savinja river basin

The region covers 2 384 km<sup>2</sup> (11.8% of the national territory), of which only around 150 km<sup>2</sup> is a plain in the Lower Savinja Valley. The rest of the region is covered by forested mountains in the upper reaches of the Savinja drainage basin, extending into the high Kamnik and Savinja Alps towards the west. In the south-eastern part the Kozjansko hills are severely broken up by deep valleys, while in the south, forested ridges in the Sava Mountains reach up to 1 204 m. Except in the alpine part where the mountain climate becomes more extreme with increasing altitude, the region has a moderate continental climate. Average temperatures are between -1.8°C (January) and 19.2°C (July) and precipitation between 1 000-1 200 mm. Temperature inversions are common in the

Lower Savinja Valley and the Velenje Basin during autumn and winter months.

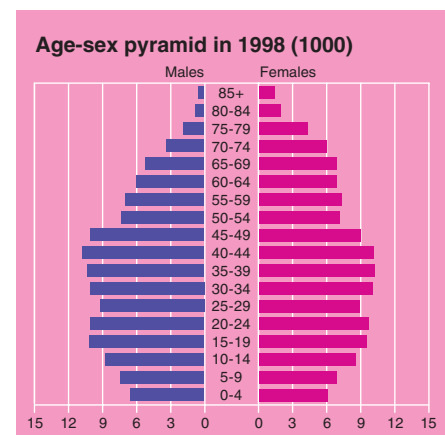
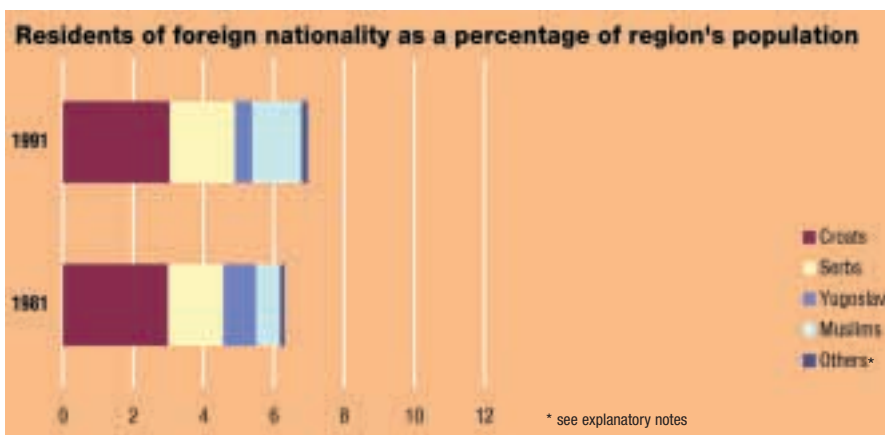
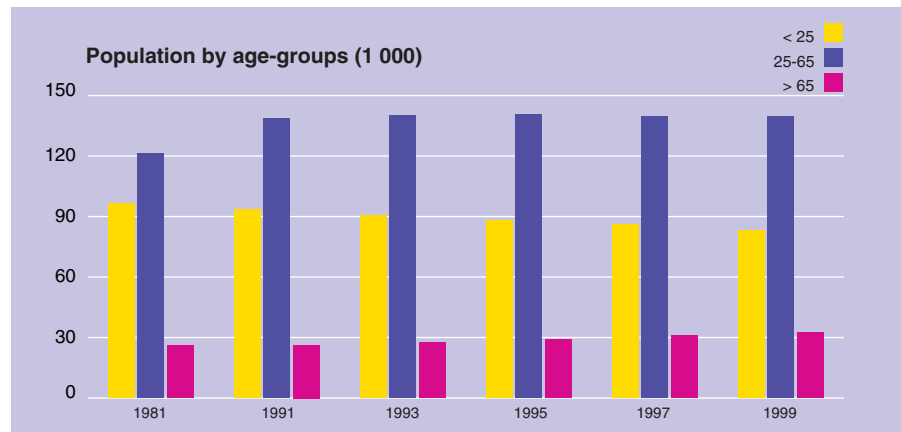
The largest town in the region is Celje (population 39 700). Other towns are Žalec (5 200), the centre of the hop growing area, Velenje (27 600) which developed rapidly after World War II thanks to the lignite mine, Mozirje (2 100), Slovenske Konjice (4 900) and Šentjur (4 700).

A layer of lignite up to 164 m thick is located under almost the entire Velenje Basin. It is extracted underground (approximately 4 million tonnes annually) and is mostly used in the nearby Šoštanj thermal power plant.

The next most important natural resource in Savinjska is its fertile soil, especially on gravel deposits in the Lower Savinja Valley.

This zone offers extremely favourable conditions for hop growing, and arable land covers more than half of the area. In other parts of Savinjska agricultural land is found only at the bottom of the valleys and on gentler sunny slopes. Forests cover more than half of the region; the most important are coniferous and mixed forests in the Upper Savinja Valley.

There are substantial groundwater supplies in the Lower Savinja Valley, while several thermal springs serve as a basis for the development of health resorts around Celje and in the eastern part of the region. Like its tributaries, the Savinja river's fluctuating level makes it unsuitable for power generation. Due to its low volume in summer months, the river also has little water available for irrigation.



## Stable, slightly declining population

The population of the third most populated region in Slovenia numbered 255 000 (12.9% of the national population) in 1998. Population density at 107 people per km<sup>2</sup> substantially exceeds the national average, especially if the relatively small proportion of lowland and more gently sloping terrain is taken into consideration.

The municipalities of Celje and Velenje have the highest population density, exceeding 400 people per km<sup>2</sup>; while in hilly areas in the east the figure is around 80 people per km<sup>2</sup>, and in mountainous areas to the west it ranges between 10 and 40 people per km<sup>2</sup>.

In overall terms, between 1985 and 1998 the population of Savinjska increased slightly, although a gradual decline started after 1991. In the same period, the number of births in the region decreased by one third, while immigration slightly surpassed emigration during the 1990s.

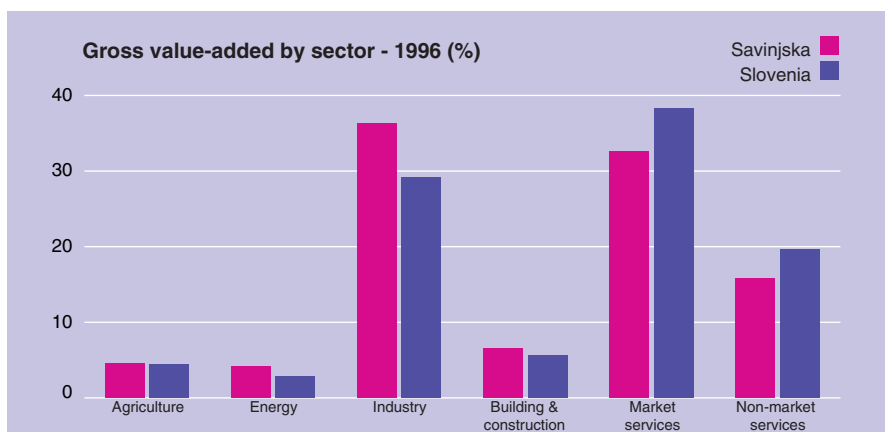
The age structure of the region's population deviates very slightly from the national average, with the younger population

decreasing in the last few years, while the older population is increasing. A similar situation is found with other demographic indicators, too, but only if we consider the region as a whole. Within the region the demographic trends are not so favourable, because most of the villages in the mountainous area around the Upper Savinja Valley and in the hills south-east of Celje are faced with depopulation and ageing of the remaining population.

While there are no indigenous ethnic minorities in Savinjska, according to the 1991 census, 10.5% of the region's population are non-Slovene. Their number increased rapidly in the 1980s when a great number of people came from other parts of former Yugoslavia to work in the Velenje lignite mine. Together with their families, they represent almost one third of the present population of Velenje.

## Main enterprises

| Name                               | Activity             |
|------------------------------------|----------------------|
| Gorenje d.d. Velenje               | Electrical equipment |
| Premogovnik Velenje d.d.           | Lignite mining       |
| Unior d.d. Zreče                   | Manufacture of tools |
| Steklarna Rogaška d.d.             | Glass products       |
| Rogaška Slatina                    |                      |
| Polzela tovarna<br>nogavic Polzela | Knitted garments     |
| Gorenje notranja<br>oprema Velenje | Kitchen furniture    |
| Termoelektrarna<br>Šoštanj d.o.o.  | Electricity supply   |
| Alpos Šentjur pri Celju            | Steel tubes          |
| Radeče papir                       | Paper and cardboard  |
| Comet Zreče                        | Abrasive products    |



### Major contributor to Slovene economy

Savinjska is the third Slovenian region in terms of economic power (generating 12.2% of the national gross value added). The region's industry contributes 15.9% to the gross value added produced by all industry in Slovenia, surpassed only by Osrednjeslovenska region (26.4%). Within the region's gross value added, the share of industry is 47.0%. The contribution of the service sector (48.4%) is considerably below the national average (58.0%), while agriculture and forestry contribute 4.6%.

The region's main agricultural area is in the Lower Savinja Valley where hops for export are the most important crop (accounting for approximately 3% of world production). In the central part of the valley, arable fields, which were at one time merged into large agricultural complexes, are today state owned, though hops is also produced by numerous individual farmers. Dairy and beef cattle farming are also important in lowland areas as well as in the mountainous Upper Savinja Valley where forests are an important source of income, too. Fruit is grown along the edges of the Lower Savinja Valley and in the eastern part of the region.

There are two industrial areas in the region: an older one in Celje and the Lower Savinja Valley, and another in the Velenje Basin, established after World War II. Industry was initiated in Celje soon after the construction of the Vienna-Trieste railway (1857). Chemical and food-processing, the manufacture of metal products and printing are important industries today. In the mining town of Velenje, the Gorenje factory, established in the 1960s, is one of the largest producers of household appliances in Europe. A large thermal power plant (745 MW), of great importance for electricity production in Slovenia, is situated in nearby Šoštanj. It generates more than a third of all Slovenian electricity in winter months, when the river discharge is at its lowest.

Numerous smaller industrial towns (each providing 500-2000 jobs) can also be found here. Among the most successful of these are Zreče (production of forge tools and artificial grindstones), Rogaška Slatina (glassworks), Laško (brewery), Nazarje (furniture) and Polzela (stockings factory).

Service activities are concentrated mainly in Celje which is the third most important service centre in Slovenia. It is also an exhibition centre with the renowned annual International Craft Fair. Health-resort

tourism is also an important activity.

While Celje and the Lower Savinja Valley had to face a severe crisis in several areas of industry after Slovenia became independent, other areas took advantage of their qualified work-force and established themselves successfully in the world market. Considerable investment by larger companies in research and development as well as the successful development of small businesses in smaller settlements should ensure rapid economic development for Savinjska in the future.

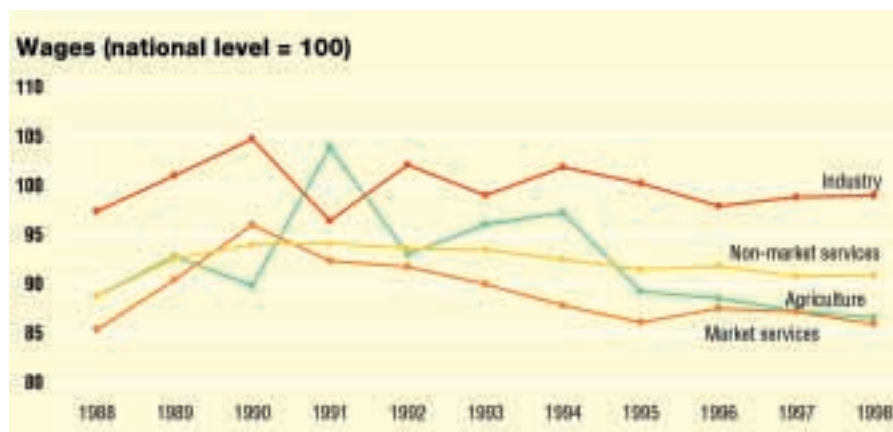
### Wages still below the national average

In the period between 1995 and 1998 average net wages in Savinjska increased by 12.8% which was slightly below the national average. The highest increase was recorded in the construction and industry sectors and non-commercial service activities, while those working in agriculture recorded the smallest increase in this period.

In Savinjska, the average net monthly wage at the end of 1998 was 501 ECU, which was 7% below the national average. The lowest net monthly wages were recorded in industry (466 ECU) and agriculture (471 ECU), the highest in non-commercial service activities (582 ECU) and energy production (581 ECU). Earnings in the agricultural and market services sectors deviated furthest from the national average, being over 10% lower in each case as compared to the sectorial average.

The presence of labour-intensive industry in the countryside and commuting to both larger industrial centres have contributed to the widespread formation of mixed farmer-employee households, so even in the fertile Lower Savinja Valley there are very few pure agricultural households at all. Such a situation has considerably mitigated the negative effects of workforce reduction in the 1990s, because the ownership of good agricultural land made it possible for many households to earn additional income from producing food for their own consumption and from selling the surplus at the local market.

In the mountainous parts of the region incomes from large private forests is of vital importance for many isolated farmsteads, while in the health resorts some extra income comes from tourist-related activities.







## A persistently high unemployment rate

Savinjska has a rather balanced employment structure since all three sectors are important and none of them prevails substantially. Industry employs the largest share of the workforce (49.2%), which is significantly above the national average of 42.1%. 45.6% of the workforce is employed in the service sector and 5.1% in agriculture and forestry, and these proportions have been relatively stable for a considerable period of time.

As elsewhere in Slovenia, the number of employees in industry has been decreasing, and in fact it dropped by 14.5% between 1991 and 1998. At the same time, employment in the services sector increased by 34% in the same period. The vast majority of employees live and work in the region, and commute daily to nearby Celje and Velenje. The jobs are mostly full-time, as is the case for other parts of Slovenia. Approximately one fifth of the workforce is employed on a temporary contract.

For decades, a special feature of the Lower Savinja Valley has been the employment of a seasonal workforce for spring time work on hop fields and for picking hops in late sum-

mer. This workforce used to come mostly from economically less developed parts of eastern Slovenia and the region of Hrvatsko zagorje in Croatia, whereas in the 1990s it has come almost exclusively from Croatia.

At 16.4% the unemployment rate in Savinjska is slightly above the national average. It is lower in the Velenje Basin where mining, energy production and other areas of industry successfully avoided a severe crisis following independence. The rate is higher in the wider Celje area and the Lower Savinja Valley where many people have lost their jobs due to the crisis in the metal-working and wood processing industries or due to the rationalisation in other, labour-intensive branches, especially the textile industry.

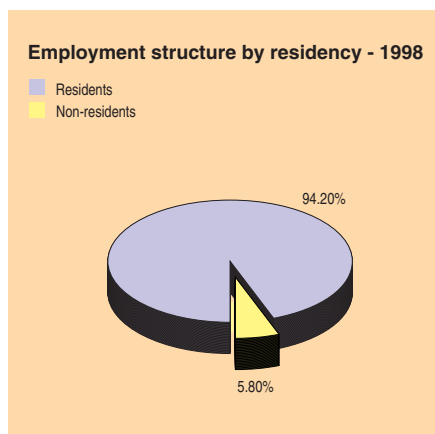
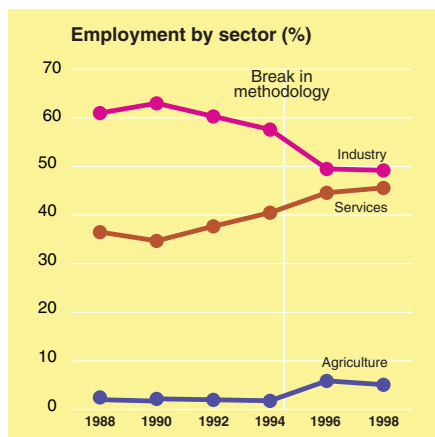
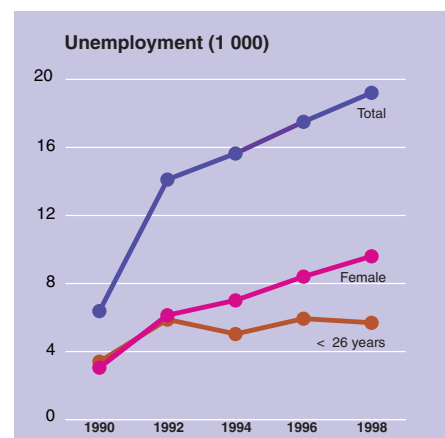
As well as overall unemployment increasing throughout the 1990s, long-term unemployment has also been rising. By 1998 two-thirds of the unemployed had been out of work for more than year, a figure which is above the national average and the second highest in Slovenia. Considering the existing economic structure (labour intensive industry and agriculture), no rapid reduction of unemployment is expected in Savinjska. It is of concern that the number of young unemployed people almost doubled between 1990-1992, has shown no decrease since then and today a third of the unemployed are young people.

## At the crossroads of major transport routes

The regional centre of Celje is the third most important traffic hub in Slovenia. Here, roads from Koroška, Spodnje-posavska and neighbouring Croatia join the sub-Alpine traffic route connecting Central Europe and the Mediterranean. The E57, a major road connecting Wels-Graz-Maribor-Celje-Ljubljana, runs through the region. It is motorway except for the section crossing the Trojane pass which will be constructed by 2004.

There are 628 km of major roads in the region. Apart from the aforementioned E57 road, the most important are the Celje-Šentjur-Rogaška Slatina-Krapina (Croatia) road, the Arja vas-Velenje-Slovenj Gradec-Dravograd road and the Celje-Laško-Zidani Most road. The main traffic route in the mountainous part of Savinjska is the regional Šentrupert-Mozirje-Solčava road, which has not yet been extended to connect the region with Austria.

A dense network of mostly paved local roads covers the plains and hilly areas of Savinjska, while local and forest roads connect villages and isolated farmsteads



with the valleys in mountainous areas. Savinjska has 91800 passenger cars or 358 cars per 1000 persons which is slightly below the national average.

There are 161 km of railway track in Savinjska. The most important is the southern railway line between Vienna and Trieste, constructed between 1841 and 1857. Its Savinjska section is an entirely electrified double-track railway. In the important railway junction at Zidani Most, another line of the same category (constructed in 1862) branches off, leading towards Zagreb. Other local lines include the Savinjska track (constructed in 1891) connecting Celje and Velenje, in Grobelno a local track leading towards Rogatec and Krapina (Croatia) branches off, while in 1960, the Stranje-Kumrovec-Harmica line was constructed through the Sotla valley, leading towards Zagreb.

There are no airports in Savinjska, Ljubljana international airport is 75 km from Celje, and rivers in the region are not navigable.

**Surfaced public roads – 1997**

|  | Savinjska | Slovenia |
|--|-----------|----------|
| Length in km per km <sup>2</sup>                             | 0.23      | 0.23     |
| Length in km per 1 000 population                            | 2.1       | 2.4      |
| Length in km per 1 000 private passenger cars                | 6.0       | 6.1      |
| % private passenger cars in total number of vehicles         | 88        | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.6       | 0.5      |

**The largest investment in environmental protection**

The environment in the Velenje Basin and around Celje, which had been considerably affected, has already improved in the 1990s thanks to a huge investment in environmental protection measures. In 1996, half of all investment funds intended for environmental protection in Slovenia were disbursed in the region, mostly for the installation of a desulphurisation unit on part of the Šoštanj thermal power plant. Despite this investment the power plant is still the largest “producer” of sulphur dioxide (SO<sub>2</sub>) in Slovenia, and to combat this a similar unit is currently being installed on another area of the plant.

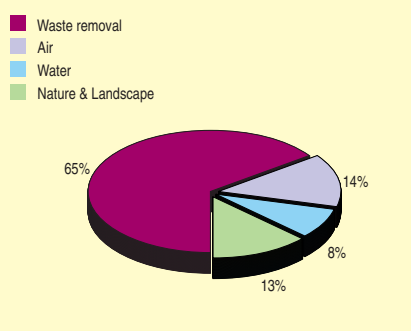
Due to the power plant operation, critical SO<sub>2</sub> concentration levels are commonly exceeded in the Velenje Basin and the surrounding mountains. Additional environmental damage in the Velenje Basin is caused by the subsidence of the basin floor, which is the result of mining, and the huge quantities of ash which are generated during the combustion of low quality lignite and then deposited in the subsiding area.

In Celje and its surroundings, the environmental pollution is caused by industry, traffic and domestic heating, with the problem exacerbated by temperature inversions in the autumn and winter months.

A serious problem in Savinjska is the considerable damage to forests caused by the SO<sub>2</sub> emissions from the Šoštanj and the Trbovlje thermal power plants. Rivers are seriously polluted as well and even Celje has no waste water treatment plant. Concentrations of nitrates, pesticides and heavy metals in groundwater in the Lower Savinja Valley, an important source of drinking water for Celje, are also too high.

The majority of the population is connected to municipal water supply networks. Environment pressures were reduced considerably after the construction of a natur-

al gas network in Celje and some other towns. A district heating system using hot water from the thermal power plant was constructed in 1971 in Velenje and Šoštanj. All settlements and almost all isolated farmsteads in the mountains are connected to the telephone network, however telephone penetration at 289 telephone lines per 1 000 inhabitants is 20% below the national average.

**Current expenditure for environmental protection - 1997****Education and culture centred on Celje**

Celje is one of the most important high-school centres in Slovenia, providing a wide variety of options ranging from classical grammar schools to specialised vocational schools. A technical school of mechanical engineering and a department of the Maribor faculty of economics and business are also located in Celje. In Velenje, there is a high-school centre and a technical school of electronics. Students wishing to continue their studies must do so at the universities of Ljubljana and Maribor.

Research institutions in Savinjska include the Institute for Hop-Growing and Brewing in Žalec and the Institute for Environmental Research in Velenje. The Gorenje factory in Velenje also has a strong research team. The region's general hospital is also sited in Celje, while there is a smaller hospital in Topolšica near Velenje and a psychiatric hospital in Vojnik. Health services are also available in Dobrna, Laško, Atomske toplice near Podčetrtek and Rogaška Slatina, where there are health resorts with natural mineral water.

The most important cultural centre is Celje

**Utilities - 1997**

|  | Savinjska | Slovenia |
|--|-----------|----------|
| Dwellings connected to water supply system (%)     | 97.4      | 97.6     |
| Dwellings connected to sewerage system (%)         | 97.4      | 97.6     |
| Per capita consumption of water ( m <sup>3</sup> ) | 83.2      | 71.9     |
| Telephone connections per 1000 population          | 289       | 357      |
| Number of doctors per 1000 population              | 1.7       | 2.2      |
| Number of hospital beds per 1000 population        | 4.6       | 5.7      |

with a professional theatre, a regional museum, the Gallery of Modern Art and a study library. Other important institutions include the Mining Museum in Velenje and the open-air Ethnology Museum near Rogatec, as well as local radio and television stations in Celje and Velenje.

**Number of pupils - 1998**

|                                       |               |
|---------------------------------------|---------------|
| Pre-school                            | 8 094         |
| Primary                               | 26 521        |
| Lower secondary                       | 2 764         |
| Higher secondary (vocational/general) | 11 605        |
| Tertiary (higher education)           | 6 606         |
| <b>Total</b>                          | <b>55 590</b> |



# Zasavska

## Slovenia's smallest region

The smallest Slovenian region by size and population, and the only one without an external border, is situated in the Sava Mountains in the centre of Slovenia and was formed around the brown coal deposits found in the three narrow valleys of the Sava river's tributaries. In the 19th century, these deposits were the key reason to construct the Southern Railway between Vienna and Trieste through the narrow and nearly impassable Sava gorge, since they were at that time the only source of engine fuel between Graz and Trieste.

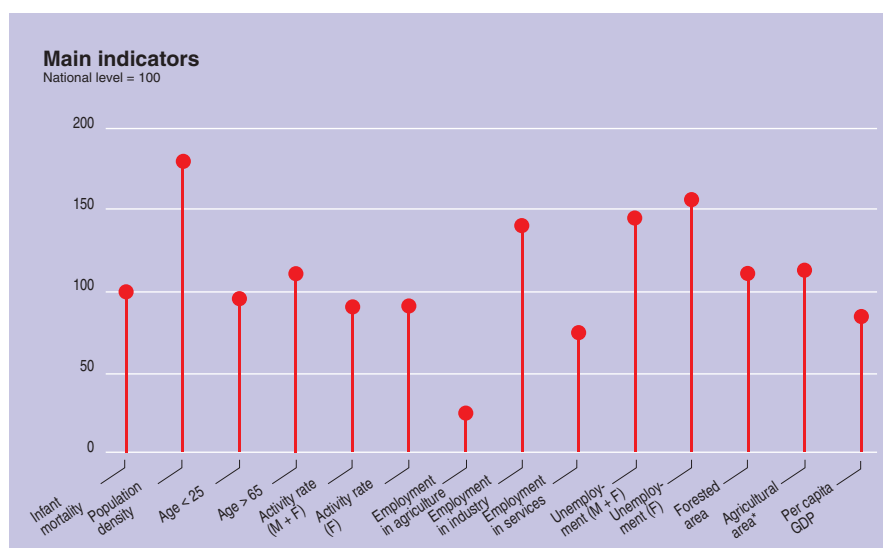
Due to its steep mountainous terrain, which presents a major constraint on agricultural development, Zasavska remains largely a mining and industrial region. Since mining operations in two out of the three existing mines will close down shortly, great structural changes and new challenges await the region in the forthcoming years, including tackling the region's rather polluted environment.

In the mid-19th century, the mining towns of Zagorje ob Savi, Trbovlje and Hrastnik grew from the villages where the three main mines were established, resulting in a regional division which has been preserved until today. Each town acts as a focal point for its own municipality. Thanks to the close ties between these towns and their outlying villages, the Zasavska municipalities are among the few that remained unchanged after the local self-governance reform in 1994. Since the 19th century, when Trbovlje established its position as a regional centre, it has been performing certain functions for the entire region. However, the three town centres retained a considerable level of individuality and strong ties with other centres. Zagorje ob Savi and Trbovlje are closely tied to Ljubljana, 60 km away, while Hrastnik maintains strong ties with Ljubljana as well as with nearby Celje.

Although the railway no longer depends on Zasavska coal, the role of the railway in the region remains very important due to its mountainous terrain.



To disperse emissions from the Trbovlje power station in the Sava Valley, a 362-m chimney was built in the 1970s (Photograph: Karel Natek)



## Comprehensive restructuring required

In the near future, the mining region of Zasavska will be subject to the most radical economic and structural changes in the country, and it is anticipated that they will largely be financed from the national budget. Due to the region's poor natural resource base and unfavourable location, there are relatively few alternatives for its further development. A comprehensive programme of restructuring for the whole region will have to be carried out at the same time as the gradual shutdown of the mines, otherwise the region will find itself in a very difficult position.

The pull of other, larger regional centres, especially Ljubljana and Celje, together

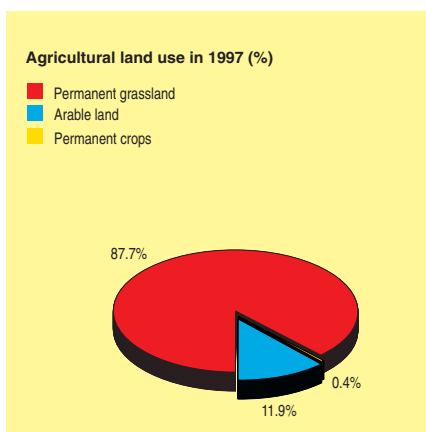
with the region's small population, does not offer many possibilities for the development of a services sector, so that the only viable option would be to attract new branches of industry.

Factors working in the region's favour include its position along the main railway line, the existing infrastructure, and its pool of labour with almost two centuries' experience of a classical industrial tradition. Furthermore, favourable conditions for new investment will be offered by the state in the framework of the restructuring programme.

In addition to its high dependency on brown coal, the region's environment is also heavily polluted by the burning of coal with a high sulphur content in the Trbovlje



thermal power plant. The fact that all three towns are located in narrow valleys, means that traffic, domestic heating and several other large industrial plants also contribute their share of pollution.



### Three brown coal mines

Zasavska region, which covers only 264 km<sup>2</sup> (1.3% of the national territory), is located in the central part of the Sava Mountains with their limestone ridges (the highest peak, Kum, at 1 220 m). Here too, the Sava river carved a gorge more than 30 km long and up to 500 m deep. A few km north of the gorge, the Moravče-Trbovlje-Laško valley system runs in an east-west direction. The Sava's left tributaries carved their transverse narrow valleys into this system, facilitating access to brown coal deposits.

A moderate continental climate is found here, with annual precipitation around 1 200 mm. In the winter, temperature inversion is common, bringing fog into the valleys and causing heavy air pollution.

Due to severe faulting of the coalbearing strata, coal extraction is very difficult and extractable deposits are nearly depleted. The Zagorje mine has been gradually shutting down since 1996. The other two mines are in Trbovlje and Hrastnik, and most of their coal is used in the Trbovlje thermal power plant. Besides coal, limestone is extracted in several quarries for the local cement and lime industry.

Near the mines, three towns developed in the 19th century, each in its own valley. These towns are Zagorje ob Savi (population 7 200), Trbovlje (16 800) and Hrastnik (6 200).

Due to its mostly steep slopes, agricultural land covers only one quarter of the region,

### Which regions are similar to Zasavska?

#### Employment structure:

1% agriculture  
 Karlovarský (CZ)  
 Surrey, East and West Sussex (UK)  
 Karlsruhe (D)

#### Population density:

176 inhabitants per km<sup>2</sup>  
 Ascoli Piceno (I)  
 Kerkyra (EL)  
 Ilfov (RO)

#### Area:

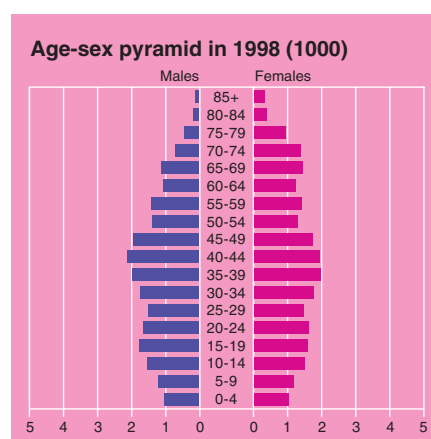
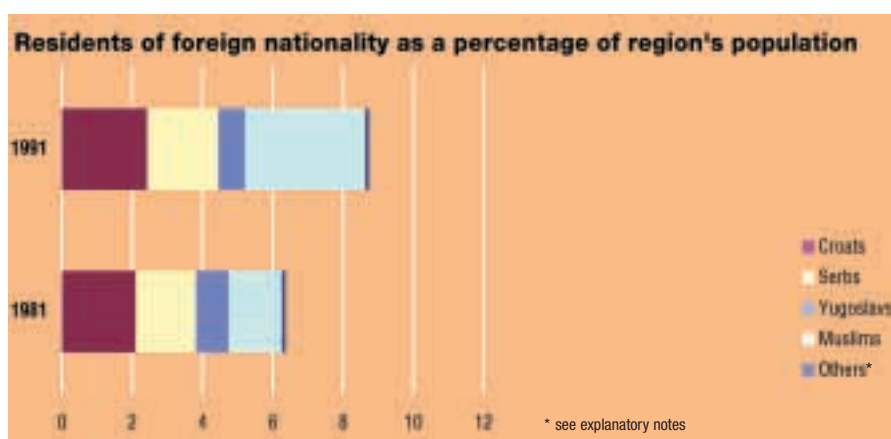
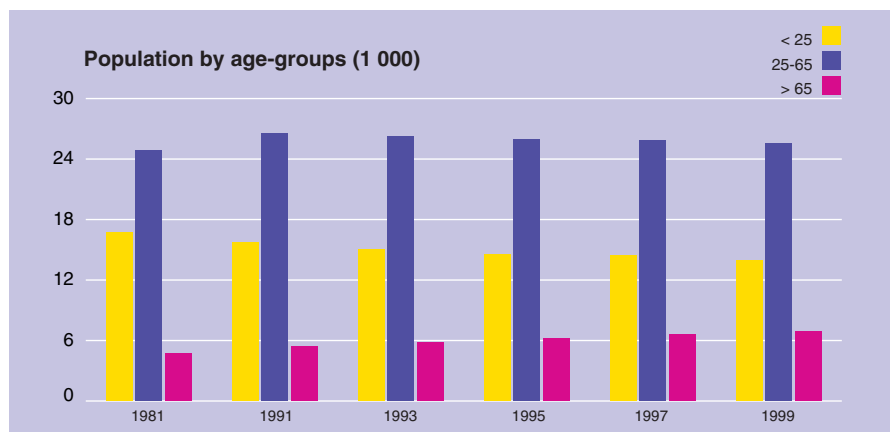
264 km<sup>2</sup>  
 Birmingham (UK)  
 Delfzijl en omgeving (NL)  
 București (RO)

### Agriculture 1997

|   |       |
|---|-------|
| Number of private farms   | 1 083 |
| Persons working in agriculture                                      | 195   |
| Total agricultural area (ha)  | 6 717 |
| Total livestock   | 9 448 |
| Cattle per 100 ha of total agricultural land                        | 104.0 |
| Pigs per 100 ha of total agricultural land                          | 29.3  |
| Main products - proportion of arable land devoted to production of: |       |
| Cereals   | 35.6  |
| Sugar beet  | 0.8   |
| Fodder plants   | 54.0  |
| Potatoes  | 8.6   |

predominately in the lower, more gently inclined sunny slopes. Almost two thirds of the area is covered by forest, which is heavily affected by sulphur dioxide emissions from the thermal power plant and is therefore of low economic significance.

Although the Sava runs through a narrow gorge, it is at present not exploited for energy production. There are, however, plans to construct hydroelectric plants here in the future.



## Population concentrated in the three valleys

Of all the Slovenian regions, Zasavska has the smallest population with only 46 000 inhabitants (only 2.3% of the national population), however it is by far the most densely settled region with 176 people per km<sup>2</sup> as against the Slovenian average of 98.

After reaching its peak in 1989, the population has been gradually decreasing since then, showing a 2.8% decline in the period 1990-1998. If other demographic indicators are considered, then a further decline can be expected in the coming years, as the mortality rate exceeds the birth rate, and the number of births has dropped by one third in the period 1985-1997. Furthermore, the region also has a negative migration balance, with people from the region mostly migrating to Osrednjeslovenska or Savinjska.

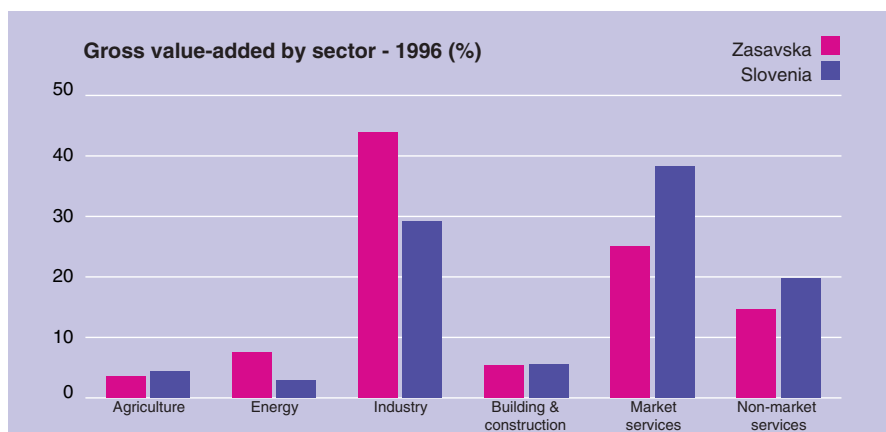
The age structure of the region's population differs somewhat from the national picture, as the percentage of people under the age of 25 is a little below the national average, while the percentage of people over the age of 65 slightly exceeds the

national average. The average age of the population in the region is also above the national average. Comparing this with the geographically and economically similar Koroška region it is obvious that Koroška has proportionally more young people and considerably fewer older people.

There are no ethnic minorities in Zasavska, but a substantial number of people from other parts of former Yugoslavia were attracted to the region because of job opportunities in mining and industry. However the percentage of non-Slovenes in the region's population (12.7%) is only slightly above the national average (12.2%). As a consequence of a severe labour shortage especially in the mines, their number increased by 85% between the 1981 and 1991 censuses. Among the immigrants, the most numerous were Bosnians and Croats from mining areas in Bosnia and Herzegovina.

## Main enterprises

| Name   | Activity                   |
|--|----------------------------|
| ETI d.d. Izlake                                    | Glass products             |
| Steklarna d.d. Hrastnik                            | Glass products             |
| "Rudnik Trbovlje-hrastnik d.o.o., Rudnik Hrastnik" | Lignite mining             |
| "Rudnik Trbovlje-hrastnik d.o.o., Rudnik Trbovlje" | Lignite mining             |
| TET Trbovlje                                       | Electricity supply         |
| Splošna bolnišnica Trbovlje                        | Hospital activities        |
| Svea Zagorje ob Savi                               | Kitchen furniture          |
| SGP Zasavje Trbovlje d.d.                          | Construction               |
| Rudnik Zagorje v zapiranju d.o.o.                  | Lignite mining             |
| STT strojegradnja d.d. Trbovlje                    | Mining/quarrying machinery |



### Mining and industry dominate the economy

Apart from Koroška, Zasavska is the most industrialised region in Slovenia with the largest share of gross value added (56.7%) generated by the secondary sector and the smallest share coming from the services sector (39.9%). The region's dependency on mining and industry is also reflected in its low per capita GDP, a figure which is lower only in Podravska and Pomurska.

The region's economy is based on brown coal. Currently used primarily in the Trbovlje thermal power plant (188 MW), brown coal was also a decisive factor in directing the course of the Vienna-Trieste railway through barely passable mountains in the middle of the 19th century. Energy intensive industries, parts of which are still in operation (glassworks, the production of inorganic chemicals in Hrastnik, and the cement factory in Trbovlje), were developed due to the presence of coal in the second half of the 19th century. The production of machinery for use in the coal mines was started in Trbovlje after World War II. Among industrial branches that are not directly related to coal mining, the production of electrical insulation material in Izlake, the furniture industry and a lime fac-

tory in Zagorje ob Savi are important.

Due to the region's small population and the proximity of other, larger regional centres the services sector is relatively weak. Main services, including a regional hospital and a high school centre, are largely concentrated in Trbovlje, while other service activities are of a local character, with the exception of a small health resort in Medijske toplice at the source of a thermal spring.

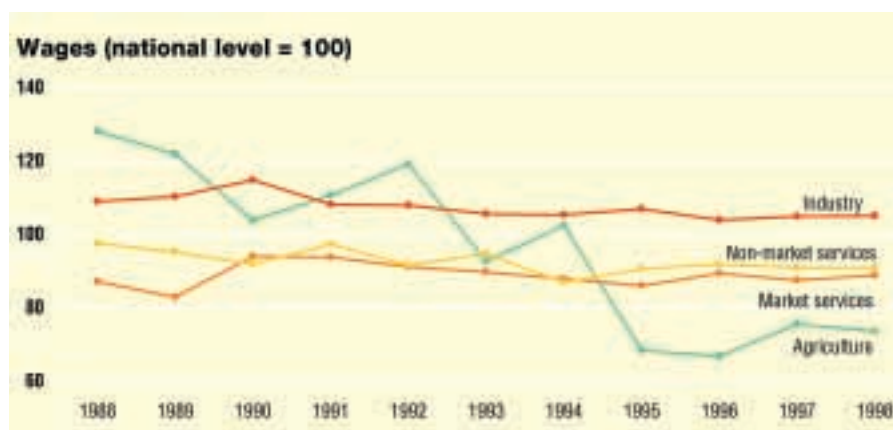
With only the Trbovlje mine due to operate for two more decades, the gradual shutdown of the coal-mines brings numerous problems and uncertainty to Zasavska, which now must face these new challenges. The mines and the thermal power plant are owned by the state, therefore a large part of the shutdown costs and related economic restructuring will be covered by the national budget. Since this process will result in a considerable surplus of skilled labour and lead to state-run incentives for new investment, Zasavska will offer favourable conditions for domestic and foreign investors in the future, especially in industry and small businesses.

### Little income generated from agriculture

In the period between 1995 and 1998 average net wages in Zasavska increased by 12.9% which was slightly below the national average. The highest increase was recorded in the construction sector and non-commercial service activities, while it was the lowest in industry, mining and the commercial services sectors.

In Zasavska, the average net monthly wage in October 1998 was 515 ECU, which was 4% below the national average. Earnings in industry and mining were even above the national average, which to some extent can be explained by the high percentage of people employed in state mines who receive allowances for hardship conditions. The relatively poorly developed services sector remains the furthest behind the national average.

The region's geography makes agricultural development very limited, and therefore there are few pure farming households. In contrast to all other Slovenian regions, only a few households in Zasavska are generating additional income from agriculture, mainly from animal husbandry (dairy and beef cattle, poultry). This characteristic makes the region the most "classical industrial region of Slovenia" with the majority of households completely dependent on monthly salaries and without any other significant source of income.





## Unemployment on the increase as mines close down

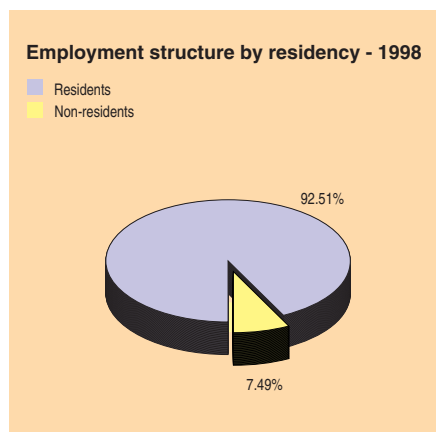
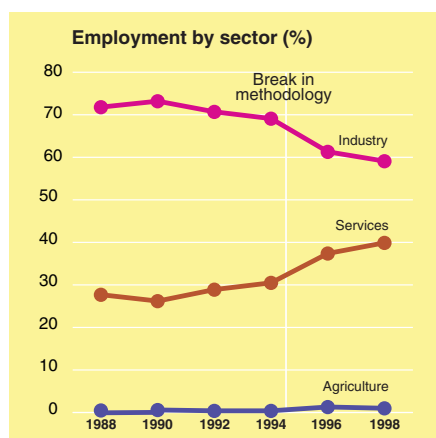
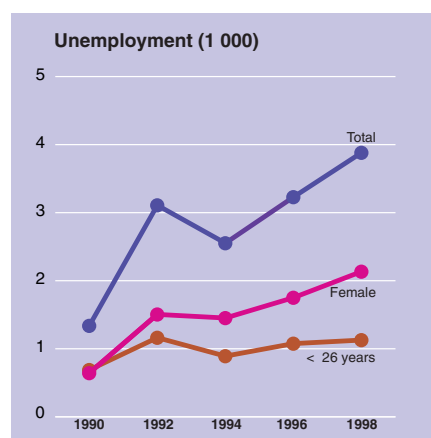
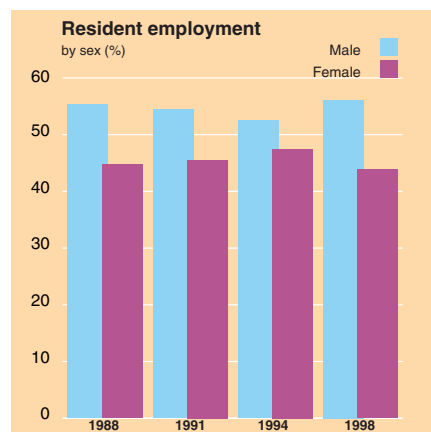
If the employment structure alone is considered, then Zasavska is the most industrial region in Slovenia. Industry employs 59.1% of the workforce, while the share of employees in the services sector is the lowest in Slovenia (39.9%). Despite the dominance of mining and industry there are no large differences between male and female employment rates since several medium-size plants were established in the past by the state, employing women from mining families.

Considerable employment difficulties are also alleviated by the 20% of the workforce who daily commute to work outside the region, especially to Ljubljana, and the number of commuters more than doubled during the 1991-1998 period. Nevertheless, Zasavska is the only region in Slovenia where the number of employees actually decreased in the same period by just over 10%.

The gradual closing-down of Zasavska's coal mines began in 1996, and should lead to large changes in the employment structure. Since all three of the mines as well as the Trbovlje thermal power plant are owned

by the state, the shutdown and retraining of redundant labour will mostly be financed from the national budget and is not expected to cause additional unemployment. The unemployment rate is already very high in Zasavska (20.6%), and is higher only in Podravska and Pomurska. During the 1980s unemployment was almost unknown in the region and some workers also came from other regions and even from other parts of the former Yugoslavia. However, unemployment has been gradually increasing since 1994.

A further disadvantage faced by Zasavska is its extremely unfavourable unemployment structure. While more than half of the unemployed are women, the worst problems are a permanently high percentage of young people among the unemployed (almost a third are under the age of 26) and a high percentage of long-term unemployed (almost two thirds have been unemployed for more than one year). Due to their rather low educational level, it will be extremely difficult to retrain these people.



## The Southern Railway diverted for brown coal

Despite its position in central Slovenia, main traffic routes would have bypassed the mountainous Zasavska region were it not for the region's brown coal deposits. This was the only reason why the Southern Railway between Vienna and Trieste was constructed through the picturesque but almost impassable Sava gorge. Zasavska's three main towns are situated only a few kilometers away from the Sava valley, and they depend on the railway more than other Slovenian towns.

The region's most important road connection is the Ljubljana-Litija-Zidani Most road running through the Sava valley. When the Ljubljana-Celje motorway is constructed (due by 2004), the regional road running through Hrastnik-Trbovlje-Zagorje ob Savi-Trojane will become the main connection between Zasavska and the Slovenian motorway network.

Local paved or tarmacked roads connect all villages and isolated farmsteads in the mountains with towns in the valleys. Most of the residents commute daily to work by car. The region has 15 700 passenger cars or 336 cars per 1 000 persons, which is,

together with Pomurska, the lowest number in all of Slovenia.

Zasavska has no airports; Ljubljana international airport is 75 km from Trbovlje. Plans were made to construct a navigable waterway through the Sava valley that would connect the Sava river basin with the Adriatic Sea, but these were finally abandoned in the 1990s.

**Surfaced public roads – 1997**

|  | Zasavska | Slovenia |
|--|----------|----------|
| Length in km per km <sup>2</sup>                             | 0.26     | 0.23     |
| Length in km per 1 000 population                            | 1.4      | 2.4      |
| Length in km per 1 000 private passenger cars                | 4.3      | 6.1      |
| % private passenger cars in total number of vehicles         | 91       | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.8      | 0.5      |

**High rates of environmental pollution**

Due to its unfavourable terrain, characterised by narrow valleys, the region has the most polluted environment in Slovenia. Furthermore this is already reflected in the local population's health, where there are signs of deterioration due to prevailing environmental conditions. The main reason for this is brown coal with its high content of non-combustible substances and sulphur.

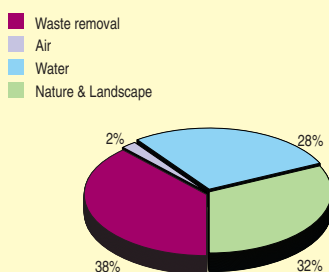
Mining itself causes considerable environmental damage in the form of surface subsidence, large quantities of tailings and water pollution caused by coal screening. Nevertheless, the largest contributor to air pollution is the Trbovlje thermal power plant, the second largest source of sulphur dioxide (SO<sub>2</sub>) in Slovenia. The problem of the accumulation of harmful gases in the narrow valleys was "solved" in the 1970s by the construction of a 362 m high stack, however this only caused the dispersal of the pollution over a wider area. SO<sub>2</sub> concentration levels commonly exceed critical values, resulting in damaged forests and danger to human health.

Apart from air pollution, rivers in Zasavska are also heavily polluted by untreated municipal waste-water combined with industrial and coal screening waste water.

In terms of network connections, the majority of the population is connected to municipal water supply networks using water sources from the surrounding mountains. Municipal waste is disposed without prior treatment in more or less adequately managed landfills, ash from the thermal power plant is disposed of in a special landfill, while tailings are mostly used for filling the abandoned mine shafts.

All settlements in the region are connected to the national electricity network. The expansion of local natural gas networks has already contributed to a reduction in

air pollution in the most critical winter months. All settlements are also connected to a telephone network, however the telephone penetration rate is more than 25% below the national average at 280 telephones per 1 000 inhabitants.

**Current expenditure for environmental protection - 1997****Educational and cultural infrastructure rather weak**

With regional development mainly centred on mining and with the strong influence of near-by Ljubljana, Zasavska is among the weakest regions in Slovenia in terms of education and culture. These activities have been dispersed among the three towns in the region during recent decades, although Trbovlje has been gradually taking a leading role.

There is a high-school centre in Trbovlje with a grammar school and several other secondary and vocational schools. In Zagorje ob Savi, there is a high-school for electronics and catering. Many students attend schools in Ljubljana and continue their studies at Ljubljana University.

Zasavska has no important research institutions. There is a regional general hospital in Trbovlje.

Cultural institutions of regional importance include workers' associations in Trbovlje and Zagorje ob Savi with well developed amateur cultural activities, the Revir Museum and a regional radio and television station in Trbovlje.

**Utilities - 1997**

|   | Zasavska | Slovenia |
|---|----------|----------|
| Dwellings connected to water supply system (%)    | 98.8     | 97.6     |
| Dwellings connected to sewerage system (%)        | 98.8     | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 64.2     | 71.9     |
| Telephone connections per 1000 population         | 280      | 357      |
| Number of doctors per 1000 population             | 1.5      | 2.2      |
| Number of hospital beds per 1000 population       | 3.4      | 5.7      |

**Number of pupils - 1998**

|                                       |              |
|---------------------------------------|--------------|
| Pre-school                            | 1 050        |
| Primary                               | 4 562        |
| Lower secondary                       | 462          |
| Higher secondary (vocational/general) | 1 926        |
| Tertiary (higher education)           | 1 205        |
| <b>Total</b>                          | <b>9 205</b> |





# Spodnje Posavska

## Historic frontier

Spodnje Posavska is the second smallest region in Slovenia, situated in its south-eastern part where the Sava river, flowing from sub-Alpine mountains, enters the Pannonian Plain. In the east and south the region extends to the Croatian border. Before Slovenia gained its independence in 1991, most of the region was part of the wider metropolitan area of Zagreb, the capital of Croatia.

This is a transitional region between forested sub-Alpine mountains, reaching 1 023 m, where steep slopes can support only small villages and isolated farms, and a wider, cultivated plain at the confluence of the Sava, Krka and Sotla rivers where climatic, cultural and other influences from the Pannonian Plain are felt. A belt of low wine-growing hills separates these two regions.

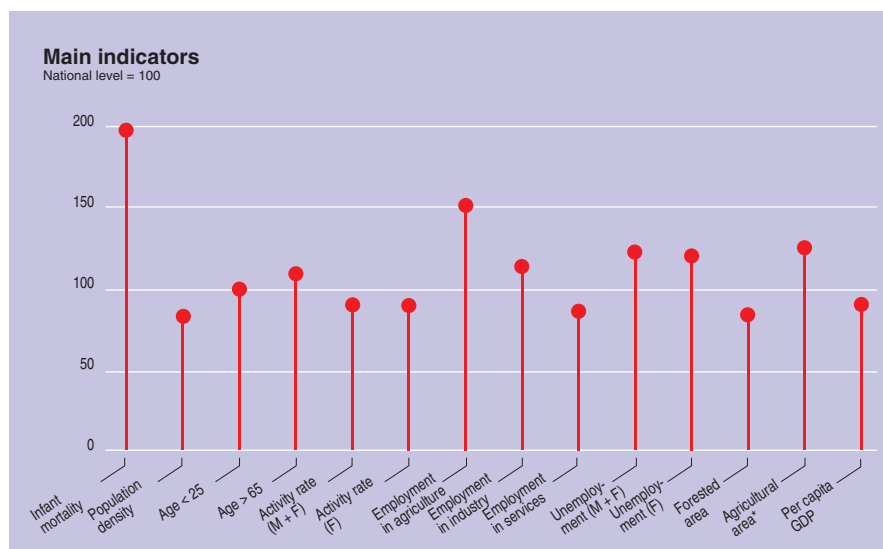
The towns of Sevnica, Brestanica, Krško and Brežice were established in ancient times around medieval castles on an important traffic route along the Sava river connecting Central and South-Eastern Europe. The region's favourable position along this traffic route and its good traffic accessibility by road and railway are still an advantage, spurring border-related service activities after 1991 at two important road and railway border crossings.

The region is divided among the municipalities of Sevnica, Krško and Brežice, all established in 1955. The municipalities remained unchanged during the local self-governance reform (1994) after Slovenia's independence.

A historical peculiarity of the Spodnje Posavska region is the stable ethnic boundary between Croats and Slovenes, set on the Sotla river, which has not changed since the early Middle Ages and which was also the south-eastern border of the Habsburg Empire for centuries. This frontier has never represented an obstacle to cross-border economic cooperation which was especially reinforced after World War II when Zagreb developed into one of the most important economic centres of the former Yugoslavia. The Spodnje Posavska region - important as a source of workforce and electricity, as well as an attractive recreational area - became a part of Zagreb's catchment area. While the formation of a state border in 1991 interrupted some ties, such as the commuting of Slovene workers to Zagreb, new ones, such as trade activity along the border, were established.



The Brežice plain on the left bank of the Sava River is a densely populated mosaic of villages, fields and woods (Photograph: Karel Natek)



## Rival urban centres

Situated along the main Ljubljana-Zagreb railway and road, the region is easily accessible from central Slovenia and from neighbouring Croatia. Its frontier position results in many jobs at border crossings.

Well developed service activities and differences in the economic structure of the three urban centres (Sevnica, Krško, Brežice) mean that there is a variety of employment options, while local high schools provide an educated workforce with considerable employment possibilities in their home region. This became especially evident after 1991 when the influx from Croatia of immigrants and commuters with high-school or university education almost entirely dried up.

The considerable distance from Ljubljana (110 km) made Spodnje Posavska rather peripheral when the state border was established, separating it from Zagreb. So far, however, it faces fewer difficulties than other Slovene border regions, which have been affected by depopulation and declining economic activity.

More than in other Slovene regions, its further economic development depends on political and economic relations between Slovenia and Croatia and on the open border between the neighbouring countries, which entails some degree of uncertainty.

Apart from Koroška, Spodnje Posavska is the only region in Slovenia without a distinctive regional centre. Instead, there are two competing regional centres 12 km apart. The older one, Brežice, was built

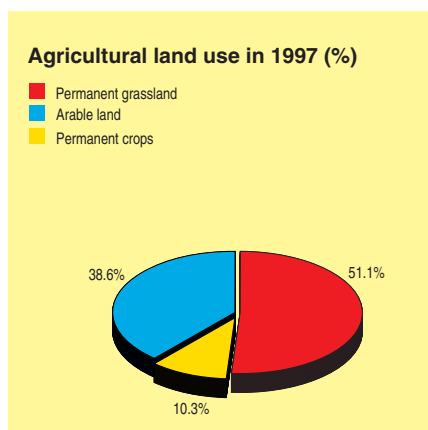


around a strategically important mediaeval castle. Its primacy was challenged by Krško's faster economic development after World War II, especially after the nuclear power plant was constructed in 1982. This dualism causes unnecessary duplication of some activities and slight tensions hindering communication within the region.

The Krško nuclear power plant offers advantages and disadvantages. One of the most successful Slovene companies, it is a major employer of high-school and university graduates. There are, however, environmental concerns since an appropriate site for a radioactive waste repository has not yet been found either in Slovenia or in Croatia. Waste has thus been accumulating in a temporary repository at the power plant.

### Extensive water resources

The region covers 885 km<sup>2</sup> (4.4% of Slovenia) and can be divided into four parts. Its northern and western parts consist of dissected sub-Alpine mountains with vast forests on steep slopes and modest agricultural possibilities. On the southern foothills of these mountains there is a 10 km-wide belt of low hills with vineyards and orchards on sunny slopes. The town of Sevnica (population 5 000) is situated in the Sava valley in the middle of this belt. The central part of the region is a plain (up to 10 km wide) along the Sava, Krka and Sotla rivers. This is the most densely populated part of the region with the most important agricultural areas. Both bigger



towns - Krško (population 7 070) and Brežice (population 6 880) - are situated here. The Gorjanci range rises in the southern part of the region along the Croatian border. It is an almost completely uninhabited, densely forested karst area.

The main natural resources are fertile land and an abundance of water in the plain, together with forests in the mountains. In Senovo, a small coal mine has been extracting brown coal since 1839, however, it has been in the process of closing down since 1995. Near Globoko there are unexploited lignite deposits, while quartz sand and gravel are extracted at several sites.

Among the three major rivers, the Krka and the Sotla are slow lowland rivers unsuitable for electricity production, while on the

### Which regions are similar to Spodnje Posavska?

#### Land use:

48% forest

Caras-Severin (RO)  
Övre Norrland (S)  
Luxembourg (B)

#### Age structure:

15% over 65

Calabria (I)  
Greater Manchester (UK)  
Lõuna-Eesti (EE)

#### Population density:

80 inhabitants per km<sup>2</sup>

Nordjyllands amt (DK)  
Cuneo (I)  
Zala (HU)

### Agriculture 1997

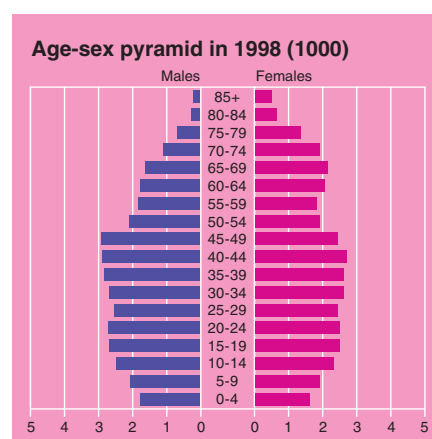
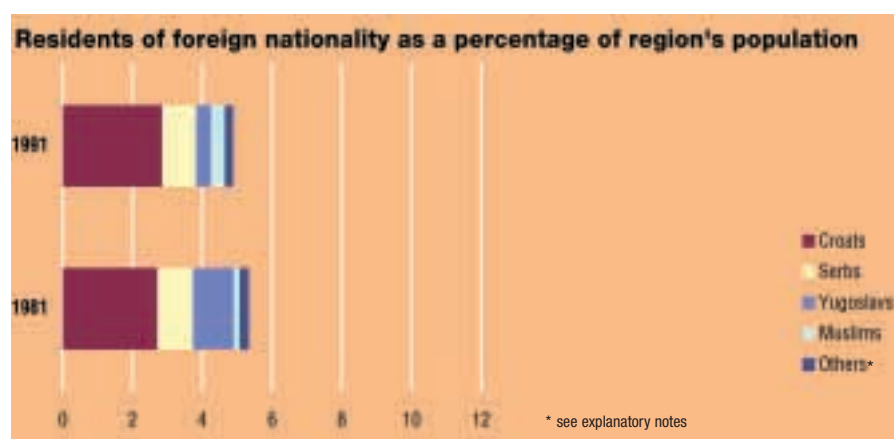
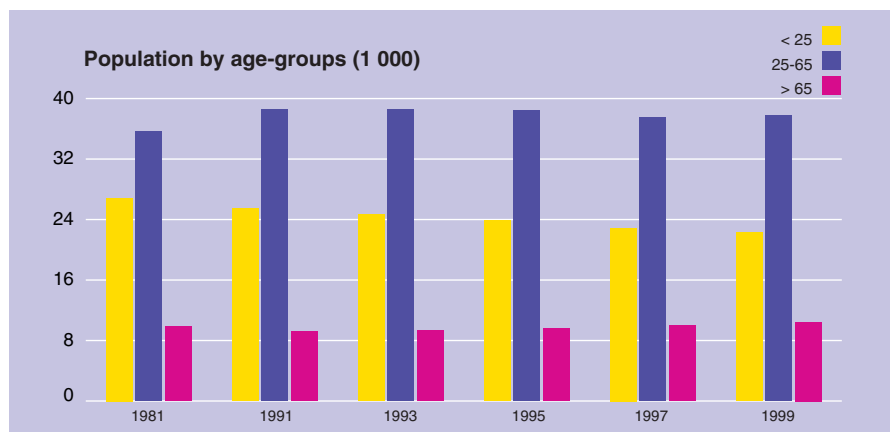
|   |        |
|---|--------|
| Number of private farms   | 6 027  |
| Persons working in agriculture                                      | 1 737  |
| Total agricultural area (ha)  | 25 403 |
| Total livestock   | 62 559 |
| Cattle per 100 ha of total agricultural land                        | 86.3   |
| Pigs per 100 ha of total agricultural land                          | 151.6  |
| Main products - proportion of arable land devoted to production of: |        |
| Cereals   | 70.7   |
| Sugar beet  | 2.2    |
| Fodder plants   | 18.9   |
| Potatoes  | 5.5    |

Sava a chain of hydroelectric power plants is planned, including three power plants in the Spodnje Posavska region. The plain is very rich in groundwater found in gravel and loam sediments, supplying the majority of the local population with drinking water. The Čatež thermal spa was developed to exploit abundant wells of naturally radioactive water with a temperature of up to 62.5 °C, pumped from a depth of approximately 300 m.

Two thirds of the plain are covered with arable fields and one third with meadows. Fields prevail on river terraces and at the foot of the hilly area, while meadows prevail in more humid areas and on floodplains along the rivers. More than half of the hilly area is covered with forest, with vineyards and orchards (5-10% of the area)



on sunny slopes. Fields and meadows prevail on other gentle slopes. In the mountains, forests cover more than three-quarters of the area, the rest is covered with meadows which are being gradually overgrown due to the abandonment of agriculture.



## Homogenous but ageing population

The region's population numbered 70 533 at the end of 1998. With 79.7 people per km<sup>2</sup>, the population density in the region is below the Slovene average (97.6 people per km<sup>2</sup>). The average density has remained almost unchanged since 1971. However, it does not reflect the large differences between the densely populated plain and the Sava valley, where all towns and numerous larger villages are situated, on the one hand, and the extremely sparsely populated mountains on the other. Most mountain villages have lost half their population since World War II, and there is a continuing trend of emigration to lower areas.

The age structure of the population is almost identical to the structure at the national level. Other demographic indicators also indicate a stable population development. The population in the region decreased by 3.5% in the 1990-1998 period. The natural increment is also almost identical to the Slovene average, while the inter-regional migration balance was slightly negative in the 1991-1997 period. An absolute population decline (3 170 per-

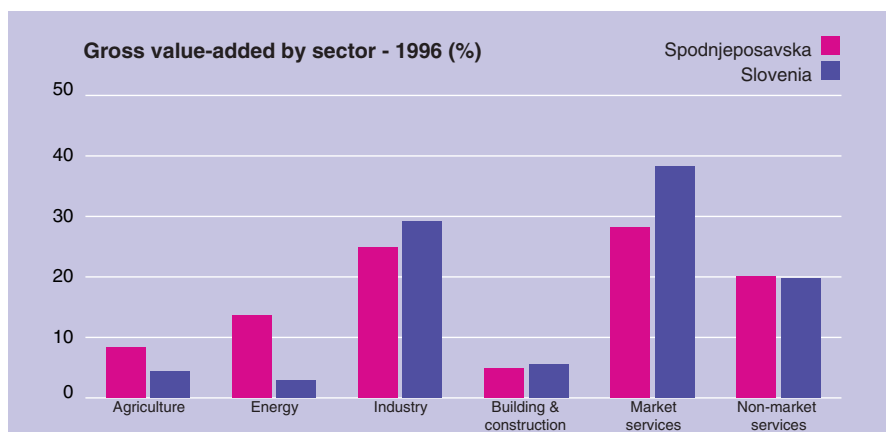
sons) during 1991-1997 can be attributed to the emigration of the non-Slovene population after Slovenia's independence.

As in other parts of Slovenia, the percentage of the population over 65 years of age is increasing due to a considerable decrease in fertility in the 1990s. At the same time, the percentage of younger people has been decreasing. The share of younger people is close to the national average, while the share of the population over 65 is higher.

According to the population census from 1991, 8.2% of the population was of non-Slovene origin. Of this, one third were Croats and the rest were immigrants from other republics of the former Yugoslavia. The staff of the military airport at Cerklje ob Krki represented a considerable number of non-Slovenes in the region and they left Slovenia together with their families when the Yugoslav army retreated in the autumn of 1991. As a result, despite the region's location on the Croatian border, there are no ethnic minorities.

## Main enterprises

| Name   | Activity               |
|--|------------------------|
| Lisca d.d. Sevnica                             | Clothing               |
| Nuklearna elektrarna Krško d.o.o.              | Electricity production |
| Jutranjka Sevnica                              | Clothing               |
| Terme Čatež                                    | Spa centres            |
| Labod Libna Krško                              | Clothing               |
| Kopitarna Sevnica d.d.                         | Footwear               |
| Splošna bolnišnica Brežice                     | Hospital activities    |
| Pohištvo d.d. Brežice                          | Furniture              |
| "SŽ-Centralne delavnice Ljubljana, pro.Dobova" | Railway repair shops   |
| Lisca d.d. Sevnica Šivalnica Senovo            | Clothing               |



### Slovenia's nuclear power plant

Taking into account the number of commercial companies and generated value added, the most important sector is industry, contributing 46.3% of value added, followed by the services sector (45%), energy and agriculture.

Spodnjeoposavska's lowlands and hills are among the most important agricultural regions of Slovenia. Small farms prevail. In the plain they focus on corn production (for silage and grain), which is a basis for livestock (dairy and meat farms) and pig raising and to a lesser extent poultry production. In the hilly area, wine production is the most important activity, especially around Bizeljsko and at the foothills of the Gorjanci. Fruit growing (apples) is also important. In the 1990s, strawberry production expanded substantially in the plain, while in Čatež ob Savi flowers and pot plants are grown in greenhouses heated with natural thermal water.

Industry is concentrated in towns along the main railway. Medium-size companies with 200 - 300 employees prevail. In Sevnica, textile industry predominates (ladies' underwear and clothes, children's clothes), while in Brestanica there is a packaging plant, in Krško there is a pulp and paper

mill, and in Brežice a furniture factory and brickworks. Only the central workshops of Slovene Railways in Dobova have remained after 1995 from a once important metal industry.

The nuclear power plant near Krško (691 MW power), built in 1982 with joint Slovene and Croatian capital, makes the region very important for the Slovene electricity production sector. Negotiations have been taking place between the countries since 1991 regarding the distribution of the plant's ownership and liabilities. The power plant used to cover one third of electricity needs in Slovenia and one fifth in Croatia, which has been refusing to receive its share of electricity since 1998. There is a gas-steam power plant in Brestanica with a nominal power of 95 MW, used to provide additional power during peak consumption periods. Its operation is based on the use of gasoline and natural gas.

Within the service sector, the most important activities are trade, with small private companies prevailing, and tourism controlled by the Terme Čatež company. Trade is noticeably concentrated in Brežice; since 1991, two shopping malls adapted to demands of Croatian customers have been built - one in Brežice and the other

one at the Obrežje border crossing.

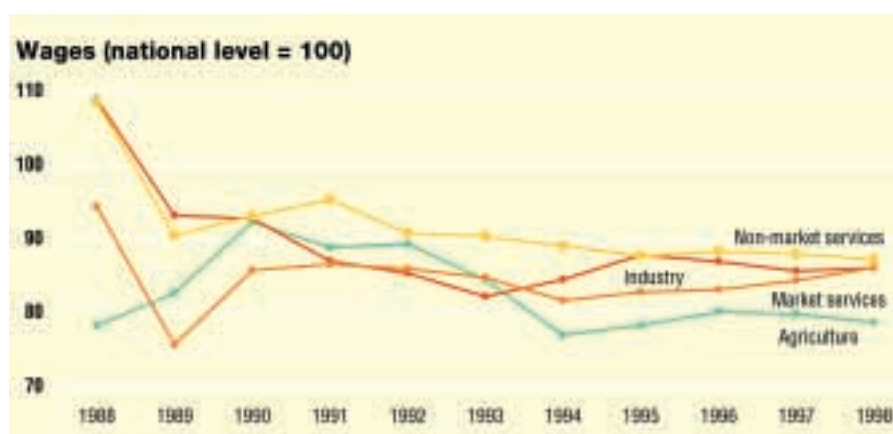
Industry is oriented predominantly towards the domestic market with the exception of the metal industry. Local industry was spared major shocks after 1991 and adapted to new conditions relatively successfully. Domestic private capital prevails, except for the pulp and paper mill in Krško where a Czech investor has been the majority shareholder since 1997. Since the entire region is faced with a lack of capital and new development schemes, it has not been able to carry out more radical restructuring. As a consequence, it is already lagging behind more agile Slovene regions.

### Low wages

After significant fluctuations of wages caused by high inflation rates at the end of the 1980s and in the early 1990s, resulting in decreasing wages in real terms, wages stabilized after 1992. Since then, they have been gradually increasing, with the slowest growth rates in industry and agriculture and the fastest growth rates in the services and energy sectors.

Average gross wages in the 1992-1998 period were 12% below the Slovene average, especially in the construction and agricultural sectors where they were more than 20% below average. In contrast to this, wages in the energy sector were actually 25% above the national average for the sector.

Wage inequalities between men and women are comparable to the national average. The largest inequalities are found in the workforce categories of 'unskilled', 'skilled' and 'highly educated' where women are paid almost 20% less than men. Within the region, there are no striking wage inequalities with the exception of Krško, which has a higher share of employees in the energy sector receiving higher wages.





## Shift from industry to services

Immediately after World War II, self-sufficient agriculture with small market surpluses prevailed, employing one half of the active population. The non-agrarian population, employed in industry, mining and the services sector, lived only in towns. Rapid industrialisation in the 1950s and 1960s spurred intensive emigration from rural areas to nearby towns with satisfactory employment possibilities in labour-intensive industrial branches. A higher standard of living and the widespread use of cars caused rural depopulation and an abandonment of farming, resulting in the formation of households with a combined source of income, i.e. income from agriculture plus one or more family members employed in other sectors. In the 1990s the share of the farming population dropped below 7%, resulting in the non-farming population being in the majority even in rural areas.

Of the active population (27 900 in 1998 which represents an activity rate of 49.6%), 46% are women which is equal to the Slovene average. Industry and mining employ the largest share of employees (35.1%), followed by trade, hotels and restaurants, transport and communica-

tions, finance services and business services (26.6%) and public administration, education, health and other public, community service and personal service activities (19.6%). The region's share of employees in the last two sectors is below the national average, while the share of employees in agriculture/forestry (6.2%) and energy (4.5%) sectors is above the national average.

During the period 1991-1998, radical changes occurred in the employment structure - the share of employees in industry and mining dropped from 51.1% to 35.1% as unprofitable companies closed down after the transition to a market economy. Part of the redundant workforce joined self-employment schemes while the rest sought work in service activities. The number of employees in the services sector in the period 1991-1998 increased from 7 300 to 10 700 while their share increased from 35.6% to 46.2%. Almost all employees are employed full-time. After 1991 the share of people employed for a limited period of time increased, amounting to one fifth of all employees.

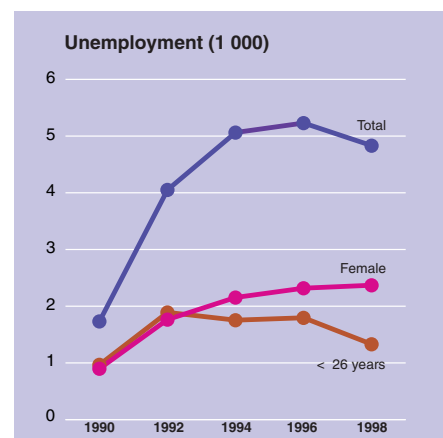
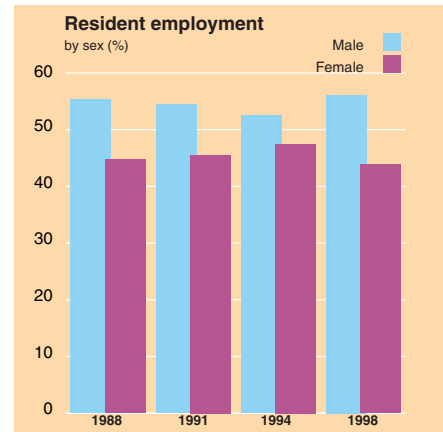
A 60% increase in unemployment in the period 1991-1998 can be attributed almost entirely to the discharging of redundant workers in industry and mining, so that the unemployment rate in the region (17.3% of the active population) is above the Slovene average (14.2%). Among the unemployed, 49% are women and as many as 63% are long-term unemployed; all these values are very close to the national average.

Especially worth mentioning is the planned retraining of former miners from the Senovo coal mine, financed from the national budget as part of the mine shut-down programme.

## Extensive road network

Due to its position along the Sava traffic route, the region is characterized by easy access in an international and interregional sense. Among major roads (totalling 291 km), the most important are the E70 Ljubljana-Zagreb road (planned to be constructed as a motorway by 2004), the Drnovo-Krško-Sevnica-Zidani Most-Celje road and the regional road Brežice-Mestinje through the Sotla valley. Besides these roads, there is - especially in lowland and hilly parts of the region - a dense network of local, almost entirely paved roads. All villages in the mountainous part of the region are accessible by road.

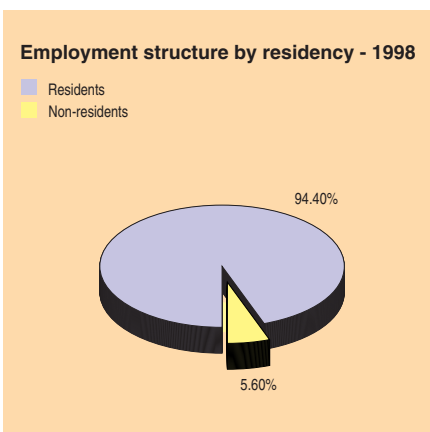
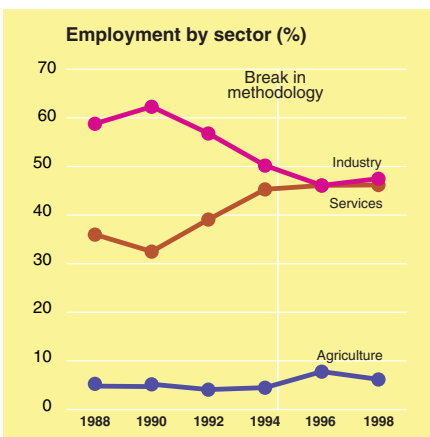
There are 25 100 passenger cars in the region - 356 cars per 1 000 persons, which is slightly below the national average.



A 52 km long section of the Ljubljana-Zagreb railway built in 1862 runs through the region. This double-track electrified railway is also the most important connection between Croatia and other countries in South-Eastern Europe and Central Europe. In Sevnica, the single-track local railway Sevnica-Trebnje branches off from the main railway.

In Cerklje ob Krki there is a large military airport, which belonged to the former Yugoslav army, and is now partly used by the Slovene army. The nearest civil airport is Zagreb airport 45 km away, while Ljubljana airport is 140 km away.

Rivers in the region are not navigable.



**Surfaced public roads – 1997**

|  | Spodnjeposavska | Slovenia |
|--|-----------------|----------|
| Length in km per km <sup>2</sup>                             | 0.25            | 0.23     |
| Length in km per 1 000 population                            | 3.1             | 2.4      |
| Length in km per 1 000 private passenger cars                | 8.7             | 6.1      |
| % private passenger cars in total number of vehicles         | 86              | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 1.5             | 0.5      |

**Water pollution from industry and sewage**

The most serious environmental problem is considerable pollution of all three major rivers (Sava, Sotla and Krka). In particular, the border river Sotla is heavily polluted throughout the year with municipal and industrial waste-water, while the Sava carries the burden of industrial waste-water from most of Slovenia. After the construction of the chain of hydroelectric power plants on the Sava river, a considerable reduction of this pollution is planned.

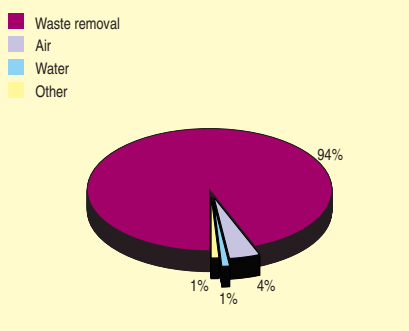
Thanks to Spodnjeposavska's open position and frequent winds, air pollution is low. Higher sulphur dioxide pollution levels appear only during temperature inversion periods in the winter months in the area around Krško.

The Krško nuclear power plant has been operating without major problems; emissions are within legal limit values.

Of 24 500 housing units, 99.1% are connected to the public electricity network and 96.6% to the drinking water supply network, while 96.7% are connected to sewerage systems or have their own septic tanks. The water supply is satisfactory; all larger settlements are connected to the public water supply network, while smaller villages in the mountains are supplied from local or private water supply networks. The situation regarding sewerage is less favourable since septic tanks prevail in individual houses, while sewerage systems were built in all towns, however without wastewater treatment plants. All settlements are also included in the collection of municipal waste which is disposed off untreated at the municipal landfill. Only 3% of waste is recycled.

A natural gas pipeline, from Rogaška Slatina to Novo mesto, crosses the region. Apart from larger industrial consumers, some residential districts in Krško and Sevnica are also connected to the pipeline.

The majority of households in towns and in rural areas are connected to a fixed telephone network, while the whole area is also covered with analogue and digital systems of mobile telephony.

**Current expenditure for environmental protection - 1997****Well-developed infrastructure**

Brežice is among the smaller Slovene high-school centres with a grammar school, and a high-school of economics. The technical high-school is in Krško. Students continue their university and post-graduate studies at Ljubljana University.

A general hospital was built in Brežice in 1872 for the entire region, while for specialist treatment people are directed to the Novo mesto hospital and the Ljubljana Medical Centre. The Terme Čatež spa is a health resort and recreational centre specialised in healing rheumatism and diseases of the female reproductive organs. Primary health care is carried out by health centres in Brežice, Krško and Sevnica, by several health stations in smaller settlements and, since 1991 by an increasing number of private medical and dental clinics.

Brežice is also a regional cultural centre with a regional museum in the 16th century Renaissance castle, a library and a local radio station. Krško and Sevnica are also smaller culture centres. Kostanjevica na Krki is a picturesque little town on the island in the Krka river with the Gorjup Gallery, the Božidar Jakac Gallery in the

**Utilities - 1997**

|   | Spodnjeposavska | Slovenia |
|---|-----------------|----------|
| Dwellings connected to water supply system (%)    | 96.7            | 97.6     |
| Dwellings connected to sewerage system (%)        | 96.7            | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 50.8            | 71.9     |
| Telephone connections per 1000 population         | 286             | 357      |
| Number of doctors per 1000 population             | 1.3             | 2.2      |
| Number of hospital beds per 1000 population       | 2.1             | 5.7      |

renovated former Cistercian monastery, and a nearby permanent open-air exhibition of wooden sculptures known as Forma viva.

**Number of pupils - 1998**

|                                       |               |
|---------------------------------------|---------------|
| Pre-school                            | 2 114         |
| Primary                               | 7 213         |
| Lower secondary                       | 696           |
| Higher secondary (vocational/general) | 2 996         |
| Tertiary (higher education)           | 1 684         |
| <b>Total</b>                          | <b>14 703</b> |



# Dolenjska

## South-east European influence

Dolenjska region is situated in the south-eastern part of Slovenia in a transitional area between forested Dinaric Mountains and gently undulating hills on the extreme south-western margin of the Pannonian Plain. Despite relatively low altitudes, the plain is not extensive, mostly along the middle reach of the Krka river where the regional centre Novo mesto is situated. The landscape is characterised by low, rolling hills with numerous clustered villages and churches on hilltops. Relatively sparse water sources and surface streams reflect the karst character of the limestone area, where rainwater disappears underground, although the karst phenomena are not as spectacular as in the Dinaric Mountains.

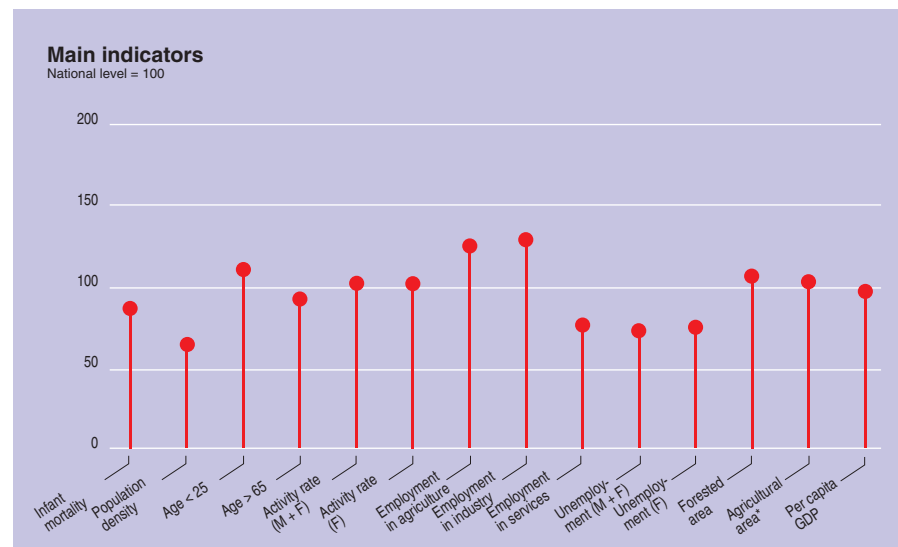
The extreme south-eastern part of the region, between the forested Gorjanci range and the Kolpa river on the Croatian border, is called Bela krajina. This is an atypical part of Slovenia featuring landscape and cultural characteristics of nearby south-eastern Europe. During the expansion of the Ottoman Empire in the 15th and 16th centuries, many refugees, the so-called Uskoks, found refuge in this area, and in some villages they have preserved their Serbian language and orthodox religion until today.

From 1335 until the end of World War I, the whole Dolenjska region was part of the duchy of Carniola, a part of the Habsburg monarchy. Today the region is divided among 10 municipalities, of which Novo mesto, covering more than one third of the region, is the largest municipality by area in Slovenia, outranking even Ljubljana in terms of area.

The Ljubljana-Zagreb highway (due to be upgraded to a motorway by 2004) runs through central Dolenjska, making these two places easily accessible. The railway connecting Ljubljana to Croatia runs through Novo mesto. Because of its peripheral position in south-east Dolenjska, Bela krajina will also remain at a distance from the Slovenian motorway system in the future.



Hilltop church in Trška gora, surrounded by scattered plots of vineyards, orchards and fields (Photograph: Karel Natek)



## Agricultural region with successful industry

As early as the second half of the 19th century when industrialisation began, this part of Slovenia was considered undeveloped. In the socialist period after World War II some (especially marginal) parts of the region were exempt from development schemes for political reasons. This caused intensive depopulation, accompanied by farmland reverting to forest, especially in the karst area of Suha krajina on either side of the upper Krka valley.

However, this lack of economic development "saved" Dolenjska from the presence of heavy industry, a sector which has been facing severe problems in all other regions since Slovenia's independence.

Consequently, the region's automobile, pharmaceutical and other light industry has been very successful by Slovenian standards, especially in Novo mesto, which is developing into a regional centre of growing importance, with ambitions to become a supra-regional centre.

The advantage which central parts of the region have is their favourable location along the Ljubljana – Zagreb motorway (currently under construction), giving good access from all directions and relatively good traffic links within the region. Bela krajina, however, which is separated from the rest of the region by the Gorjanci mountain range, remains peripheral in spite of rail and road links.

Bela krajina is also economically weak,

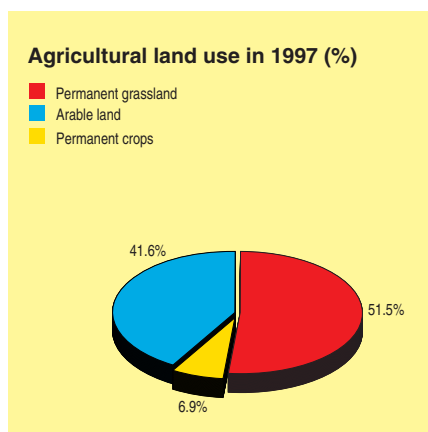


divided between two local centres of equal importance and lacking natural resources of any worth. An additional problem is also the fact that it borders an economically underdeveloped region of neighbouring Croatia from where no developmental impetus can be expected.

The entire region faces a considerable problem in the agricultural sector, mainly due to the prevalence of small farms with widely scattered plots, and in some parts also due to the karst terrain which prevents the introduction of modern farming methods. On the other hand, problems relating to a previously severe shortage of drinking water have been overcome almost everywhere in the region.

### Undulating karst landscape with few natural resources

Dolenjska region covers 1 684 km<sup>2</sup> (8.3% of the national territory) and is, in spite of its relatively low altitude, the third most sparsely populated Slovenian region. In the west it extends into the Dinaric Mountains, containing the vast, completely uninhabited Kočevski Rog (1 099 m) and Poljanska gora (864 m) mountain ranges, and the sparsely populated Suha krajina karst plateau, dotted with only a few small villages. Other parts of the region are characterised by an undulating, partially karst landscape with a colourful mosaic of fields, meadows and vineyards around clustered villages, mostly inhabited by no more than 100 people.



Almost a quarter of Dolenjska is comprised of Bela krajina, a large, low-lying karst plateau with altitudes between 160-200 m, which is quite sparsely populated due to its poor soils.

The climate is moderately continental with average temperatures between -1.3°C (January) and 19.4°C (July) and annual precipitation between 1 000-1 200 mm, falling mostly in the summer months.

Extensive plains are found in the Novo mesto Basin along the Krka river where more than one third of the region's population is settled. Novo mesto (population 22 500), the regional centre, is situated here. Other local centres are Trebnje on the Temenica river (3 100); Žužemberk in the

### Which regions are similar to Dolenjska?

#### Age structure:

34% under 25  
 Pays de la Loire (F)  
 Vorarlberg (A)  
 Kaunas (EE)

#### Land use:

61% forest  
 Östra Mellansverige (S)  
 Galicia (E)  
 Uusimaa (FIN)

#### Employment structure:

54% industry  
 Pernik (BG)  
 Trenciansky (SK)  
 Norte (P) 48%

### Agriculture 1997

|   |        |
|---|--------|
| Number of private farms   | 8 799  |
| Persons working in agriculture                                      | 2 393  |
| Total agricultural area (ha)  | 39 774 |
| Total livestock   | 71 932 |
| Cattle per 100 ha of total agricultural land                        | 98.7   |
| Pigs per 100 ha of total agricultural land                          | 48.7   |
| Main products - proportion of arable land devoted to production of: |        |
| Cereals   | 49.2   |
| Sugar beet  | 0.2    |
| Fodder plants   | 42.5   |
| Potatoes  | 6.4    |

upper Krka valley (1 100); Črnomelj (5 700) and Metlika (3 200) in Bela krajina.

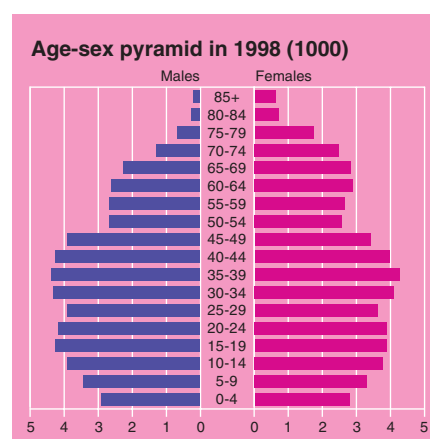
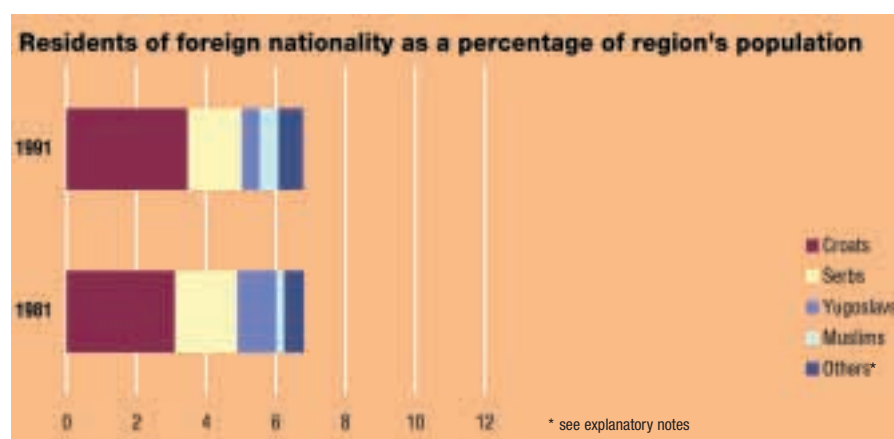
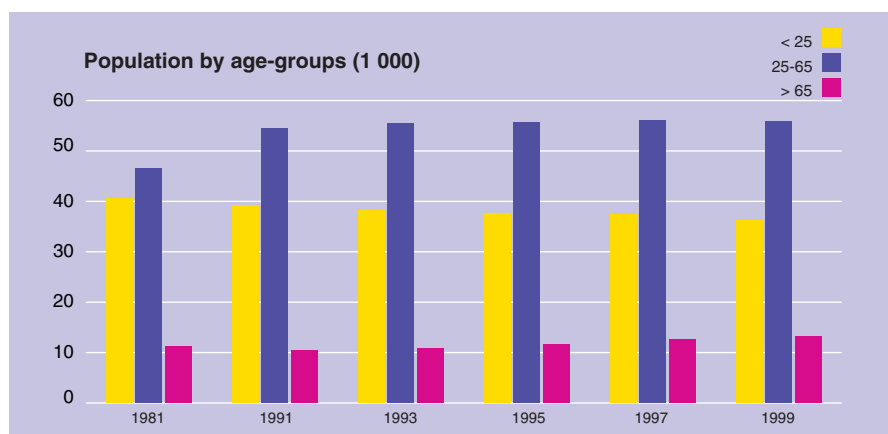
Dolenjska's fertile soil (agricultural land covers 23.6% of the region) and forest, which covers three fifths of the region, are both of economic importance to the region. Quartz sand extraction on several sites is also worth mentioning, while the Kanižarica brown coal mine has been gradually winding down its operation since 1995.

Near Novo mesto, natural thermal water abounds in two locations, and has led to the development of health resorts. Otherwise, surface water and springs are relatively sparse due to the permeable bedrock. Thanks to their clean water, the





region's largest rivers, the Krka and Kolpa, are popular for leisure pursuits and fishing. In the northern part of its course the Temenica river disappears twice and reappears again on its way towards the Krka valley.



## Low population density and a lot of young people

At the end of 1998, the population of Dolenjska numbered 105 000, or 5.3% of the national population, which is a small number considering the region's surface area and economic potential. With 63 people per km<sup>2</sup>, Dolenjska is among the most sparsely settled regions in Slovenia, with population density lower only in the Goriška and Notranjsko-kraška regions. In comparison with other regions, the population is relatively evenly distributed throughout the region, ranging between 45 and 75 people per km<sup>2</sup>. There is a slightly higher density in the urban municipality of Novo mesto due to the concentration of the population in the Novo mesto Basin (83 people per km<sup>2</sup>).

Dolenjska also differs from other regions through having had slow but steady population growth during the 1990-1998 period, in the main due to having the highest birth rate among the Slovenian regions, a low mortality rate (lower than the birth rate) and a considerable surplus in its migratory balance. The number of births is also declining more slowly than in other regions, as in the 1985-1997 period it

decreased by slightly over 20%.

The age structure of the population is also favourable compared to the national average. Dolenjska has the highest percentage of population below the age of 25 (34.4%) and the second smallest percentage above the age of 65 (12.6%), with the percentage of older people smaller only in Koroška. Nevertheless, the region's younger population decreased by 7.8% in the 1990-1998 period, while its older population increased by as much as 27.7% in the same period. It is also worth mentioning that in all municipalities the average age of the population is below the national average.

Non-Slovenes native to the region include gypsies around Novo mesto and in Bela krajina, and orthodox Serbs in three villages near the Kolpa river. According to the 1991 census, the percentage of non-Slovene immigrants and their descendants was 9.9%, showing a slight change from the 1981 census. The most numerous of these immigrants are Croats, numbering over a third of the total.

## Main enterprises

| Name                                | Activity                |
|-------------------------------------|-------------------------|
| Revoz d.d. Novo mesto               | Motor vehicles          |
| Krka Novo mesto d.d.                | Pharmaceutical products |
| Iskra kondenzatorji d.d. Semič      | Electronic components   |
| Danfoss Compressors d.o.o. Črnomelj | Electrical equipment    |
| Splošna bolnišnica Novo mesto       | Hospital activities     |
| Novoles d.d. Straža                 | Furniture               |
| CP Novo mesto d.o.                  | Civil engineering       |
| "Krka Novo mesto d.d., Institut"    | Pharmaceutical R & D    |
| Konfekcija Komet Metlika d.d.       | Clothing                |
| Trimo Trebnje                       | Metal products          |



### Rapid transition from an undeveloped to an economically successful region

Dolenjska can be placed among Slovenia's most successful regions economically, ranking fourth (after Osrednjeslovenska, Obalno-kraška and Goriška) according to generated GDP per capita. The driving force of the region's economic development is industry, generating 47.6% of the region's gross value added, while the share coming from the services sector is substantially below the national average (45.2%). The contribution of agriculture is almost twice the national average (7.2%).

In terms of agriculture, the region is characterised by mixed farming with a slight bias towards dairy and beef cattle farming. In some parts of eastern Dolenjska and on hills surrounding Bela krajina, fruit (apples, pears) and wine growing are important. Due to the unfavourable natural conditions (stony, mostly uneven terrain), almost all land remained in private ownership during the socialist period, resulting in numerous small farms and plots. This reduces the economic efficiency of farms on the one hand, but importantly contributes to landscape variety on the other. In marginal, hilly areas, as farming is abandoned, former

meadows and pastures are now being overgrown by forests.

At the end of the Second World War, Dolenjska was economically undeveloped with a surplus of workers and little industry. The local workforce was the basis for the development of the textile industry in Novo mesto and Metlika, followed in the 1960s by the arrival of the electronics industry in smaller towns such as Semič. Today, the three main pillars of Dolenjska and Bela krajina's economy are Krka (pharmacy) and Revoz (cars) in Novo mesto and Danfoss (compressors) in Črnomelj. These companies are also among the region's most successful large companies and are major exporters at the national level.

The Krka pharmaceutical company is privately owned by Slovenian investors and has, apart from the country's two main universities, the strongest research and development team in the country. The other two factories are owned by foreign investors: Revoz operates as a member of the Renault group, while Danfoss is owned by Danish investors.

After Slovenia gained its independence, the direct impact of Zagreb on eastern

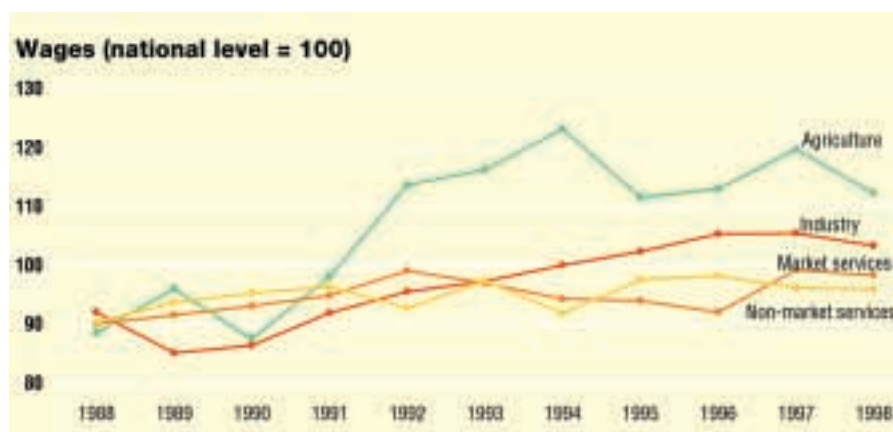
Slovenia was reduced due to the establishment of the Croatian border. As a result, Novo mesto reinforced its position considerably as a regional centre. Its main services include the regional hospital, a large high school centre with a wide array of educational programmes, and a trade and banking sector. Tourism is also an important activity, especially in Otočec and at the health resorts of Dolenjske Toplice and Šmarješke Toplice which were established near natural thermal springs.

### Earnings are a positive feature

In the period between 1995 and 1998 average net wages in Dolenjska increased by 13.6% which equals the national average. The highest increases in salaries were recorded in the construction and industry sectors, while they were slightly lower in the services sector.

The average net monthly wage earned here in 1998 was 525 ECU, a figure which is the highest among regions in eastern Slovenia and only 2% below the national average. Relatively high wages can primarily be attributed to successful companies working in industry (478 ECU) and construction (496 ECU) where the salaries paid even exceed the national averages for both branches. By contrast, in the service sector earnings are slightly below the national average, both in market services (551 ECU) and non-market services (614 ECU).

Monthly wages represent more than a half of all household incomes, while one third comes from pensions and other social insurance sources. While most of the farms in the region are not market-oriented and characterised by low productivity, they are of great importance for many mixed farmer-employee households as an additional source of income from farming, either as the production of food for own consumption or for sale at local market.

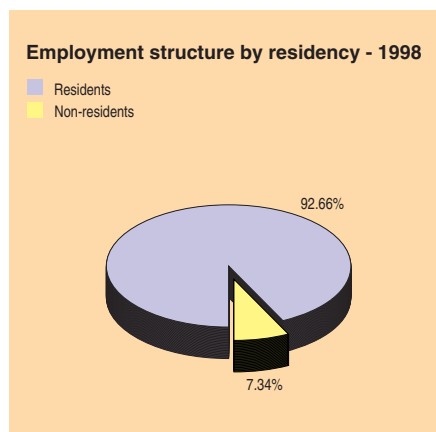
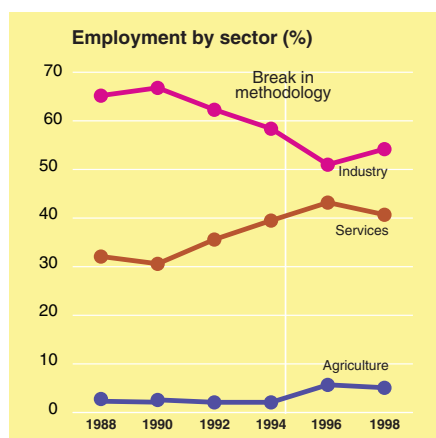




## Increasing employment opportunities

From its post-war position of a poor agricultural region, Dolenjska experienced intensive industrialisation after 1960 and today it is one of the most economically successful Slovenian regions. The main driving force of dynamic development is the region's industry, which is also reflected in the employment structure with industry employing the largest proportion of the workforce (54.2%). In fact, this share is exceeded only in the mining and industrial regions of Zasavska and Koroška. On the other hand, the percentage of the workforce employed in the service sector (40.7%) is relatively low, and again it is lower only in the aforementioned regions. Agriculture and forestry employ 5.1% of the workforce.

During the years of great structural change following Slovenia's independence, there was an initial decline in the region's industry and the number of employees decreased by more than 25%. Since then, employment has risen by almost 13%, whereas at the national level it has decreased by almost 2%. Despite such an increase, almost all the workforce comes from the home region, with only a small



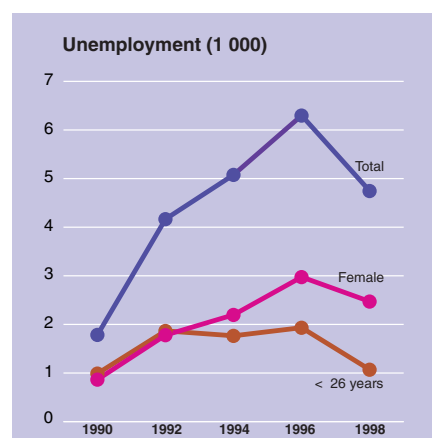
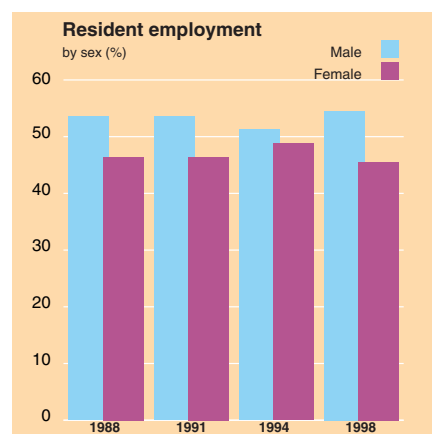
percentage coming from neighbouring Spodnje-posavska and from Croatia. The majority of those working do so on a full-time basis, although not all of them have permanent contracts, as almost 25% of employees have temporary contracts.

With unemployment running at just over 10%, it causes fewer problems in Dolenjska than elsewhere in Slovenia, and it is lower only in Osrednjeslovenska and in Goriška. The unemployment rate increased most rapidly during the transition to a market economy (it more than doubled between 1990-1993). After it reached a peak in 1996, it then decreased by more than 25%. It is also interesting that the share of young people among the jobless is the smallest in Slovenia, in part due to employers tending to employ a younger workforce when they expand their activities. On a less positive note, more than two thirds of the unemployed have been seeking employment for more than one year.

## Easy access from all directions

Dolenjska is situated on the 10th European traffic corridor, the Munich-Salzburg-Ljubljana-Zagreb-Istanbul route, which is the most important traffic route connecting Western and Central Europe with South-eastern Europe and the Middle East. The road from Ljubljana to Zagreb via Novo mesto, constructed between 1947-1958 as part of the most important traffic route in the former Yugoslavia, brought great changes to the region which at that time had poor links with other regions. This section is a part of the E70 Venice-Ljubljana-Zagreb-Belgrad road and there are plans to upgrade it to a motorway by 2004.

Other important roads include the main highway from Novo mesto to Metlika and on to Karlovac (Croatia), which is the main connection between Bela krajina and the rest of Slovenia, the regional road Trebnje-Sevnica through the Mirna valley, and the Ivančna Gorica-Žužemberk-Crnomelj regional road through the picturesque Krka valley.



Dolenjska has a relatively dense network of local, partly unpaved roads. There are 39 000 passenger cars in Dolenjska or 368 cars per 1 000 persons which is almost equal to the national average.

The main Ljubljana-Zagreb railway line was constructed through the Sava valley and therefore bypassed Dolenjska. Nevertheless, the region has 91 km of single railway track. The Grosuplje-Novo mesto track was constructed in 1894 and was extended in 1914 to Metlika and Karlovac (Croatia). There is also a local track between Trebnje and Sevnica.

There are no airports in Dolenjska, and Ljubljana international airport is 90 km from Novo mesto. Rivers in the region are not navigable.

**Surfaced public roads – 1997**

|  | Dolenjska | Slovenia |
|--|-----------|----------|
| Length in km per km <sup>2</sup>                             | 0.23      | 0.23     |
| Length in km per 1 000 population                            | 3.7       | 2.4      |
| Length in km per 1 000 private passenger cars                | 9.9       | 6.1      |
| % private passenger cars in total number of vehicles         | 82        | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.3       | 0.5      |

**Relatively well preserved environment**

Due to its dispersed settlements, hills and late industrialisation, the environment in Dolenjska is relatively well preserved. Although there are no large sources of harmful gases, sulphur dioxide (SO<sub>2</sub>) and black smoke concentrations tend to increase in the autumn and winter months in larger settlements, due, in particular, to household heating.

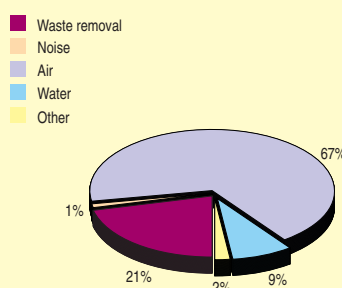
Most farms are small with extensive or moderately intensive production but despite there being no large livestock farms in the area, the contribution of agriculture to environmental pollution is not negligible because large parts of the region are karst areas with highly permeable bedrock.

Most at risk are the surface waters because of their weak self-purification capacity in karst areas. This is especially so for the Krka which receives most of its water from karst springs fed by water from higher karst areas constantly threatened by water pollution. A severe environmental disaster occurred in the 1980s on the karst river, the Krupa, in Bela krajina. The river, a major source of drinking water for the entire Bela krajina region, was polluted to toxic levels by PCBs from the inadequately managed landfill near a factory producing condensers. After the landfill site was properly contained, pollution levels decreased considerably.

Larger settlements are connected to the municipal water supply networks, which are fed by several major karst springs. In remote karst areas, people use water from rainwater tanks. An important source of water pollution in the region is due to municipal waste-water leaking out through septic tanks in rural areas, while in larger settlements it is only partially cleaned by treatment plants.

All settlements are connected to the

national electricity network, while natural gas is supplied only in Novo mesto. The region has 319 telephone lines per 1 000 inhabitants, which is 11% below the national average. Several smaller, remote settlements still have no telephone connection.

**Current expenditure for environmental protection - 1997****Everything in the regional centre Novo mesto**

Although the population of Novo mesto exceeded 5 000 people only at the beginning of the 1950s, it was already an important cultural centre in the 19th century, thanks in particular to a grammar school established in 1746 which still exists today. Novo mesto also has a high-school centre with numerous educational programmes on the high school and vocational school levels, as well as a technical school of mechanical engineering. There is also a smaller high-school centre in Črnomelj.

In recent years, the successful and financially strong industrial community in the region has been advocating the idea of establishing a completely new university centre in Novo mesto.

There is a regional general hospital in Novo mesto. Health services are also provided in thermal health resorts in Dolenjske Toplice and Šmarješke Toplice.

Cultural attractions in Novo mesto include the Dolenjska Museum with its rich collections of items from the Bronze and Iron Ages, the Dolenjska Gallery, a study library, as well as two local radio and television

**Utilities - 1997**

|   | Dolenjska | Slovenia |
|---|-----------|----------|
| Dwellings connected to water supply system (%)    | 95.1      | 97.6     |
| Dwellings connected to sewerage system (%)        | 95.1      | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 57.5      | 71.9     |
| Telephone connections per 1000 population         | 319       | 357      |
| Number of doctors per 1000 population             | 2.1       | 2.2      |
| Number of hospital beds per 1000 population       | 4.8       | 5.7      |

stations. The Bela krajina regional museum and the Fire Fighting Museum are located in Metlika castle. The Pleterje Carthusian monastery, established in 1136, is also very important for Slovenian culture.

**Number of pupils - 1998**

|                                       |        |
|---------------------------------------|--------|
| Pre-school                            | 3 370  |
| Primary                               | 12 048 |
| Lower secondary                       | 1 063  |
| Higher secondary (vocational/general) | 4 931  |
| Tertiary (higher education)           | 2 973  |
| Total                                 | 24 385 |



# Osrednjeslovenska

## Home to Slovenia's capital

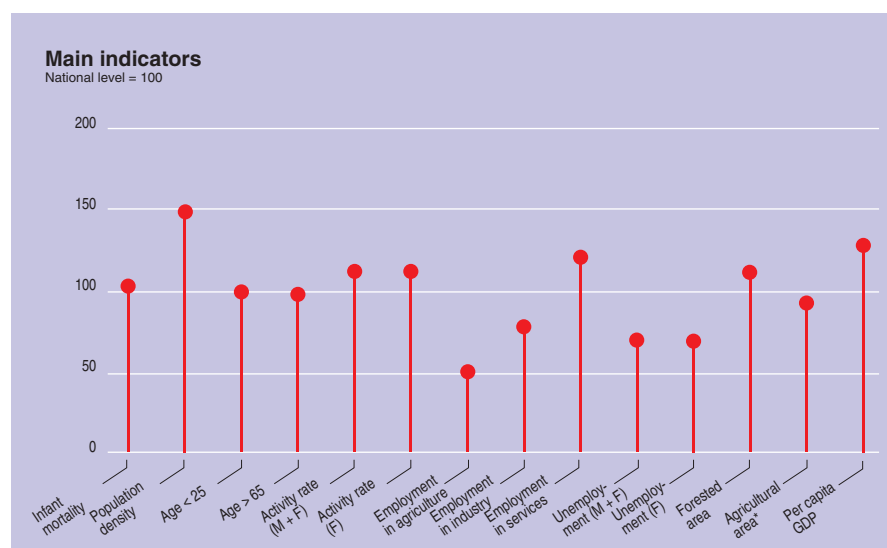
The largest Slovenian region by size and population extends down through Slovenia from the Austrian border in the north to the Kolpa river on the Croatian border in the south. Ljubljana, the capital of Slovenia, is situated in the large Ljubljana Basin, and forms the economic and population nucleus of the country. Ljubljana was established on the site of the Roman settlement of Emona, and nowadays sits at the junction of two of Slovenia's most important traffic routes. From the 14th century, it was the capital of the Carniola duchy. Since the 19th century, it has been a cultural capital for all Slovenes, scattered among five Habsburg hereditary lands as they were at that time, and also one of the nation's unifying forces. Today, the region is divided between 30 municipalities.

The region has a rich diversity of landscape arching around the densely populated and economically strong eastern part of the Ljubljana Basin. To the north are the high Kamnik and Savinja Alps with several peaks over 2000 m. The Polhov Gradec and Sava subalpine mountains are situated to the west and east, while to the south are the vast Ljubljana marshes, offering a rich diversity of swamp and marsh-land habitats. Densely forested Dinaric karst, one of the last Central European refuges of brown bear, lynx and wolf, rises abruptly from the southern border of the Ljubljana marshes. This karst area with no springs nor surface water consists mostly of forested mountain ranges, with the majority of its population living in the fertile "poljes" (broad depressions in karst area with flat and fertile bottom surrounded by forested mountains) between them.

In the 14th century, local feudal lords colonised the karst area around the town of Kočevje with farmers from southern and central Germany. They cleared vast forests and preserved their language and culture through the centuries, until they "voluntarily" migrated to the Brežice area in what today is Spodnjeposavska region, which had at the time been annexed by the German Reich, during the 1941-1942 period. After the end of World War II, their abandoned villages and fields were gradually overgrown by woodland.



Ljubljana - winter in the older part of the capital beside the Ljubljanica River below the medieval castle (Photograph: Jerneja Fridl)



## The pull of the capital

The most obvious advantages of this region are its favourable position at the crossroads of the main transport routes and the presence of the capital city of Ljubljana. After Slovenia gained its independence, probably too many decision-making functions, key governmental activities and other services of national importance were concentrated in Ljubljana, which may not be the most appropriate alternative to the former socialist model of multi-centred development. In a European context, Ljubljana is only a medium-sized town, but nevertheless there is easy access to it from abroad as well as from most of Slovenia.

The other advantage the region has is the

large catchment area of Ljubljana with its population of over half a million, which makes Ljubljana and its surrounding area the most attractive Slovenian region for investment in service activities. Many activities of national importance are also situated in the capital, such as the university, research institutes and the medical centre, as well as the various departments of the state administration, the majority of whose employees work in the capital. It is, therefore, hardly surprising that the active population rate is above the national average, that almost one third of all people employed in the country live here, that average wages and purchasing power are the highest in Slovenia and that the unemployment rate is well below the national average.

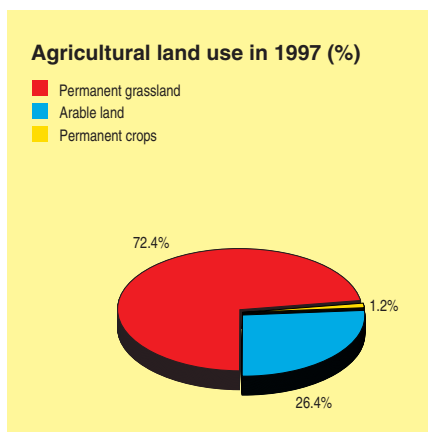


On the negative side, the decline of economic power in the south-eastern part of the region and environmental difficulties and traffic jams in the capital are worth mentioning. The rapid development of Ljubljana has also caused intensive suburbanisation of neighbouring municipalities, mostly those fringing the city to the north, causing, among other effects, increasing economic differentiation between suburban areas north and south of the capital.

### In the heart of Slovenia

Covering 3 546 km<sup>2</sup> (17.5% or more than one sixth of the national territory), this is the largest Slovenian region consisting of four different parts. Its largest southern part is the Dinaric karst, a region of predominantly forested karst mountains, extending from the Ljubljana Basin in the north to the Kolpa river on the Croatian border in the south. Most of the settlements and agricultural land are located in poljes between the mountains, and of these the Kočevjopolje (73 km<sup>2</sup>) is the largest polje in Slovenia.

In the extreme northern part of the region there are the Kamnik and Savinja Alps (the highest peak, Grintovec, 2 558 m). The Ljubljana Basin, filled with gravel sediments, is situated between the Dinaric karst and Alpine mountains. It contains the



majority of the region's farmland and almost 75% of the region's population. The fourth part of the region consists of mostly forested subalpine mountains, slightly over 1 000 m in height – the Polhov Gradec Mountains to the west of Ljubljana and the Sava Mountains to the east.

The climate is moderately continental with average temperatures between  $-1.1^{\circ}\text{C}$  (January) and  $19.9^{\circ}\text{C}$  (July) and annual precipitation between 1 300-1 800 mm, falling in all seasons but predominantly in the autumn. Temperature inversion accompanied by fog is common in the Ljubljana Basin (on average 120 days annually), while snow cover lasts 55-65 days a year.

The majority of towns are situated in the Ljubljana Basin, including Ljubljana itself

### Which regions are similar to Osrednjeslovenska?

#### Employment structure:

33% industry  
 Magdeburg (D)  
 Småland med öarna (S)  
 Lääne-Eesti (EE)

#### Area:

3 546 km<sup>2</sup>  
 Kent CC (UK)  
 Catania (I)  
 Riga (LV)

#### Population:

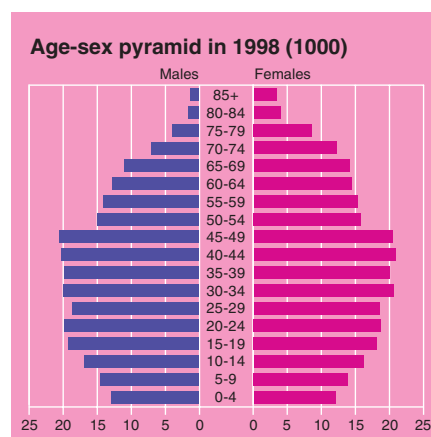
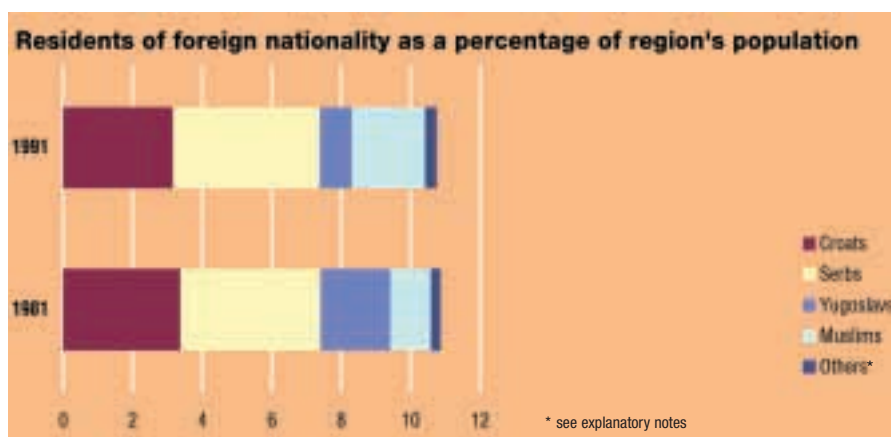
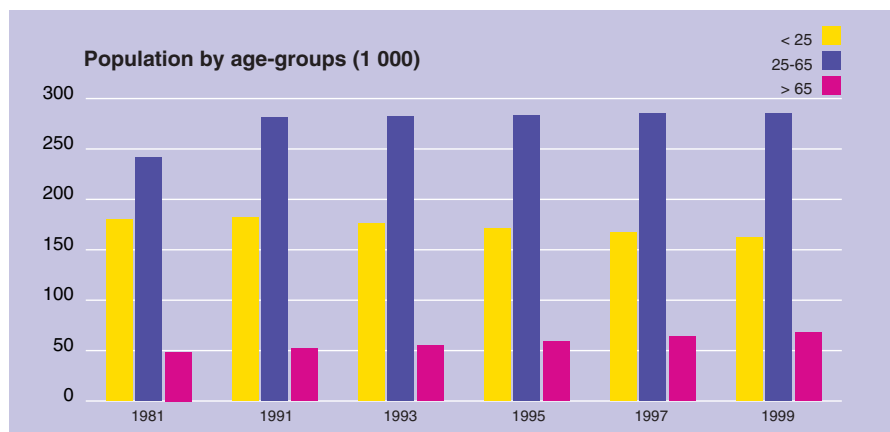
515 294 inhabitants  
 Ain (F)  
 Hannover, Kreisfreie Stadt (D)  
 Olt (RO)

### Agriculture 1997

|   |         |
|---|---------|
| Number of private farms   | 11 802  |
| Persons working in agriculture                                      | 6 030   |
| Total agricultural area (ha)  | 75 017  |
| Total livestock   | 186 704 |
| Cattle per 100 ha of total agricultural land                        | 118.5   |
| Pigs per 100 ha of total agricultural land                          | 113.6   |
| Main products - proportion of arable land devoted to production of: |         |
| Cereals   | 33.0    |
| Sugar beet  | 0.1     |
| Fodder plants   | 57.0    |
| Potatoes  | 7.6     |

(population 267 000), Domžale (11 600), Kamnik (12 100) and Vrhnika (7 100). Litija (6 400) is located in the Sava valley and other towns, such as Grosuplje (6 000), Ribnica (9 300), Kočevje (9 200) and Logatec (7 200) are in poljes in the southern part of the region.

Osrednjeslovenska has no ore or fossil fuel deposits. The largest river is the Sava with two hydroelectric plants installed to date, while other rivers in the northern part are not suitable for energy production due to their torrential character. The southern karst part of the region has only a few areas of surface water. The western part belongs to the Ljubljanica river basin, while the south-eastern parts drain mostly underground into the Kolpa and Krka rivers.



## No further concentration of the population anticipated

More than a quarter of the total Slovenian population (515 294) lived in this large region at the end of 1998, making it the third most densely settled region in Slovenia (145 people per km<sup>2</sup>). This high density figure is a consequence of the high concentration of the population in and around Ljubljana, while the density in the region's larger, more forested southern part is much lower, running at below 50 people per km<sup>2</sup> in most municipalities.

In the 1970s and 1980s, the population grew constantly and rapidly due to immigration from other parts of Slovenia and the former Yugoslavia. After 1990, the population remained virtually unchanged, although since 1995 a slight decline has been recorded. The reduced birth rate (although it is still above the mortality rate) was the most important contributor to this trend, followed by migration, since the once positive migration balance reversed after 1995, and has been increasingly negative since. The impact of suburbanisation is also felt to a certain extent, a consequence of the enlargement of the motorway network. The radius covered by people

commuting daily to work in the capital has enlarged substantially to include some municipalities from neighbouring regions.

The age structure of the region's population is almost identical to the Slovenian average. The decrease in the number of people under the age of 25 in the 1990-1998 period was almost the same as that nationally, however the number of people over the age of 65 increased by almost one third. For the time being, these figures do not indicate the ageing of the region's population since the percentage of older people is still marginally below the national average. Nevertheless, it is likely that the population will not continue to concentrate in Osrednjeslovenska in the foreseeable future.

While there are no non-Slovene ethnic minorities in Osrednjeslovenska, the percentage of the non-Slovene population (16%) is the second highest in Slovenia, surpassed only by the Obalno-kraška region. According to the 1991 census, the percentage of immigrants from other parts of the former Yugoslavia was only slightly above the national average, although the percentage of people from other countries was high. Their number increased rapidly after Slovenia's independence with the

reinforcement of political and economic ties with other countries. As a result, at the beginning of 1999, more than 25% of all foreigners residing permanently or temporarily in Slovenia lived in the city municipality of Ljubljana.

## Main enterprises

| Name   | Activity                  |
|--|---------------------------|
| "Ministrstvo za obrambo Ljubljana, Generalštab SV" | Defence activities        |
| Ministrstvo za obrambo Ljubljana                   | Defence activities        |
| Ministrstvo za notranje zadeve Ljubljana           | Law enforcement           |
| Lek d.d. Ljubljana                                 | Pharmaceutical products   |
| "KC Ljubljana, OE Kirurška služba"                 | Hospital activities       |
| Nova ljubljanska banka d.o.Ljubljana               | Financial services        |
| Titan d.d. Kamnik                                  | Metal products            |
| Lpp d.o.o. Ljubljana                               | Urban passenger transport |
| "KC Ljubljana, OE Uni.interne klinike Zaloška"     | Hospital activities       |
| SZ d.d Ljubljana                                   | Rail transport            |



### Service activities dominant in the capital

Of all Slovenia's regions, this is economically the most important and generates one third of the nation's total gross value added (33.5 %). Due to the high concentration of service activities of national importance, the region's GDP per capita exceeds the national average by almost 30 %. Services, centred on Ljubljana, generate over two-thirds of gross value added, followed by the secondary sector (29.6 %). The contribution from agriculture and forestry is only 1.8 %.

The wider Ljubljana area is characterised by a very diversified agriculture base, ranging from dairy and beef cattle breeding to poultry and pig farming, as well as to the growing of vegetables to supply the capital. In mountainous and karst areas, dairy beef cattle farming prevail.

Although there is considerable industry in and around Ljubljana, it is not so predominant as in Maribor, for example. Most are medium-size and small enterprises: more than 25 % of all small businesses in Slovenia are situated here. Industry is very diverse, so the severe crisis in the classical industrial branches that struck many parts

of Slovenia after independence was not felt so strongly in the region. Key industrial sectors are the chemical (production of dyes, varnishes and other protective materials in Medvode, Domžale and Ljubljana), metal and machine engineering (Ljubljana, Kamnik), pharmaceutical (Lek in Ljubljana), food processing and tobacco (Ljubljana), textile (Domžale, Ljubljana, Kočevje) and leather (Vrhnikia, Domžale) industries. The wood processing industry is concentrated mostly around Kamnik and in the southern part of the region (Logatec, Ribnica and Kočevje).

Service activities of national importance were already highly concentrated in Ljubljana during the socialist period and this trend was further reinforced after independence. Government ministries, the university, cultural institutions, many high schools, the headquarters of Slovenian Telekom, Slovenian Railways, the electricity distribution company, pension scheme and health insurance institutions, the largest bank in Slovenia (Nova Ljubljanska banka) and the stock exchange, are all located in Ljubljana. Ljubljana is also an important centre for specialised international fairs, as well as being the largest congress centre in Slovenia.

A high concentration of people and its

above-average purchasing power make Ljubljana also an important trade centre. The head offices of several large commercial groups are located in Ljubljana while foreign trade corporations are also active in acquiring market share here.

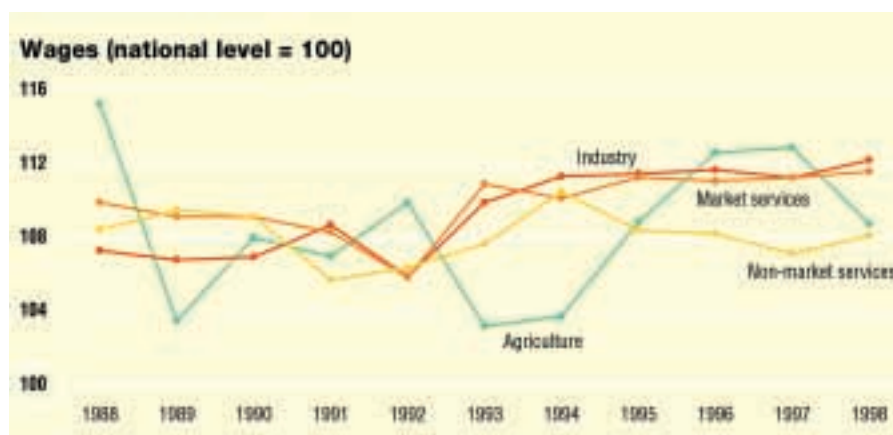
Compared to other regions, Osrednjeslovenska's economy benefits from the presence of a highly skilled and educated workforce, substantial research and development capabilities in Ljubljana and a high concentration of domestic and foreign capital. Much of the potential of these assets has not been sufficiently exploited so far, especially in research and development, which has relatively weak links with the production sector. This partly explains why the region has not been so successful in completing the transition from labour-intensive to capital- and innovation-intensive industries.

### Capital city lifts average earnings

Average net wages in Osrednjeslovenska increased by 13.1% between 1995 and 1998. The highest increase was recorded in the construction and industry sectors and in non-commercial service activities, while the lowest rise was noted in agriculture and in commercial service activities.

Not unsurprisingly with the presence of the capital city in the region, average earnings are well above average, and in 1998 they were 595 ECU, or 11% above the national average. Wages in industry and commercial service activities are the highest in Slovenia, which is the result of successful production programmes in industry and a high concentration of profitable service activities. Furthermore, earnings are above average across all sectors.

Earned income represent more than a half of all household incomes, while one third comes from pensions and other social insurance sources. Mixed farmer-employee households in rural areas receive considerable additional income from agriculture. Due to the high concentration of educated people in Ljubljana, income from copyright royalties and other types of intellectual work are also important here.



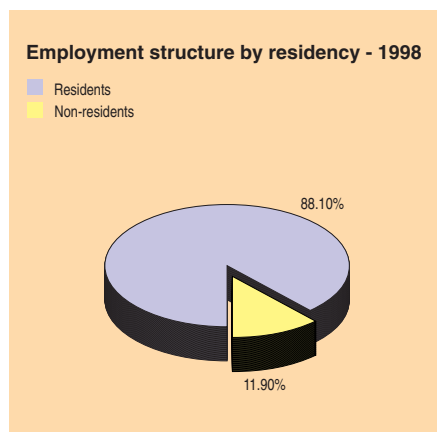
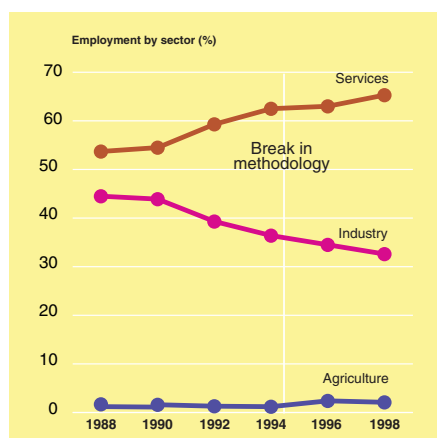




## Good employment opportunities in Ljubljana

By far the highest concentration of jobs in the country, especially in the service sector, is found in and around the capital. Head offices of almost one third of all Slovenian firms and commercial companies are located in the city municipality of Ljubljana, while many small businesses are situated throughout the entire northern part of the region. Almost two thirds of the workforce is involved in service activities (65.3%), 32.6% is employed in industry while only 2.1% is employed in agriculture and forestry.

When Ljubljana became the capital of Slovenia after independence, the concentration of political and economic power increased considerably there, although this is not reflected in the employment structure. In the period 1991-1998, the number of employees in Osrednjeslovenska increased by 14.5% while the combined increase in all other Slovenian regions amounted to 7.8%. Interesting differences arose between this region and the rest of Slovenia. While the number of employees in industry declined by 20% in both parts of the country, the increase in the case of the service sector was several percent



lower in Osrednjeslovenska (31.3%) than in the rest of Slovenia (35.1%).

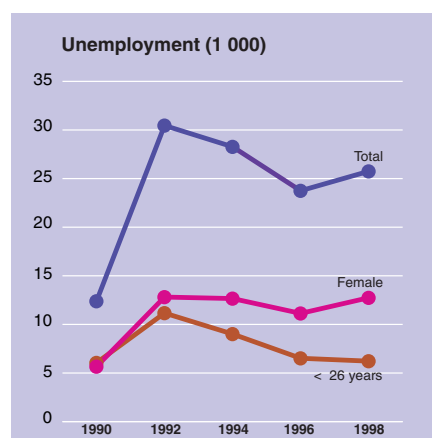
As elsewhere in Slovenia, most people are employed on full-time contracts, and the share of temporary employment here is the smallest in Slovenia. While female employment rates in the region are within the norms, what distinguishes the workforce here is the very large number of people commuting daily to Ljubljana within a radius of 30 km. More than 10% of the workforce comes to work from neighbouring regions, especially from Gorenjska and Zasavska.

Among the benefits of having a relatively successful economy is the region's low unemployment rate (9.8%), and indeed only Goriška has a slightly lower unemployment rate. The period 1990-1993 was characterised by a dramatic increase in unemployment, when the number unemployed increased by 177%, a substantially higher rise than in other Slovenian regions. Since then the number of unemployed has reduced by almost 25%. A similar trend of decreasing unemployment in all other regions in western Slovenia, except in Notranjska-kraška, only confirms the fact that this part of the country adapted to new market conditions more successfully and that the centre of economic power in Slovenia is increasingly shifting westwards.

## The centre of the Slovenian motorway hub

Ljubljana is very favourably located for road transportation. It is situated in the heartland of the country where both lines of the Slovenian motorway hub intersect. These are the European traffic corridors 5 (Venice-Ljubljana-Budapest-Kiev) and 10 (Munich-Salzburg-Ljubljana-Beograd-Istanbul). Therefore, four motorways radiate from Ljubljana as well as two other important roads: the Ljubljana-Litija-Zidani Most road, leading towards the east through the Sava valley and the Ljubljana-Kočevje-Delnice (Croatia) road, leading towards the south-east.

In the plains, a very dense network of local, almost entirely paved, roads exists. Road density is lower in the more sparsely settled karst part of the region in the south and in the mountainous western part of the region. Local and forest roads connect all villages or mountain farms with the valleys which is very important for the people commuting daily to work in local centres or Ljubljana. Although Ljubljana has a good network of bus and railway lines connecting the city with the surrounding settlements, the majority of daily commuters use passenger cars. This makes the arteri-



al roads and streets in the city centre the busiest road sections in the whole country in spite of the construction of the 38 km long motorway ring road around Ljubljana. There are 216 000 passenger cars in the region or 418 cars per 1 000 persons which is slightly above the national average.

Ljubljana is also an important railway hub. Here, several railway tracks branch off from the electrified double-track Southern railway (constructed 1841-1857 between Vienna and Trieste). These are the electrified single-track railway from Ljubljana to Jesenice, the single-track railway leading towards Novo mesto and Karlovac and the local Ljubljana-Kamnik line. The Grosuplje-Kočevje railway line is used only for freight transport.

The Ljubljana Brnik international airport, 30 km north of Ljubljana, connects Slovenia with 19 European cities and Tel Aviv. Rivers in the region are not navigable.

**Surfaced public roads – 1997**

|  | Osrednjeslovenska | Slovenia |
|--|-------------------|----------|
| Length in km per km <sup>2</sup>                             | 0.24              | 0.23     |
| Length in km per 1 000 population                            | 1.6               | 2.4      |
| Length in km per 1 000 private passenger cars                | 3.9               | 6.1      |
| % private passenger cars in total number of vehicles         | 88                | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.4               | 0.5      |

**Polluted environment in the central part of the region**

The majority of the region's population and economic activities are concentrated in the Ljubljana Basin where the environment is under enormous pressure, while in outlying parts of the region this pressure is considerably less.

Temperature inversion is frequent in the Ljubljana Basin during the autumn and winter months. Made worse by the fog, high concentrations of sulphur dioxide (SO<sub>2</sub>), black smoke, nitrogen oxides and carbon monoxide are emitted by household heating, the two thermal plants and traffic. Due to increasing road traffic in Ljubljana, ozone concentrations are also increasing.

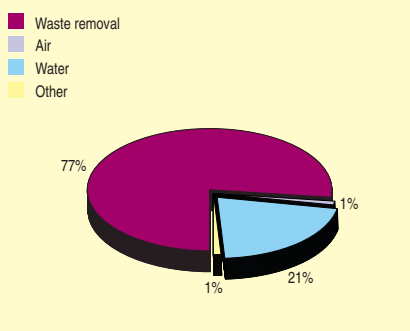
Surface water and groundwater in the basin is also heavily polluted. The worst conditions are found in Ljubljana, which is still without a central waste-water treatment plant. Increased pollution of groundwater with pesticides is also a cause for concern.

The southern part of Osrednjeslovenska is a karst area with a prevailing underground run-off. Due to the high bedrock permeability and their weak self-purification capacity, karst waters are extremely vulnerable to pollution from the surface. The largest source of pollution is waste-water from households, industry and agriculture, while an additional threat is posed by the transportation of hazardous substances.

Drinking water for the settlements in the Ljubljana Basin is supplied from groundwater, while regional and local water supply systems in karst areas are fed from karst springs. Municipal waste is disposed of at several large landfills, and illegal waste disposal sites represent a problem especially around Ljubljana.

Most of Ljubljana and the settlements in its vicinity are now connected to the natural

gas network, a move which contributed considerably to reducing air pollution. Ljubljana also has two combined heat and power plants that supply the city's district heating system. The telephone network in the entire region is dense, and with 453 telephone lines per 1 000 inhabitants, the region exceeds the national average by 25%.

**Current expenditure for environmental protection - 1997****Institutions of national importance in the capital**

Ljubljana, the cultural and educational centre for all Slovenes since the mid-19th century is home to Ljubljana University with its 20 faculties and 3 art academies. Also located here are the Slovenian Academy of Science and Arts, the Slovenian National Theatre, the Slovenian Philharmonic Orchestra, the National Radio and Television company and the Ivan Cankar Cultural and Congress Centre. Ljubljana is also the largest high-school centre in Slovenia, with smaller high-school centres in the region's other towns.

Most of the national research capacity is concentrated here, especially in the Jožef Stefan research institute and in the National Institute of Chemistry. In the humanist area, the most important is the Scientific-Research Centre of the Slovenian Academy of Science and Arts with 16 institutes. The Ljubljana Medical Centre is the largest and the most important health institution in Slovenia with numerous clinics and institutes, including the largest rehabilitation institute in the country.

There are numerous other institutions of

**Utilities - 1997**

|   | Osrednjeslovenska | Slovenia |
|---|-------------------|----------|
| Dwellings connected to water supply system (%)    | 99.1              | 97.6     |
| Dwellings connected to sewerage system (%)        | 99.1              | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 76.5              | 71.9     |
| Telephone connections per 1000 population         | 453               | 357      |
| Number of doctors per 1000 population             | 3.5               | 2.2      |
| Number of hospital beds per 1000 population       | 8.2               | 5.7      |

national importance in Ljubljana, such as the National and University Library, several museums (the Natural Sciences Museum) and galleries (the National Gallery). The annual International Summer Festival has been taking place in Ljubljana since 1954.

Smaller cultural centres in Kamnik, Ribnica and Kočevje remain in the shadow of the capital. However, the Cistercian monastery in Stična, established in 1136, is very important for Slovenian culture.

**Number of pupils - 1998**

|                                       |         |
|---------------------------------------|---------|
| Pre-school                            | 19 508  |
| Primary                               | 52 038  |
| Lower secondary                       | 9 491   |
| Higher secondary (vocational/general) | 18 521  |
| Tertiary (higher education)           | 17 340  |
| Total                                 | 116 898 |



# Gorenjska

## Good links across the Alps to Austria

The most Alpine of all Slovenian regions is situated in the north-western part of the country, bordering Austria in the north and Italy in the west. Most of the region is covered by the towering Julian Alps with numerous serrated peaks exceeding 2 000 m, including Triglav (2 864 m), the highest Slovenian mountain and one of Slovenia's national symbols. Due to its natural beauty, almost the entire Julian Alps range is protected as the Triglav National Park.

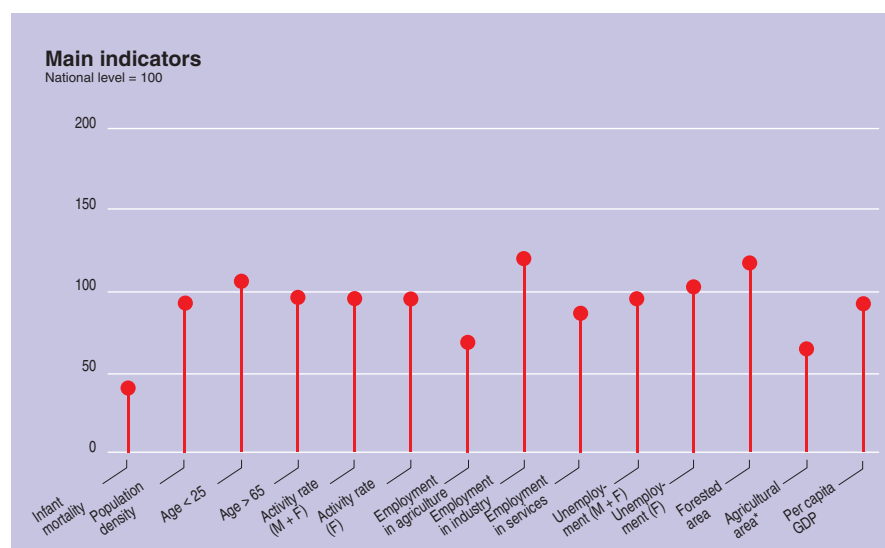
The Karavanke range along the Austrian border also belongs to the high Alpine regions. Between these two mountainous areas, the Upper Sava valley runs in an east-west direction. Further to the east it opens up into the densely populated Ljubljana Basin where the town of Kranj, the centre of Gorenjska, is situated in the middle of the plain. In the south-western part of the region there are the Škofja Loka Mountains with villages clustered in the valleys and isolated farmsteads on steep slopes.

From 1335 until the end of World War I, virtually the whole region was part of the duchy of Carniola, one of the Habsburg hereditary lands. Today, the region is divided between 17 municipalities.

Economically, Gorenjska is one of the most developed regions in Slovenia. Its prosperity is based on a well developed industrial tradition, dating back to the 19th century when it developed from ironworks and shoemaking which were very important at that time. Tourism in Bled, Kranjska Gora and Bohinj, and agriculture on the plains and in the surrounding mountains are also of significance. The region has good links to Ljubljana and the federal province of Carinthia in Austria. As well as a railway tunnel and an almost 8 km long motorway tunnel that connect the region with Austria, three mountain passes lead across the Karavanke range. Ljubljana international airport is situated in the eastern part of the region.



Autumn in the Julian Alps - the Škratica range in the Triglav National Park (Photograph: Karel Natek)



## Economically developed region at the foot of high rocky mountains

With relatively well developed industry in the regional centre and in numerous smaller towns, successful tourism and agriculture (oriented primarily towards dairy farming and beef cattle breeding), Gorenjska is among the most economically advanced regions in Slovenia. Good access to the majority of settlements is also favourable, as the population is concentrated in the plains along main traffic routes and in wider river valleys where the rest of the infrastructure is also good.

Gorenjska is also a leading resort area thanks to its picturesque and carefully maintained alpine landscape and unspoilt

environment, especially within the large Triglav National Park. It also has a wide variety of tourist facilities which are quite scarce in many other parts of Slovenia.

As in the Lower Savinja Valley, a substantial part of Gorenjska's industry is dispersed among smaller towns. Following their development into small but distinctive local supply centres in the second half of the 19th century, today they are centres of economically strong municipalities. Nevertheless, local industry also faced substantial difficulties during the transition from the former state-controlled to the current market oriented economy. The most affected were the iron industry in Jesenice and the labour-intensive shoemaking and textile industries. However, thanks to its geographical situation and its strong



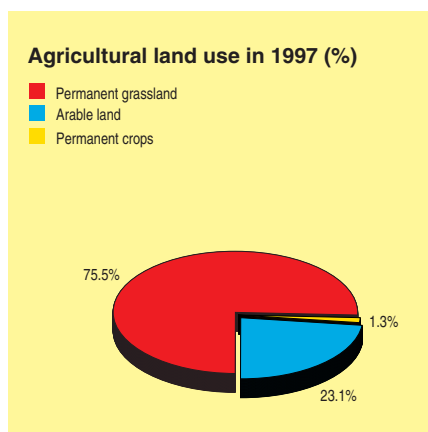
municipalities, this part of Slovenia is very attractive to foreign capital investment, so quite a few local industries are owned to some extent by foreign investors.

Negative factors include the limited scope for the development of agriculture, due to the less favourable alpine climate and steep slopes in the mountains. The proximity of Ljubljana is favourable on the one hand, while on the other the short distance between Ljubljana and Kranj makes it difficult for Kranj to develop fully into a regional centre comparable to Celje or Novo mesto.

### The most alpine of Slovenia's regions

More than half of Gorenjska, which covers 2 137 km<sup>2</sup> (10.5% of the national territory), consists of the Julian Alps and the Karavanke Mountains. A substantial part of these mountains, with their deeply incised valleys reshaped by glaciers, rises above the tree line (around 1 800 m). The Škofja Loka Mountains in the upper reaches of the Sora river are situated in the southern part of the region. They comprise two wider valleys along the Poljanska Sora and the Selška Sora rivers, with villages, fields and meadows at the bottom and mostly forested ridges with isolated farmsteads on the slopes.

The Upper Sava Valley which lies between



the Julian Alps and the Karavanke Mountains opens up into the Ljubljana Basin downstream from Jesenice. The region's economic activity and the population of Gorenjska are concentrated in the northern part of the basin as are almost all the towns. The regional centre Kranj (population 36 700), Škofja Loka (12 600), Tržič (3 900), Radovljica (6 000) and Bled (5 600) are located here. Not many towns are found outside the basin: Jesenice with iron industry (13 700) and tourist-oriented Kranjska Gora (1 600) are in the Upper Sava Valley.

Due to its higher altitudes, the region has a moderate mountain climate with the lowest average temperatures in Slovenia, annual precipitation between 1 300-1 700 mm and substantial snow cover that persists for 65-

### Which regions are similar to Gorenjska?

#### Population:

195 000 inhabitants  
Zuidoost-Friesland (NL)  
Schleswig-Flensburg (D)  
Montana (BG)

#### Age structure:

33% under 25  
Brabant Wallon (B)  
Vilnius (LT)  
Balears (E)

#### Area:

2 137 km<sup>2</sup>  
Padova (I)  
Märkisch-Oderland (D)  
Komárom-Esztergom (HU)

### Agriculture 1997

|   |        |
|---|--------|
| Number of private farms   | 5 459  |
| Persons working in agriculture                                      | 2 041  |
| Total agricultural area (ha)  | 31 633 |
| Total livestock   | 63 892 |
| Cattle per 100 ha of total agricultural land                        | 158.9  |
| Pigs per 100 ha of total agricultural land                          | 19.0   |
| Main products - proportion of arable land devoted to production of: |        |
| Cereals   | 26.7   |
| Sugar beet  | 0.5    |
| Fodder plants   | 54.8   |
| Potatoes  | 16.6   |

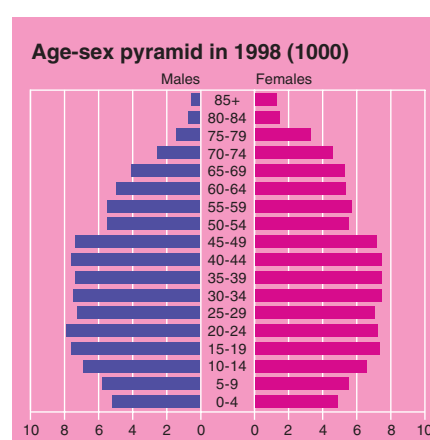
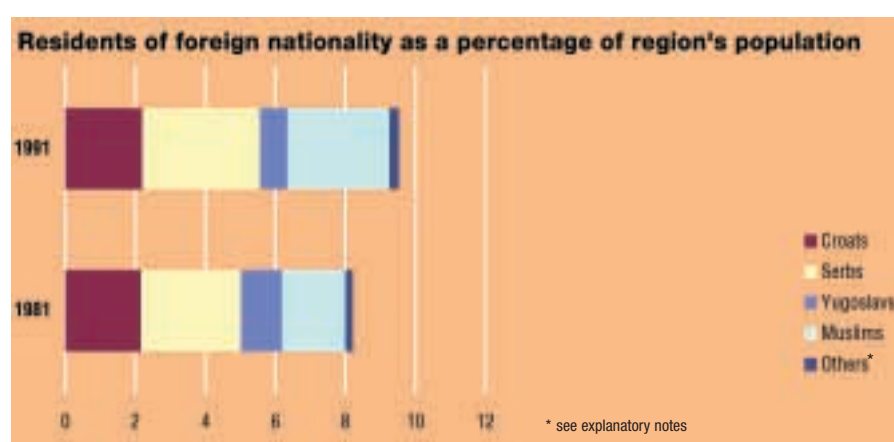
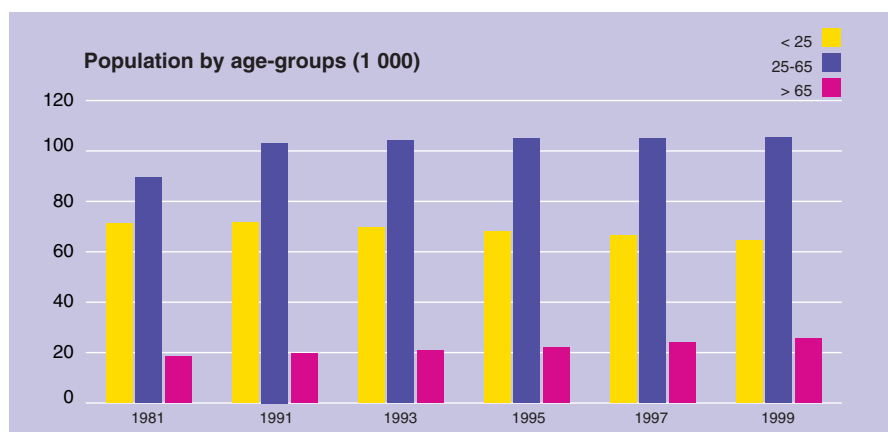
130 days a year in the valleys.

Gorenjska has no ore or fossil fuel deposits. A uranium mine operated near Gorenja vas in the Škofja Loka Mountains between 1981-1990 but was closed down because it was unprofitable. Spruce and beech forests in the lower parts of the Alps and in the Škofja Loka Mountains are an important natural resource since they cover two thirds of the region. Agricultural land comprises only 14.8% of the region, almost exclusively in the Ljubljana Basin and in the valleys in the Škofja Loka Mountains.

The abundance of water is also an important natural resource, especially because the rivers in their upper courses are relatively clean and unpolluted. The largest



river is the Sava, dammed near Moste for electricity production, while a few small, privately owned hydroelectric plants are installed on several smaller streams. Lakes Bled (1.4 km<sup>2</sup>) and Bohinj (3.18 km<sup>2</sup>), situated in the picturesque alpine environment, attract many tourists.



## Slight increase in population

At the end of 1998, 195 000 people lived in this mountainous region (9.9% of the national population). The average population density at 91 people per km<sup>2</sup> was only slightly below the national average, however there are large differences between the urban municipality of Kranj in the plain (over 350 people per km<sup>2</sup>) and the mountainous Bohinj municipality (15.5 people per km<sup>2</sup>).

Gorenjska is one of the few regions where the population actually increased in the 1990-1998 period and is, apart from Dolenjska, the only region where the population slightly increased even after 1995. Such a trend is a consequence of the relatively high and above-average birth rate, which is higher than the mortality rate, and a positive migration balance. Indeed, the region has the lowest mortality rate in Slovenia at the moment as well as the second highest birth rate. The latter indicator decreased by only 24.8% in the 1985-1997 period (by 30% in Slovenia), while the influx of immigrants from other regions, mostly from Osrednjeslovenska, is also slightly increasing.

The age structure of the population is also

slightly more favourable than for most of the other regions. The region's percentage of people below the age of 25 is above the national average, while the percentage of people above the age of 65 is below average. The number of younger people declined by 10% in the 1990-1998 period, which is below the national average, while the number of people above the age of 65 increased substantially (by 29.5%).

While the region has no ethnic minorities, the percentage of non-Slovenes in the population (14%) is above the national average. They are almost entirely immigrants from other parts of the former Yugoslavia and their descendants, who mostly settled in the region before 1981. They mainly live in Jesenice and Kranj, industrial towns with a history of labour shortages.

## Main enterprises

| Name                          | Activity                |
|-------------------------------|-------------------------|
| Iskrameco d.d. Kranj          | Electronic devices      |
| Sava Tires d.o.o. Kranj       | Rubber tyres and tubes  |
| SŽ Acroni d.o.o. Jesenice     | Iron and steel products |
| Iskratek d.o.o. Kranj         | Digital exchanges       |
| Domel Železniki               | Electrical equipment    |
| Alpina Žiri                   | Footwear                |
| Elan Line Begunje             | Sports goods            |
| Peko Tržič                    | Footwear                |
| Planika d.d. Kranj v stečajju | Footwear                |
| Aquasava Kranj                | Rubber products         |



### Small industrial centres, and flourishing tourist industry in the mountains

In terms of economic development assessed on its contribution to national GDP, Gorenjska ranks fourth among the Slovenian regions. Despite the fact that it is known for its well developed tourist sector, industry is the driving force of its economy. It contributes 45.6% to the region's gross added value, the services sector half of the gross added value (51.4%) while the share of agriculture is 3.0%.

Agriculture is oriented towards dairy and beef cattle farming, so fodder (silage corn, grain corn) is produced on most of the agricultural land in the plains. Other important crops include potatoes and rye. The average farm size is larger than in other parts of Slovenia, especially in the Škofja Loka Mountains where farms include large areas of forest. However, once important alpine pastures in the high mountains have been left to stagnate for several decades.

Relatively small industrial centres established as early as the 19th century are a characteristic feature of Gorenjska. Typically, one industrial branch prevails in each centre, especially the iron industry in

Jesenice (the largest ironworks in Slovenia), the footwear industry in Žiri and Tržič, and the metal industry in Kropa. After World War II, Kranj became an important centre for the electrical equipment industry with the establishment of Iskra, a large concern that was dismantled during the transition to a market economy. The manufacture of electrical equipment is still one of the leading industrial branches, especially in Kranj, Železniki and Škofja Loka. A sizeable workforce was also the basis for the development of the textile industry (Kranj, Radovljica, Škofja Loka), while timber from vast forests enabled the development of a wood processing and furniture industry (Bled, Bohinjska Bistrica, Škofja Loka).

Other important companies include the car tyre manufacturer Sava Kranj, and Elan from Begunje, which manufactures sports equipment. A substantial share of gross value added is also generated by small businesses.

Although the iron, footwear and textile industries have faced a severe crisis since the 1980s, a substantial number of them adapted successfully to the new market conditions. Most of the companies successfully altered production to meet the

demands of the world market, with several of them receiving financial and technological support from foreign capital investors.

Most service activities are concentrated in the regional centre of Kranj, however less than might be expected, due to the proximity of Ljubljana. Unlike some of the other Slovenian regions, service activities are well represented in smaller local centres.

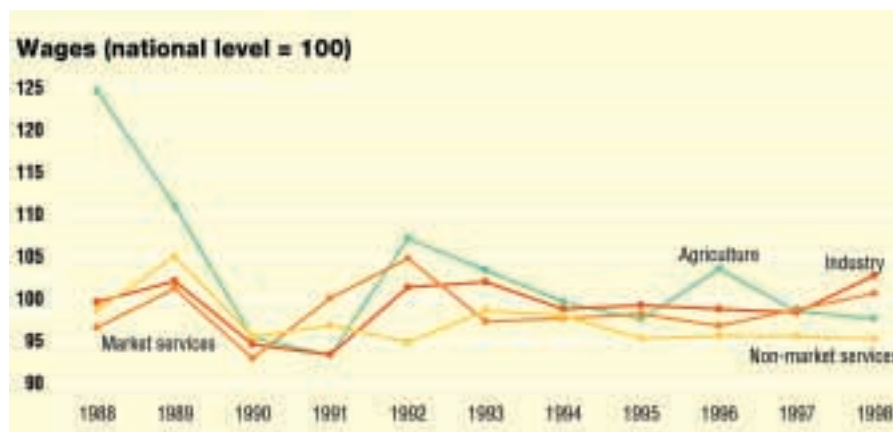
In the Alpine parts of the region tourism is well developed, making Gorenjska the second most important tourist destination in Slovenia, following Obalno-kraška. The most important tourist resorts are Bled, situated on the shores of its picturesque lake, Kranjska Gora, a skiing resort, and Bohinj, with its own lake. Mountaineering is the most popular activity in the Triglav National Park.

### Rising wages catching up with national average

Employees in Gorenjska were fortunate to enjoy average net wages increasing by 16.2% in the period between 1995 and 1998, a figure which represents the highest increase in wages of all the Slovenian regions. This is the result of the above-average wage growth in industry and moderate wage growth in the service sector.

Nevertheless the average net monthly wage in 1998 at 525 ECU was 2.4% below the national average. Net monthly wages in commercial service activities (especially tourism, catering and trade; 562 ECU) and industry (480 ECU) were among the highest in Slovenia, while in the construction sector they were substantially below the national average (422 ECU).

Although there are only few pure farming households (usually at least one family member has a job of a different kind), the income from agriculture contributes considerably to the standard of living of many rural households. Households in tourist resorts earn additional income from private room rentals and other tourist-related activities. Quite a number of daily commuters have a well-paid civil service job in Ljubljana, which also contributes to the rather high standard of living in most of the region.

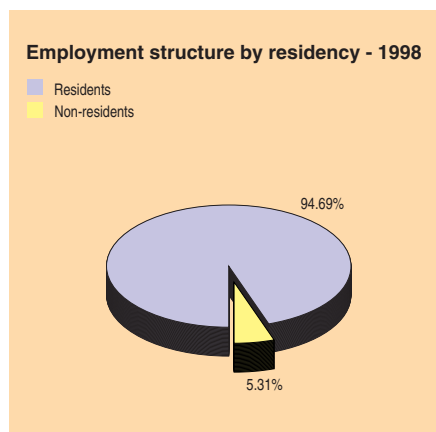
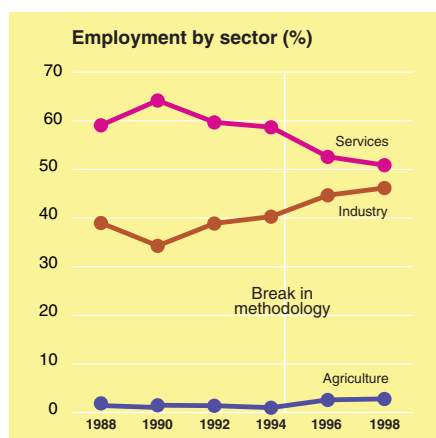




## Substantial surplus of industrial workers

Gorenjska can arguably be placed among the more successful of Slovenian regions in economic terms, although some parts of its economy are in great difficulty. More than half (50.9%) of the workforce works within the industrial sector, 46.2% is employed in the service sector and 2.8% in agriculture and forestry.

Due to the severe economic crisis that struck the iron and steel industry, the textile and the footwear industry after independence, the number of employees in this sector was reduced by almost 20%. At the same time the region lagged far behind the rest of Slovenia in opening up new jobs in the service sector. One of the main reasons for such a situation is the reinforcement of Ljubljana's importance at the expense of the regional centre Kranj, where central functions are relatively less developed than in other regional centres such as Celje (which has almost the same population). The stagnation of tourism in the mountainous part of the region also hindered the development of service sector employment. Evidence of the "outflow" of economic power is also seen in the relatively large numbers of daily commuters



from the Kranj area to near-by Ljubljana, and in fact almost 14% of the region's workforce is employed outside their home region.

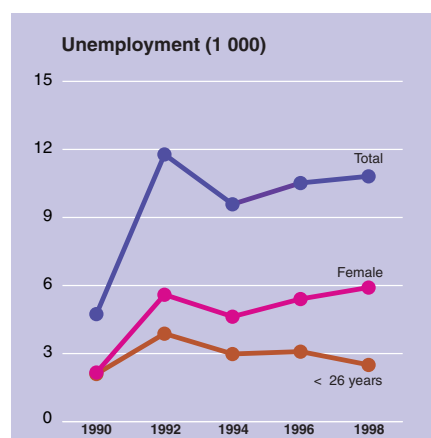
Although as elsewhere in Slovenia, most workers enjoy full-time permanent employment, the number of people working on temporary contract is on the increase and is now over 20%.

Despite several successful economic sectors, the unemployment rate in Gorenjska is relatively high at 13.3%. The percentage of women among the unemployed is above the national average, a consequence of a crisis in the footwear and textile industries. As in Osrednjeslovenska, the worst years for employment were 1990-1993 when the number of unemployed increased by 151%. However compared to Osrednjeslovenska, a much smaller decrease of the unemployment rate was recorded in the following years. Unemployment among young people is not critical and has been decreasing consistently, while the increase in the number of people who have been unemployed for a longer period of time raises concern. The majority of these people are out-of-work labourers with a low educational level, who are not easily retrained for new jobs in the more modern industrial branches or in the service sector.

## Important transport routes to Austria

Since the region is situated on the 10th European traffic corridor running through Munich-Salzburg-Ljubljana-Beograd-Istanbul, the Gorenjska plains are easily accessible. The backbone of the road network is the Ljubljana-Jesenice-Villach (Austria) road, now a motorway for almost all of its length. The 7 864 m long Karavanke tunnel (opened in 1991) serves as the main connection with the Austrian motorway network. Other important road connections include a major road leading across the Ljubelj pass to Austria, the Jesenice-Tarvisio (Italy) regional road and a regional road leading across the Vršič pass (1 611 m; closed during the winter) to the Soča Valley.

Gorenjska has two railway tracks with a total length of 79 km. The older one, connecting Ljubljana and Jesenice (in the past also Tarvisio in Italy), was constructed in 1870. In 1906, it was connected to the Austrian railway network by a 7 975 m long tunnel through the Karavanke mountain range. Between 1901-1906 the picturesque Bohinj railway track was constructed



between Jesenice and Nova Gorica to connect the port of Trieste with the ironworks in Jesenice.

The plains, with a dense road network, contrast with the few valley routes that traverse mountainous areas. The region's 381 cars per 1 000 persons, almost equal to the national average, reflect extensive commuting from rural areas.

The Ljubljana Brnik international airport with a 3 300 m long runway (opened in 1963) is situated on the plain east of Kranj. It is suitable for landing the largest airplanes and is equipped for precise instrumental landing even in unfavourable weather conditions (CAT IIIB). It is also home to Adria Airways, the only Slovenian airline, and the main base of the Slovenian air force. Scheduled flights link the airport with 19 European cities and with Tel Aviv. In 1998, it served 768 000 passengers and carried 6 600 tons of freight.

**Surfaced public roads – 1997**

|  | Gorenjska | Slovenia |
|--|-----------|----------|
| Length in km per km <sup>2</sup>                             | 0.24      | 0.23     |
| Length in km per 1 000 population                            | 2.6       | 2.4      |
| Length in km per 1 000 private passenger cars                | 6.8       | 6.1      |
| % private passenger cars in total number of vehicles         | 88        | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.3       | 0.5      |

**Well preserved alpine environment**

The mountainous parts of Gorenjska are famous for their natural beauty and well preserved environment, especially in the Triglav National Park. Although the region is among the most economically developed, the relatively densely settled valleys have succeeded in avoiding serious pollution. Thanks to the region's position in the upper part of the Ljubljana Basin where temperature inversions are much less frequent, the air is relatively clean. There are also no large industrial polluters in the region. After out-dated technology was replaced in the 1980s at the Jesenice iron works, negative impacts from there were reduced considerably.

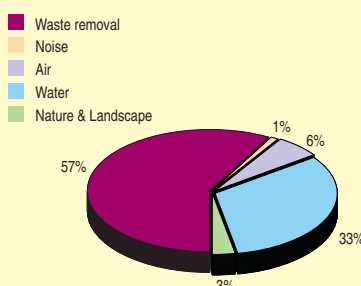
Clean mountain lakes and streams are a great resource in the region. The latter are exposed to some pollution from municipal and industrial wastewater in their lower courses despite the installation of treatment plants in larger towns. The nitrate content in groundwater in the plains below Kranj, the main source of drinking water for Kranj and Ljubljana, also gives some cause for concern.

Serious problems are, however, experienced in Lake Bled, where algal blooms take place every few years due to eutrophication. Nevertheless, the deterioration of water quality has been prevented through an artificial influx of fresh water, the moving of water from the bottom layers of the lake through a siphon and the construction of a sewage system around the lake.

Municipal waste is mostly disposed of at municipal landfills without prior treatment. There are certain problems related to illegal waste disposal sites around the settlements.

Most settlements in the plains are connected to municipal water supply systems while local and private water supply systems prevail in the mountains. A consider-

able share of households and industry use natural gas from the expanding local natural gas network. All settlements and the majority of isolated farmsteads are connected to the telephone network; with 373 telephone lines per 1 000 inhabitants, telephone penetration is slightly above the national average.

**Current expenditure for environmental protection - 1997****Small regional centres overshadowed by nearby capital**

An important feature of Gorenjska is the much more even distribution of cultural, educational and other activities in several small local centres, as well as the strong influence of Ljubljana on the region. The most important centre is Kranj with a grammar school, several other high schools and vocational schools, and the Faculty of Organisational Sciences which operates within the framework of Maribor University. Smaller educational centres are situated in Škofja Loka, Jesenice and Radovljica, the latter having the GEA College of Business and a College of Catering and Tourism.

There are no large research institutions in Gorenjska. However, four hospitals are located in the region: a general hospital in Jesenice, a psychiatric hospital in Begunje, a hospital for pulmonary diseases and tuberculosis in Golnik and a maternity hospital in Kranj.

Cultural life is the most developed in Kranj where the Prešeren Theatre, the Gorenjska Museum and the central library are located. Other important cultural centres include Škofja Loka with the Loka Museum

**Utilities - 1997**

|   | Gorenjska | Slovenia |
|---|-----------|----------|
| Dwellings connected to water supply system (%)    | 99.3      | 97.6     |
| Dwellings connected to sewerage system (%)        | 99.3      | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 105.0     | 71.9     |
| Telephone connections per 1000 population         | 373       | 357      |
| Number of doctors per 1000 population             | 1.8       | 2.2      |
| Number of hospital beds per 1000 population       | 3.0       | 5.7      |

in the town's castle, and Radovljica with its Apicultural Museum and art gallery.

**Number of pupils - 1998**

|                                       |        |
|---------------------------------------|--------|
| Pre-school                            | 5 758  |
| Primary                               | 20 943 |
| Lower secondary                       | 2 583  |
| Higher secondary (vocational/general) | 8 532  |
| Tertiary (higher education)           | 6 101  |
| Total                                 | 43 917 |





## Notranjsko-kraška

### Famous for its spectacular karst features

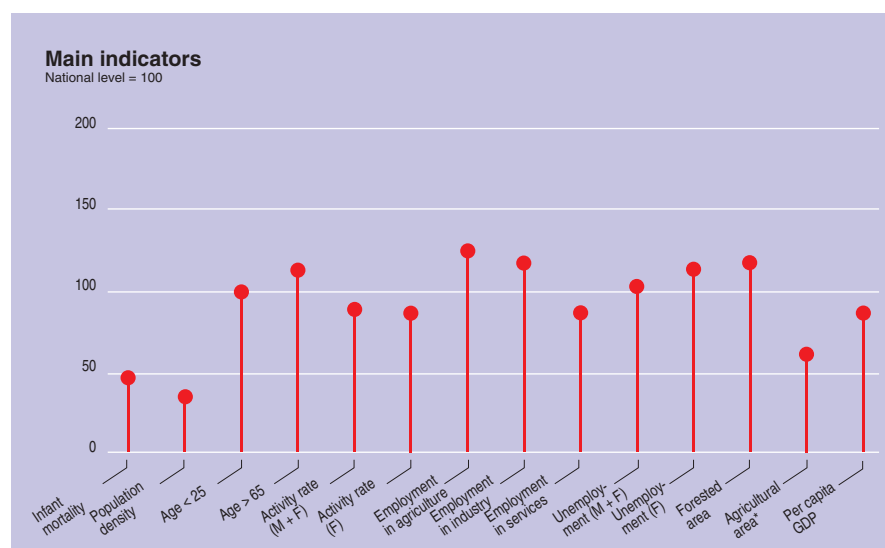
The second smallest Slovenian region by population lies in the southern part of the country and extends all the way to the Croatian border in the south. Its larger eastern part consists of the waterless Snežnik Mountains where all surface water disappears underground through permeable limestone bedrock and flows through unknown channels towards lower-lying karst valleys or “poljes”, where it comes out as abundant karst springs. The entire eastern part of the region is covered with vast forests, and the only settlements can be found in and around the Ljubljana river in the north-east where three poljes lie like fertile oases in the middle of forests. All other settlements in the region are located in its western part, especially in the Postojna Basin with Postojna as the regional centre, and in the fertile Upper Reka Valley where Ilirska Bistrica is the main town.

In the past, the region was part of the Carniola duchy, one of the Habsburg hereditary lands. After the disintegration of the Austro-Hungarian Empire at the end of World War I, it became part of Italy with the Treaty of Rapallo (1920), while after the Paris Peace Conference it was ceded to Yugoslavia. Today, the region is divided among 6 municipalities.

The region's spectacular karst phenomena are among the most famous landscape features in the world. They had already attracted considerable international attention in the 17th century thanks to the first descriptions reported by local and foreign authors. Especially well known are the intermittent Lake Cerknica and the almost 20 km long Postojna cave, which was discovered in 1818. It is, therefore, hardly surprising that one of the most important karst research institutes is located in Postojna.



*Retje, a small cultivated oasis in a karst hollow, is threatened by forest regrowth as farmland is abandoned (Photograph: Karel Natek)*



### Forested transitional area between central Slovenia and the Mediterranean

Economically, Notranjsko-kraška is one of the weakest regions in the country. Only 2.5% of the country's population and a little over 2% of its active population, generating only 2% of the nation's gross value added, live here. The only important natural resource is the extensive area of forest in the Dinaric karst mountains, where a well developed wood processing industry is based, while agricultural potential is modest due to the prevalence of stony terrain and high elevations.

While the picturesque features of the karst landscape are attractive to tourists, only the Rakov Škocjan karst valley and espe-

cially the Postojna cave have been exploited to any great extent. The latter is well equipped for tourism, although short-term visits by tourists travelling towards the coast tend to prevail. The collapse of Croatian tourism caused by the 1991-1995 war severely affected Postojna, reducing the number of visitors by two thirds in only a few years.

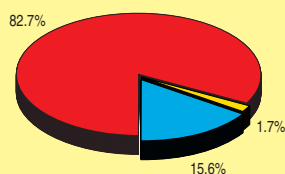
Due to the limited scope for economic activity at the local level, the population is decreasing in almost all settlements except in municipal centres where more jobs are available. The population decrease in some areas has already seen the forest encroach upon former settlements, consequently reducing the potential for sustainable farming and “green” tourism adapted to the karst environment. These would be



the only appropriate activities in this currently well preserved, but environmentally extremely vulnerable karst environment. The state intends to stimulate such activities through the establishment of a large regional park in the near future.

#### Agricultural land use in 1997 (%)

- Permanent grassland
- Arable land
- Permanent crops



### Forests and spectacular karst phenomena

The most distinctly karst region in Slovenia occupies 1 456 km<sup>2</sup> (7.2% of the national territory) and is composed of four parts. The larger eastern part comprises the completely waterless Snežnik and Javorniki karst mountain ranges covered with fir and beech forests (the highest peak Veliki Snežnik, 1 796 m). To the north lies the Notranjska valley system, a series of poljes which descend towards the Ljubljana Basin, with the largest of them being the Cerklja polje, covering 49 km<sup>2</sup>. The 530-580 m high Pivka area, including the Postojna Basin, forms the western foothills of the mountains. The southern part of the region is comprised of the 2 km wide valley along the upper Reka river and

the Brkini flysch hills with villages on wide panoramic ridges.

The lower south-western parts of the region have a sub-Mediterranean climate moderated by the lower altitudes. Average temperatures here are between -0.9°C (January) and 17.7°C (July) and annual precipitation ranges between 1 500-2 500 mm, falling mostly in the autumn months.

The main regional centre is Postojna (population 8 300), situated by the Postojna pass on an important transport route. Other towns include Ilirska Bistrica (4 900) in the Reka Valley, Cerklja (2 600) in the Cerklja polje and the railway junction Pivka (2 000).

The region has no ore or fossil fuel

### Which regions are similar to Notranjsko-kraška?

#### Area:

1 456 km<sup>2</sup>

Uelzen (D)  
Südburgenland (A)  
Ifov (RO)

#### Population density:

34 inhabitants per km<sup>2</sup>

Tauragė (LT)  
Indre (F)  
Pirkanmaa (FIN)

#### Age structure:

31% under 25

Zeeland (NL)  
Algarve (P)  
Riga (LV)

### Agriculture 1997

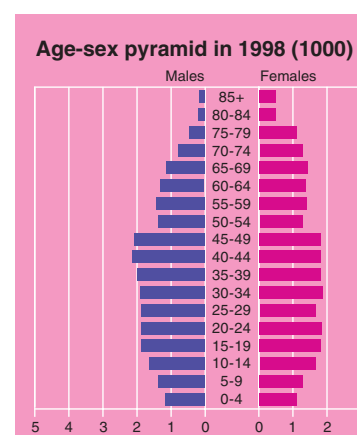
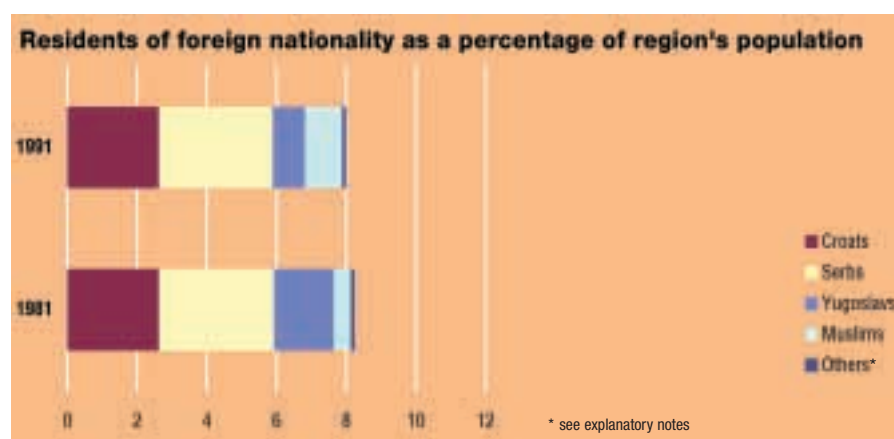
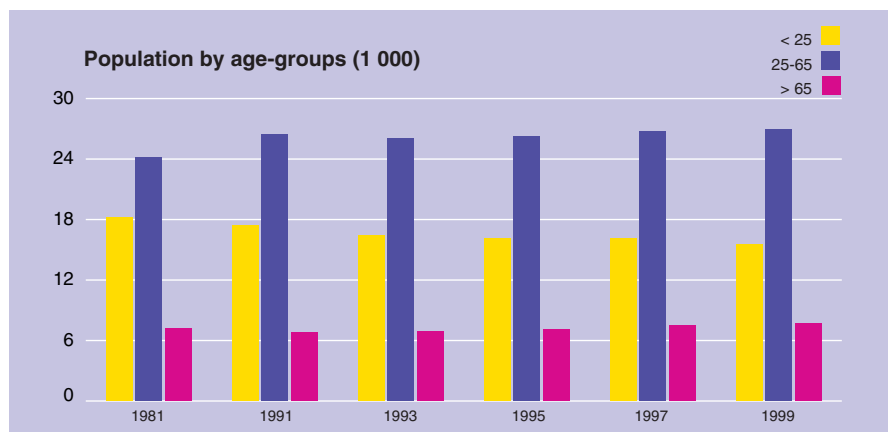
|   |        |
|---|--------|
| Number of private farms   | 3 302  |
| Persons working in agriculture                                      | 1 034  |
| Total agricultural area (ha)  | 19 940 |
| Total livestock   | 20 879 |
| Cattle per 100 ha of total agricultural land                        | 65.5   |
| Pigs per 100 ha of total agricultural land                          | 10.3   |
| Main products - proportion of arable land devoted to production of: |        |
| Cereals   | 19.0   |
| Sugar beet  | 0.0    |
| Fodder plants   | 59.4   |
| Potatoes  | 13.3   |

deposits. Agricultural land, covering only 13.7% of the region, is also not abundant, and is found mostly at the bottom of poljes, in Pivka and in the Reka Valley. Vast forests covering 65.5% of the region are an important source of timber for the local wood processing industry, while spectacular karst phenomena, are important for tourism.

Most of the region is part of the Ljubljana river basin. Its eastern branch flows under different names through poljes of the Notranjska valley system, while its western branch is the Pivka river, disappearing into the Postojna cave. Downstream, both streams meet in the Planina cave on the southern edge of the Planina polje. The largest river in the south-western part of the region is the Reka which, after flowing



54 km on the surface, disappears underground into the world famous Škocjan caves.



## Ageing population associated with declining birth rate

Only 50 140 people (2.5% of the national population) lived in this karst and forested region at the end of 1998, making it the most sparsely settled region in Slovenia with only 34.4 people per km<sup>2</sup>. In fact, the actual population densities are substantially higher since almost half of the region is completely uninhabited.

The region's population decreased by 0.8% in the 1990-1998 period which is below the national average, however it would be wrong to conclude that it is more stable or even more vital than other regions.

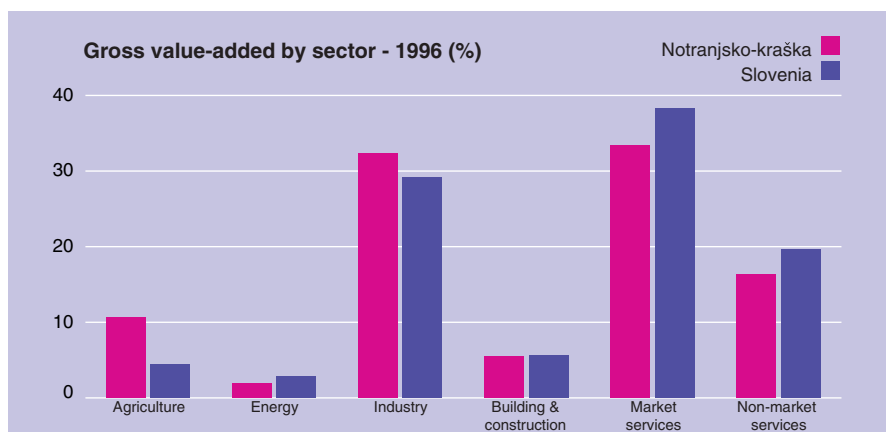
The percentage of people below the age of 25 is less than the national average and the percentage of people above the age of 65 is very high, second only to Goriška. These figures are a cause for concern since the ageing of the population is greatest in rural areas and is closely related to the abandonment of farming. This is also indicated by the data showing the high average age of the population in the municipalities of Ilirska Bistrica, Bloke and Loška dolina, where large areas are now depopulated.

The mortality rate is well above the birth rate, an indication of further population decline, since in recent years demographic trends have not allowed natural reproduction of the population. Similarly, the number of births in the 1985-1997 period decreased by 40.3%, considerably more than the national average of 30%.

There are no ethnic minorities in Notranjsko-kraška and the percentage of immigrants of non-Slovene origin and their descendants is relatively low. The most numerous among them are Serbs, Croats and Bosnians, living predominantly in Postojna and Ilirska Bistrica. According to the 1991 census, 12% of the population was of non-Slovene origin, although the majority of these were Yugoslav military staff who subsequently left Slovenia when the Yugoslav army withdrew in the autumn of 1991.

## Main enterprises

| Name  | Activity                  |
|---|---------------------------|
| Kovinoplastika d.d. Lož   | Locks and hinges          |
| Javor vezan les Pivka   | Furniture                 |
| Liv Postojna  | Metal equipment           |
| TIB d.d. Ilirska Bistrica                                       | Freight transport by road |
| Brest-pohištvó d.o.o. Cerknica                                  | Furniture                 |
| "Ministrstvo za obrambo Ljubljana, 4.pokrajinsko poveljstvo SV" | Defence activities        |
| Lesonit Ilirska Bistrica  | Veneer sheets             |
| Plama-PUR d.d. Podgrad  | Plastic products          |
| "Pivka d.d. Neverke, enota meso"                                | Poultry products          |
| Javor opažni elementi Belsko                                    | Veneer sheets             |



### An economically weak region with forests the main resource

Sparsely settled and second smallest in terms of population, Notranjsko-kraška contributes only 2.2% to the national gross value added, a figure which is lower only in the mining region of Zasavje. Industry is hardly noticeable in the region's well preserved natural environment, and yet the secondary sector contributes 39.9% to the region's gross value added. The service sector is more important even though its share (49.5%) is slightly below the national average, while the share of agriculture and forestry (10.6%) is more than twice the national average.

Due to the very small area of agricultural land in the region, the agricultural sector is weak and distinctly oriented towards dairy and beef cattle farming. In the Košana Valley near Pivka the third largest poultry production centre in Slovenia can be found. Fruit growing (plums, apples) in Brkini, which had once been important, and then almost abandoned, is being systematically revitalised.

The region's vast forests are an important resource, on which a well developed wood processing industry is based. Although

parts of this industry went bankrupt during the severe crisis following the transition to a market economy, the remaining companies have established themselves successfully despite the difficulties. The manufacture of furniture (Pivka, Cerknica) and semi-finished wooden products, such as plywood, panels (Pivka), and fibreboards (Ilirska Bistrica) prevails. Other industrial sectors worth mentioning are metal manufacturing, especially in Lož (fittings) and Postojna and the chemical industry in Podgrad (polyurethanes).

Postojna is one of the smallest regional centres in Slovenia with only a few central services (high-school centre, trade). Tourism, based around the famous Postojna cave, is also important. This is the most visited tourist attraction in Slovenia, relying on tourists stopping on their way towards the Adriatic coast or on their way back from vacation. Since the end of the war in Croatia, the number of tourists has been increasing, however it is still far below past figures. The contribution from tourism to the region's gross value added is among the lowest in Slovenia, and other service activities such as road transportation and forwarding services in Postojna and Ilirska Bistrica are now more important.

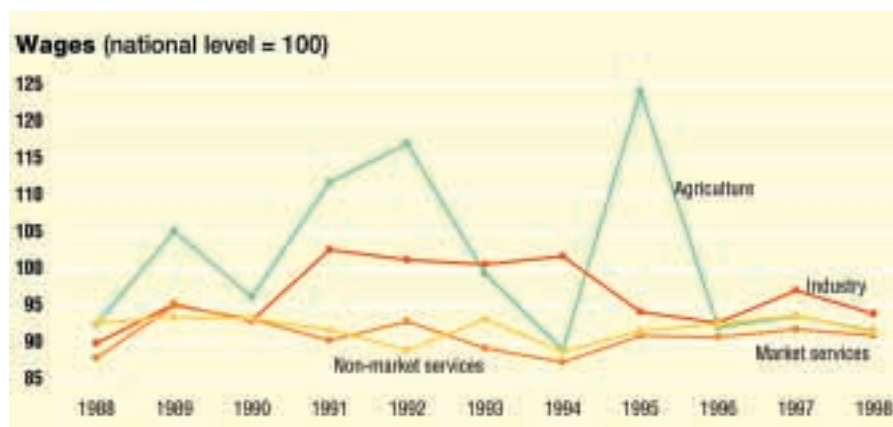
While industry in the region has adapted to new market conditions, it depends almost entirely on labour-intensive branches, producing mostly semi-finished goods with a low rate of value added. A larger number of jobs are required if the region is to retain its people and preserve its present cultural landscape but, so far, the region has been unable to re-orient itself towards more profitable economic activities.

### Low earnings particularly for those employed in the service industries

With wages increasing by only 11.5% in the period between 1995 and 1998, average net wages in Notranjsko-kraška were well below national average, and only in Obalno-kraška and Pomurska regions did wages rise at an even slower pace. The highest increase in net wages was recorded in the construction, non-commercial service and industrial sectors.

In Notranjsko-kraška, the average net monthly wage in 1998 was 496 ECU, which was 7.8% below the national average. Wages were lower only in Spodnje-posavska, Pomurska and Koroška regions. They were slightly above the national average only in the construction sector (486 ECU), while they remained the furthest behind in the relatively poorly developed market service sector (518 ECU).

The most important source of revenue is monthly wages from non-agricultural jobs, representing more than a half of all household incomes, while one third comes from pensions and social insurance. Although usable land is scarce and stony in the karst areas, quite a number of mixed farmer-employee households in rural areas get additional income from agriculture and, especially, from the sale of timber.

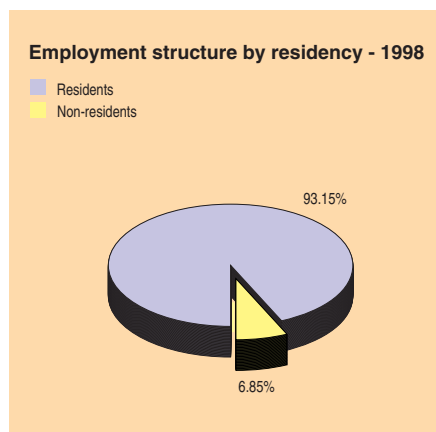
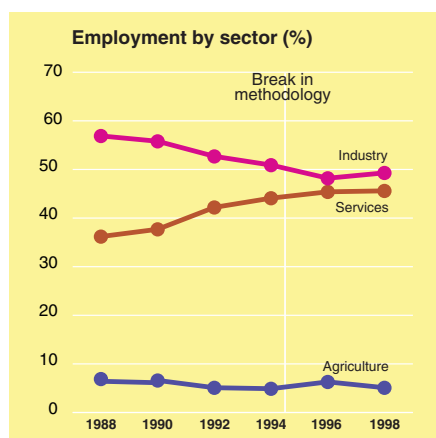




## Region lacks jobs, particularly in slow developing services sector

Economic development in the region speeded up only after World War II when the first large industrial plants were built. In the following decades some industry was also developed in several of the region's small settlements. This industry is today very important for the majority of the local population since it represents their only employment opportunity outside agriculture and forestry. There is a relatively low percentage of purely industrial workers in the region, and the strong attachment of local communities to local companies is a favourable factor for further development.

49.3% of the workforce is employed in the industrial sector and slightly less (45.6%) in the service sector which is not as developed as in other regions in western Slovenia. Despite unfavourable natural conditions the share of the workforce employed in agriculture and forestry is above the national average (5.1%). It is also interesting to note that Notranjsko-kraška has the lowest share of women among its workforce. As elsewhere in Slovenia almost all employees have full-time permanent employment and the share



of temporary employment is almost one quarter.

Due to the lack of jobs in the home region, 22.6% of the workforce commutes daily to neighbouring regions, which is the highest percentage among all Slovenian regions. Prior to Slovenian and Croatian independence, people from border areas used to travel to Rijeka in Croatia to work, a practice now abandoned. Today, many people, especially from Postojna and Cerknica, commute to Ljubljana.

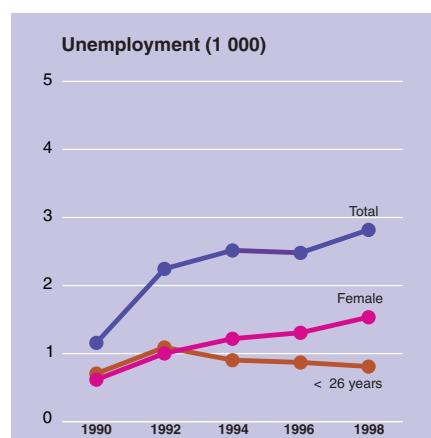
The number of employees in the industrial sector decreased by 3.7% between 1991 and 1998, which is less than elsewhere in Slovenia. However, the region is lagging behind in the development of its service sector where employment has been increasing at a slower rate than in other parts of Slovenia.

Among other factors, a relatively high unemployment rate (14.4%) indicates the lack of employment opportunities in the region. During the 1991-1993 transitional years from the socialist to a market economy, the number of unemployed increased dramatically in Notranjsko-kraška (by 118%), and, unfortunately, this figure has been increasing slowly but steadily since then. Almost one third of the unemployed are people below the age of 26, which is worrying, while the percentage of people that have been unemployed for more than a year is lower than in most other regions.

## Major transit route between Central Europe and the Mediterranean

Strategically, the Postojna pass (612 m above sea level) is one of the most important passes in all of Slovenia. For a distance of almost 1 500 km, between the Rhône Valley (France) in the west and the Morava Valley (Yugoslavia) in the south-east, it is the easiest and the lowest passage from Central Europe to the Mediterranean basin. Alongside the centuries-old main road connecting Vienna with the port of Trieste, the Southern railway was constructed between 1847 and 1857 through this pass, while from 1970 to 1972 the first Slovenian motorway connecting Vrhnika and Postojna was also built here. Today, the 5th European corridor, Venice-Ljubljana-Budapest-Kiev, also follows this route.

Near Postojna a major road branches off from the Kozina-Ljubljana motorway (E70), connecting it with the port town of Rijeka in Croatia. Near Razdrto, the road, which forks off towards Nova Gorica, is currently being modernised and should be recon-



structed by 2002.

In relatively sparsely settled Notranjsko-kraška, all settlements are accessible by local roads, while forested areas are covered with a network of unpaved forest roads. With 19 900 cars in the region or 395 cars per 1 000 persons, this is slightly above the national average for car ownership.

A single-track electrified railway towards Rijeka (Croatia) branches off in Pivka from the double-track electrified Vienna-Trieste railway.

There are no airports in Notranjsko-kraška, and Ljubljana international airport is 81 km from Postojna. Due to the prevailing karst terrain there are also no rivers suitable for navigation.

**Surfaced public roads – 1997**

|  | Notranjsko-kraška | Slovenia |
|--|-------------------|----------|
| Length in km per km <sup>2</sup>                             | 0.18              | 0.23     |
| Length in km per 1 000 population                            | 5.2               | 2.4      |
| Length in km per 1 000 private passenger cars                | 13.1              | 6.1      |
| % private passenger cars in total number of vehicles         | 81                | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.4               | 0.5      |

**Extremely sensitive karst environment**

Due to the permeable karst terrain, surface water disappears underground through fissures and runs through unexplored tunnels towards distant springs. While such springs are very scarce in karst areas, where they do appear they can be as large as an entire river. Harmful substances can be washed into these waters from the surface or from caves where they have been carelessly dumped. Since the water runs through underground tunnels, it cannot be purified by filtering through clay or sand layers. Every occurrence of water pollution can also be fatal for the unique underground fauna of the karst area.

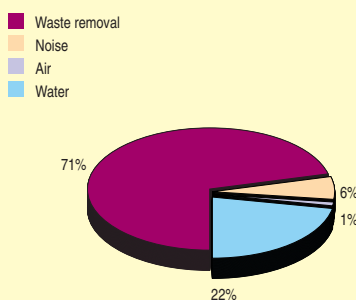
All larger settlements in karst areas have waste-water treatment plants. Nevertheless, the few surface water in poljes are considerably polluted by waste-water from households, industry and agriculture. The same holds true for Lake Cerknica, which almost entirely dries out during the summer months and fills up again in the autumn after abundant rainfall.

In the past, the Reka river presented a serious environmental hazard as it used to enter the Škocjan caves extremely polluted by waste water from the wood processing and chemical industry in Ilirska Bistrica. After Unesco proclaimed the caves a world heritage site, pollution was reduced considerably through the introduction of modern technologies in fibreboard production and the closure of the chemical plant.

Municipal waste disposal also causes substantial problems. It is being piled up untreated at municipal landfills, and is still not being managed as well as it should be in a vulnerable karst environment.

The majority of people in Notranjsko-kraška are connected to municipal water supply systems that are fed by only a few karst springs, therefore, the water supply is highly vulnerable to potential environmen-

tal hazards. There is no natural gas network in this sparsely settled region. All settlements are connected to electricity and telephone networks, and with 358 telephone lines per 1 000 inhabitants this is equal to the national average.

**Current expenditure for environmental protection - 1997****World leader in karst research**

The small population of the Notranjsko-kraška region and the relatively short distance between the regional centre Postojna and Ljubljana are the main reasons for the lack of educational, health, cultural and similar institutions in the region.

Almost all of these activities are concentrated in Postojna where a high-school centre, with a grammar school, forestry and carpentry departments and other colleges with vocational education programmes, are located.

The Karst Research Institute in Postojna, a constituent part of the Scientific-Research Centre of the Slovenian Academy of Sciences and Arts, is one of the most important karst research institutes in the world. It was established in 1947 on the basis of the pre-war Italian National Speleological Institute.

There is a small maternity hospital in Postojna, too.

**Utilities - 1997**

|   | Notranjsko-kraška | Slovenia |
|---|-------------------|----------|
| Dwellings connected to water supply system (%)    | 97.7              | 97.6     |
| Dwellings connected to sewerage system (%)        | 97.7              | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 75.5              | 71.9     |
| Telephone connections per 1000 population         | 358               | 357      |
| Number of doctors per 1000 population             | 1.1               | 2.2      |
| Number of hospital beds per 1000 population       | 1.1               | 5.7      |

Cultural activities are rather modest, and apart from some lively amateur dramatics, only the Notranjska Museum in Postojna is worth mentioning.

**Number of pupils - 1998**

|                                       |               |
|---------------------------------------|---------------|
| Pre-school                            | 1 151         |
| Primary                               | 5 069         |
| Lower secondary                       | 693           |
| Higher secondary (vocational/general) | 1 929         |
| Tertiary (higher education)           | 1 472         |
| <b>Total</b>                          | <b>10 314</b> |



# Goriška

## Region forms main border with Italy

By size, Goriška is the third largest Slovenian region, while only the sixth by population. Situated in the western part of Slovenia along the Italian border, it is almost entirely within the catchment area of the Soča (Isonzo in Italian) river, which rises in the heart of the Julian Alps, and flows southwards towards the wide Friuli Plain in Italy.

The entire northern part of the region is part of the high Julian Alps, and the Soča is one of the last intact Alpine rivers, very popular with holidaymakers and water sports fans. The central part of the region consists of the rugged and barely passable Idrija Mountains. Towards the south it continues into the forested karst plateaus of Banjšice and Trnovski gozd, and then drops abruptly into the fertile and densely populated Vipava Valley, distinctively Mediterranean in terms of climate and culture.

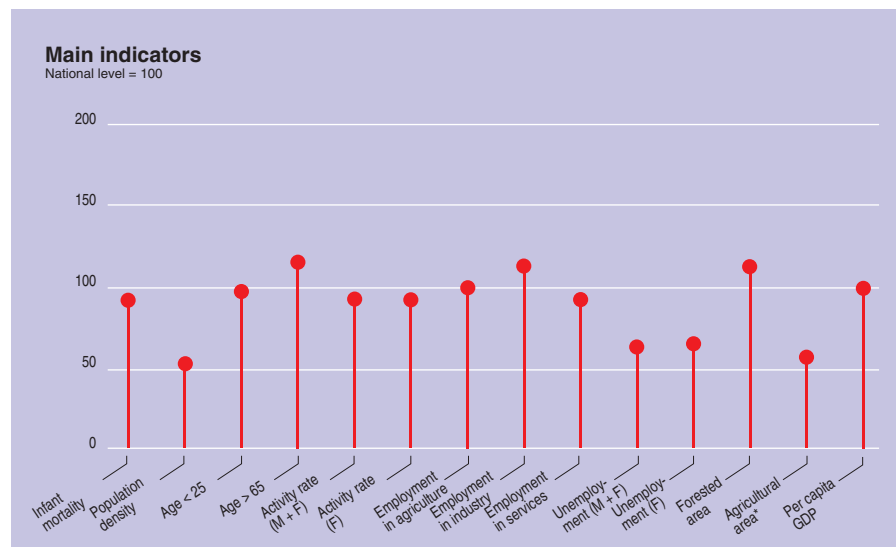
In the Middle Ages, the region belonged to the Oglej (in Italian Aquileia) patriarchs and the dukes of Gorica (in Italian Gorizia) whose heritage was taken over by the Habsburgs in 1500. The northern part of the present border between Slovenia and Italy also separated Austria and the republic of Venice in the 16th century, while its southern part was delimited by the Treaty of Paris between Italy and Yugoslavia (1947) and finally confirmed by the Treaties of Osimo (1975). State and ethnic boundaries do not overlap, thus leaving Slovenes also on the Italian side of the border.

The famous Isonzo Front, which divided the Austrian and Italian armies during World War I, ran across the mountains above the Soča river. Along this front, over a million soldiers died on both sides. After the collapse of the Austro-Hungarian Empire (1918), the area was granted to Italy with the Treaty of Rapallo (1920), while after World War II it became part of Yugoslavia with the Treaty of Paris (1947). Today, it is divided among 12 municipalities.

The southern part of the region is easily accessible from within Slovenia as well as from the Italian side. A motorway through the Vipava Valley is currently under construction to connect the Slovenian and Italian motorway networks. The only access to the region's northern part is a road running through the Soča Valley from the south and two high mountain passes.



Goriška brda is a range of distinctively Mediterranean wine and fruit-growing hills along the Slovenian-Italian border (Photograph: Matej Gabrovec)



## Between high Alps and the Mediterranean Plain

The region's position along the Slovenian-Italian border is very favourable for its southern, lowland zone but makes its larger mountainous section even more peripheral.

Despite being only a little over 100 km away from Ljubljana and relatively close to the densely populated Friuli Plain in neighbouring Italy, the upper Soča Valley is not easily accessible. Furthermore, the main pass towards Gorenjska across the Julian Alps is closed in winter. This part of the region experienced severe depopulation until 1970. With few natural resources, its weak economy is dependent on tourism. The unspoiled Soča river and picturesque

mountains, especially in the Triglav National Park, offer considerable, as yet largely unexploited, development opportunities. Strong earthquakes devastated parts of the region in 1976 and 1998, and repair to the damage caused is largely financed from the national budget.

At Idrija, in the central mountainous part of the region, one of the most important mercury mines in the world operated for almost five centuries, before its phased closure began in 1986. Nevertheless, industry in and around the town was very successfully reoriented into the manufacturing of machine equipment and electronics.

The situation in the southern, Mediterranean part of the region is entirely different. After the town of Gorica (Gorizia



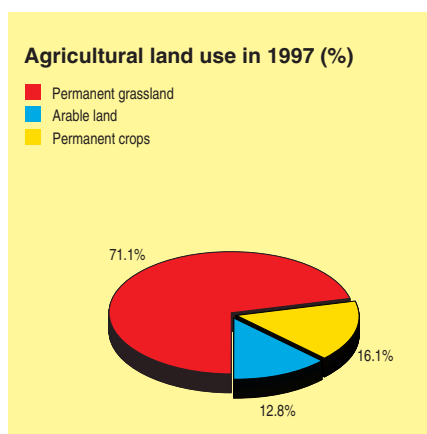
in Italian) was given to Italy in 1947, the new town of Nova Gorica was established on the Slovenian side of the border. Both sides of the border were able to take advantage of this location, resulting in intensive cross-border co-operation especially in trade, transport and tourism, with the result that Goriška has the lowest unemployment rate in Slovenia.

A further advantage of this part of the region is its Mediterranean climate, enabling agricultural specialisation in wine, fruit and vegetables. Although the Vipava Valley is the largest plain in the Mediterranean part of Slovenia, its favourable natural conditions for more intensive cultivation of fruit and vegetables are far from being fully exploited compared to the plain on the Italian side of the border.

### In the Soča river basin

The Goriška region occupies 2325 km<sup>2</sup> (11.5% of the national territory) and comprises the high mountains and hills of the Soča river basin. In the north are the Julian Alps around the deeply incised upper Soča Valley. The middle part comprise the rugged Idrija Mountains in the Idrija river basin (the highest peak is Porezen, 1630 m) extending southwards into the forested Trnovski gozd karst plateau at an altitude of 1 000-1 300 m and into the slightly lower Banjšice plateau.

On their southern side, the plateaus fall away, in an escarpment over 1 000 m in



height, into the fertile Vipava Valley along the Vipava river, the Gorica Plain along the Soča and the Goriška brda hills along the Italian border.

The southern part of the region has a Mediterranean climate with average temperatures between 3.2°C (January) and 21.4°C (July) and annual precipitation ranging between 1 500-1 700 mm (in the mountainous part between 2 000-3 500 mm). Peculiar to the Vipava Valley is the "bora", a turbulent cold wind which blows at speeds of over 50 m/s during the winter months.

In the mountainous parts of the region, the majority of settlements and agricultural land is located in the narrow river valleys, with areas outside the valleys being sparsely settled due to the mountainous

### Which regions are similar to Goriška?

#### Population:

119 659 inhabitants  
 Nordvorpommern (D)  
 Gwynedd (UK)  
 Alto Alentejo (P)

#### Age structure:

16% over 65  
 Este (E)  
 Latgale (LV)  
 Kärnten (A)

#### Population density:

52 inhabitants per km<sup>2</sup>  
 Harghita (RO)  
 Marche-en Famenne (B)  
 Blekinge län (S)

### Agriculture 1997

|   |        |
|---|--------|
| Number of private farms   | 7 021  |
| Persons working in agriculture                                      | 2 051  |
| Total agricultural area (ha)  | 29 828 |
| Total livestock   | 37 871 |
| Cattle per 100 ha of total agricultural land                        | 77.6   |
| Pigs per 100 ha of total agricultural land                          | 16.0   |
| Main products - proportion of arable land devoted to production of: |        |
| Cereals   | 37.7   |
| Sugar beet  | 0.0    |
| Fodder plants   | 37.3   |
| Potatoes  | 10.3   |

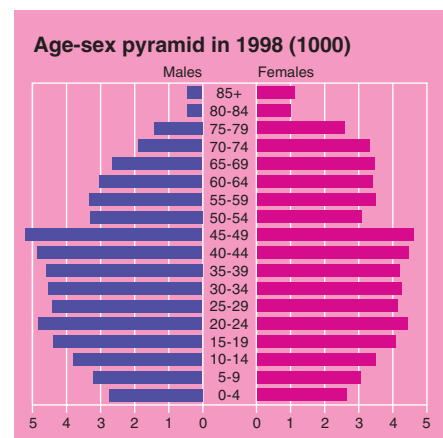
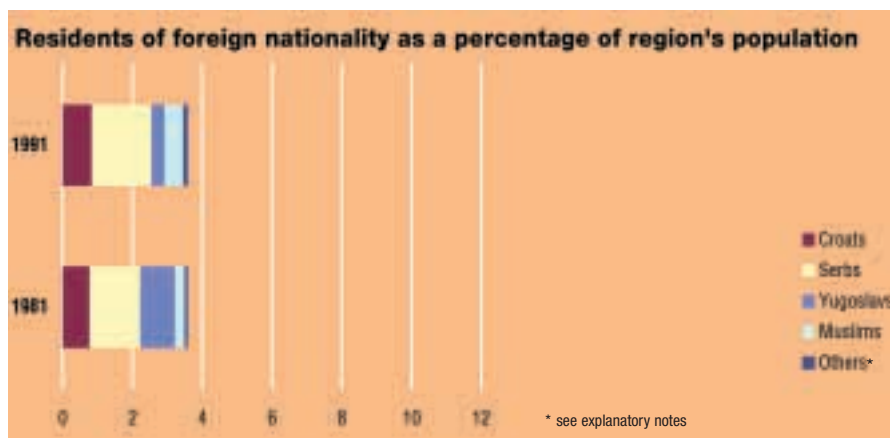
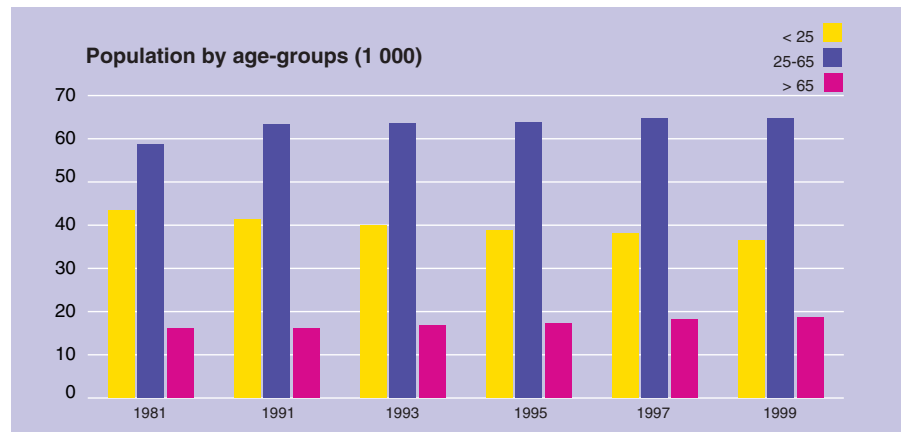
terrain. Here, the largest towns are Tolmin (population 3 900) in the Soča Valley and Idrija (6 100) in the Idrija Mountains. In contrast to the region's mountainous part, the south is densely settled. The larger towns are Nova Gorica (population 13 900) on the Italian border and Ajdovščina (6 100) and Vipava (1 600) in the Vipava Valley.

The only ore deposit found here was mercury, which was extracted in Idrija from 1490 until 1996, when the mine was permanently closed. The Soča river with its tributaries is an important resource for hydroelectricity generation, while its upper course is protected as a national heritage due to its exceptionally unspoilt beauty. Numerous small hydroelectric plants are installed on smaller tributaries in the mountains. Another important natural





resource is the broadleaf and mixed forest covering almost two thirds of the region (63.4%), while agricultural land covers only 12.8%, and is found almost exclusively in its southern part.



### The region with the highest percentage of old people

The population of the third largest Slovenian region by size numbered only 119 659 (6% of the national population) at the end of 1998. Unsurprisingly, the average population density in this mountainous border region is only 51.5 people per km<sup>2</sup>, and the population density is lower only in Notranjska. Differences within the region are also large, as for example 132 people per km<sup>2</sup> live in the town municipality of Nova Gorica and only 9 people per km<sup>2</sup> in the Alpine municipality of Bovec.

Despite unfavourable natural conditions in most of the region, the population decline in the 1990-1998 period was no larger than in other parts of Slovenia. The population decline is a consequence of the decreasing birth rate which is already lower than the mortality rate, although the decrease in the number of births at 13.6% in the 1990-1997 period was below the national average of 18.8%. In the period between 1991 and 1996, more people left the region than moved to it, but in 1997 the migratory balance levelled-off.

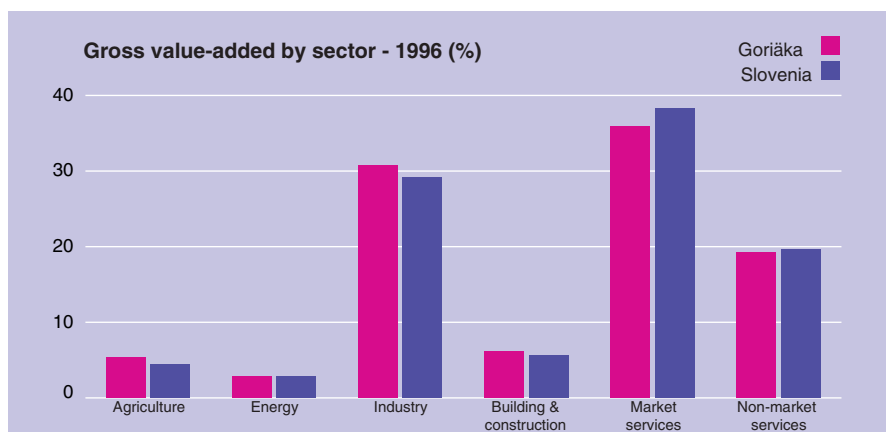
The age structure of the population is also

not so favourable, as the percentage of people below the age of 25 is among the lowest in Slovenia (30.5%), while the percentage of people above the age of 65 is the highest in the country (15.6%). The average age of the region's population is above the Slovenian average in all municipalities, except Ajdovščina and Vipava, makes the ageing of the local population even more evident. In mountainous parts of the region, this process is combined with population decline in small settlements and the abandonment of farming.

Although Goriška lies along the Slovenian-Italian border, there are no indigenous ethnic minorities in the region. The main reason is that the historical ethnic boundary between the Slovenes to the east and the Italians and Friulans to the west follows the contact line of the Friuli Plain with the Pre-alpine hills and mountains, situated inside Italian territory some kilometres to the west. The proportion of resident non-Slovenes is also quite low at 6.9%, the second lowest in Slovenia after Koroška region. They are mostly immigrants from other parts of former Yugoslavia, who settled down in the newly built town of Nova Gorica after World War II, and their descen-

### Main enterprises

| Name  | Activity              |
|---|-----------------------|
| ETA d.o.o. Cerkno                                     | Electrical equipment  |
| Iskra-avtoelektrika d.d.<br>Šempeter pri Gorici       | Electrical components |
| Kolektor Idrija                                       | Electric motors       |
| Splošna bolnišnica<br>dr.Franc Derganc<br>Nova Gorica | Hospital activities   |
| Rotomatika Spodnja<br>Idrija                          | Electric motors       |
| Metalfleks Tolmin                                     | Electrical equipment  |
| Živilska industrija<br>Fruktal Ajdovščina             | Beverages             |
| "Hit d.d. Nova Gorica,<br>igralnica Perla"            | Casino                |
| Tekstilna Ajdovščina                                  | Textile weaving       |
| "Hit d.d. Nova Gorica,<br>Casino park"                | Casino                |



### A border region with a successful economy

This border region can be placed among the leading Slovenian regions in terms of economic power and successful management. Its share (6.0%) in generated national gross value added puts it in fourth place among Slovenian regions, while it is third in terms of GDP per capita, following the Osrednjeslovenska and Obalno-kraška regions. Modern industrial branches and service activities prevail in the region, therefore its economy is burdened to a lesser degree with problems that are typical of classical industrial areas. The region successfully took advantage of its border position to establish numerous economic ties with Italian communities.

Service activities generate the largest share (55.2%) of gross value added in the region, (it is larger only in three other regions), the secondary sector contributes 39.7%, while the contribution from the primary sector is 5.4%.

Within Goriška, agriculture varies extremely between its mountainous parts and its lower southern part where the impact of the Mediterranean climate is felt. In upland areas, dairy and beef cattle farming almost

exclusively prevail with sheep farming slowly reemerging in some areas. The mountains above the Soča Valley have witnessed a revival of almost abandoned alpine pasturing since favourable conditions for sustainable food production exist here. The southern part of the region is specialised in growing frost-sensitive fruits (peaches, apricots, cherries) and in wine growing, especially in the Goriška brda hills and in the Lower Vipava Valley.

When this part of Slovenia was included in former Yugoslavia after World War II, it was almost entirely without industry. Only the Idrija mercury mine was important at that time. The local workforce served as the basis for the development of a successful electronics industry which adapted to new market conditions successfully after independence and is today, apart from the service sector, the main driving force of further development. Most of these companies have long-term relations with foreign partners and represent some of the more important Slovenian exporters. The main centres are Cerkno (household and heating appliances), Idrija (commutators for electric motors and electric motors for cooling appliances) and Šempeter pri Novi Gorici (starting motors). The food processing industry is present in Ajdovščina (fruit

juices) and Nova Gorica (meat products).

Service activities in Goriška are closely related to its border position. This is especially evident in the case of tourism which is distinctly geared towards casinos and related services and adapted to the needs of Italian visitors. The Vrtojba border crossing is also one of the largest cargo border crossings in Slovenia. In the mountainous part of the region, tourism is centred around the Soča river, one of the most beautiful Alpine rivers, which lends itself to water sports and fishing.

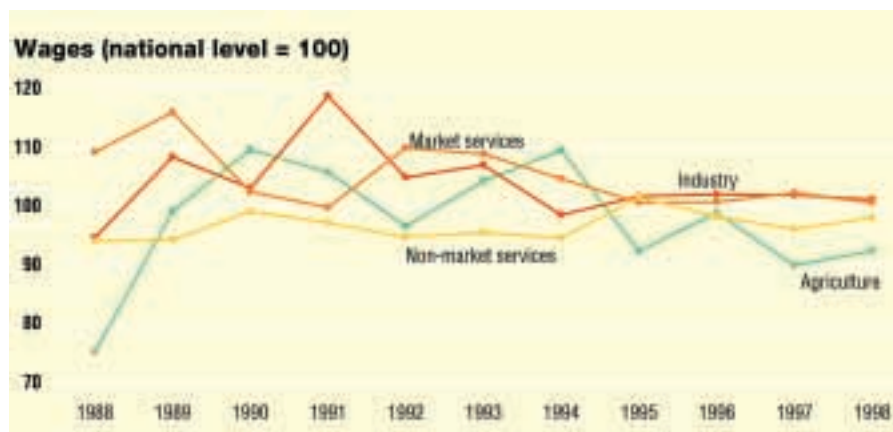
### Earnings on the increase

In 1998 Goriška had one of the highest average net wages in Slovenia at 545 ECU, which was slightly above the national average. Wages were higher only in Obalno-kraška and Osrednjeslovenska regions.

Wages in the region's non-commercial services (686 ECU) and construction sectors (523 ECU) are not only well above national average but are in fact the highest in Slovenia, while they are slightly below the national average in the commercial services (536 ECU) and industrial sectors (461 ECU).

In the period 1995-1998, average net wages in Goriška increased by 14.5% which was also slightly above the national average. The increase was higher only in Gorenjska. The fastest growth in earnings was recorded in the non-commercial services, construction and industrial sectors, while wages decreased slightly in the commercial services sector.

Monthly wages are the most important source of household income, representing about half of all income, followed by pensions and other incomes from social insurance. Quite a number of people receive pensions from Italian funds, either from their work during the Italian occupation (1918-1943) or from employment in Italy after the 1950s. In rural areas there is a high percentage of mixed farmer-employee households receiving additional income from farming, partly from growing food for their own consumption and partly from selling any surplus at market. The boom in tourism and recreational activities in the upper reaches of the Soča river since 1990 has also improved the standard of living of a number of rural households.

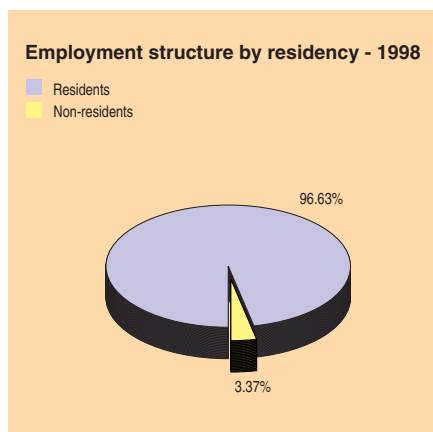
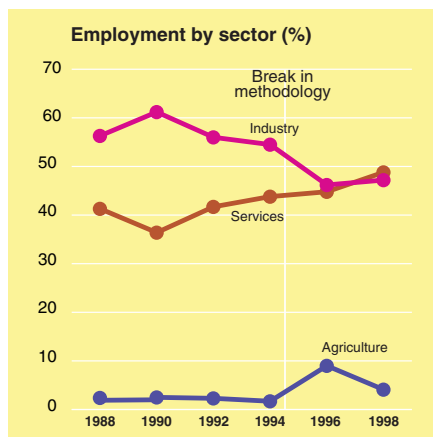




## Low unemployment rate, new possibilities in the services sector

When Goriška became part of former Yugoslavia after World War II, it was essentially an under-developed region with almost no industry and without a regional centre since the town of Gorica (Gorizia) remained on the Italian side of the border. This situation was further exacerbated by the border between the two being tightly closed. The town of Nova Gorica, built in the 1950s, attracted people from nearby areas as well as from other parts of Slovenia. It soon developed into a vibrant economic centre with its border position becoming increasingly important.

A considerable number of industrial plants were established in small settlements in an effort to prevent depopulation of the region's mountainous parts. Consequently, industry employed just under two thirds of the region's employees at the beginning of the 1990s. Between 1991 and 1998, the number of employees in this sector decreased by 12.3%, while in the service sector it increased by almost 40%. In 1998, a slight majority (48.8%) of the workforce was employed in the service sector, 47.2% in the industrial sector and 4.1% in



agriculture. The open border with Italy, various forms of cross-border cooperation, local border trade and tourists coming over to gamble were all contributing factors to such favourable development. Positive trends are expected to continue in the future.

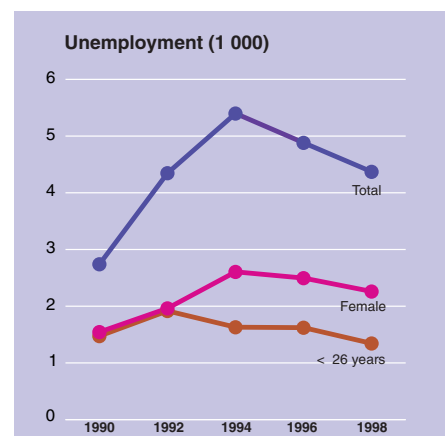
The vast majority of employees have full-time employment, however 20.2% are employed only temporarily. Due to its position along the western border, not many people from neighbouring Slovenian regions are employed in Goriška, whereas many people from the region commute daily to Italy.

The blossoming of the service sector and the successful retraining of former miners from the Idrija mercury mine who are now mostly employed in the electronics and machinery industry, are the main reasons for the region having the lowest unemployment rate in Slovenia (8.7%). As in other regions, the number of unemployed increased rapidly during the difficult period of transition from a socialist to a market economy (a 120% increase between 1990-93), however unemployment has been steadily decreasing since then. Unfortunately, a relatively high and above average unemployment rate has been recorded among the younger population, while the share of the long-term unemployed is below the national average.

## Both road and rail open towards Italy

The southern part of Goriška, including the Vipava Valley and the plain around Nova Gorica, is situated at the meeting-point of the Italian and the Slovenian motorway networks and is therefore easily accessible. In Italy, the Trieste Padova motorway (E70) and the Palmanova-Udine-Villach motorway (E55) run near the border. A major road through the Vipava Valley, connecting the Vrtojba border pass with the Koper-Ljubljana motorway, is currently under reconstruction and should be entirely modernised by 2002.

Due to its mountainous terrain the larger, northern part of Goriška is not as easily accessible. The main road from Nova Gorica via Tolmin, Kobarid to the Italian border runs through the Soča Valley. In Most na Soči it is joined by the Logatec-Idrija-Most na Soči road, which is this part of the region's most important connection with central Slovenia. The only road connections towards the north lead across two mountain passes, the Vršič Pass (1 611m; closed during the winter) towards Kranjska Gora and the Predel Pass (1 156 m) towards Tarvisio in Italy.



Despite the rugged terrain, local or forest roads enable access to all settlements in this part of the region. In the plains and in hilly areas, there is a dense network of local, mostly paved roads. In sparsely settled mountain areas cars are very important for the local population commuting to work, as a result of which car ownership is well above average. The region has 53 000 passenger cars or 445 cars per 1 000 persons, and only Obalno-kraška has more cars per capita.

The single-track Jesenice-Nova Gorica railway, called the Bohinj railway, which was later extended to Dutovlje and connected with the Southern railway near Sežana in 1948, runs through the mountainous part of Goriška. A local railway line leading to Ajdovščina branches off near Prvačina. There is also a rail border crossing near Nova Gorica, connecting the Slovenian and the Italian railway networks.

Goriška has no airports, although Ronchi airport on the Italian side of the border is only 20 km from Nova Gorica, while Ljubljana international airport is 140 km away. There are no navigable rivers in the region.

**Surfaced public roads – 1997**

|  | Goriška | Slovenia |
|--|---------|----------|
| Length in km per km <sup>2</sup>                             | 0.22    | 0.23     |
| Length in km per 1 000 population                            | 4.3     | 2.4      |
| Length in km per 1 000 private passenger cars                | 9.6     | 6.1      |
| % private passenger cars in total number of vehicles         | 82      | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.4     | 0.5      |

**Clean environment along the emerald-green Soča river**

The mountainous part of Goriška lies in the upper reaches of the Soča river, one of the last large Alpine rivers that have been preserved in a completely natural condition. Due to its few settlements and minimal economic development, environmental impacts are small, although the area is faced with the abandonment of farming and the subsequent deterioration of its traditional Alpine landscape.

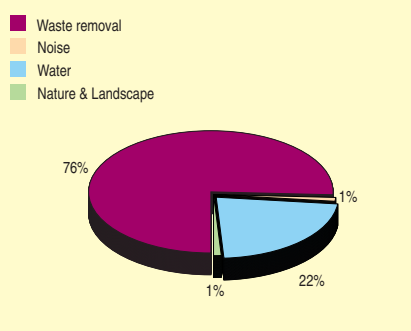
Nevertheless, environmental problems related to the Idrija mercury mine were felt here, but they have been largely resolved following the closure of the mine. Sediment deposited by the Idrija and the lower part of the Soča river still contain considerable amounts of mercury and other heavy metals which are gradually being transported towards the sea together with other sediments. Severe environmental problems were also caused by the manufacture of asbestos products in the Anhovo cement factory, where production was stopped at the end of 1996.

The environment in the plains and hills in the southern part of Goriška, which is more densely settled and more economically active, is less well preserved. The rivers are especially affected, and their self-purification capacity was reduced considerably by extensive land reclamation schemes, especially in the Vipava Valley. Additional strain is caused by intensive agriculture as well as industrial and municipal waste water deposits.

Due to the abundant rainfall in the region's mountainous part, there are numerous water sources used by local and private water supply systems. The abundant karst springs in the foothills of the high Dinaric plateaus are the main source of drinking water in the southern part of the region.

Only Nova Gorica is supplied by natural gas through a local natural gas network. All

settlements including isolated farmsteads are connected to the national electricity network. The region has 313 telephone lines per 1 000 inhabitants, which is 12% below the national average.

**Current expenditure for environmental protection - 1997****Several smaller cultural centres**

As in neighbouring Gorenjska, there are several educational and cultural centres in this large region of western Slovenia. Apart from Nova Gorica, which is the most important centre, smaller centres include Idrija, Tolmin and Ajdovščina, all of which have high-school centres. Nova Gorica, built only after World War II, has numerous schools, from grammar schools to various high schools and vocational schools. The private polytechnic, specialising in post-graduate environmental studies, is also based here.

There are no large research centres in Goriška. In Šempeter pri Novi Gorici there is a regional general hospital and in Idrija there is a psychiatric hospital.

Since independence, there have been increasingly close cultural ties between Nova Gorica, the cultural centre of Goriška, and the town of Gorica (Gorizia) on the Italian side of the border. The Primorska Drama Theatre and the Goriška Museum are among the most important cultural institutions in Nova Gorica. Other institutions of note in the region are the World War I Museum in Kobarid (European

**Utilities - 1997**

|   | Goriška | Slovenia |
|---|---------|----------|
| Dwellings connected to water supply system (%)    | 98.0    | 97.6     |
| Dwellings connected to sewerage system (%)        | 98.0    | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 61.7    | 71.9     |
| Telephone connections per 1000 population         | 311     | 357      |
| Number of doctors per 1000 population             | 1.1     | 2.2      |
| Number of hospital beds per 1000 population       | 6.3     | 5.7      |

museum of the year 1993) and the Municipal Museum in Idrija (the best European technical museum of 1997). Galleries include the Veno Pilon Gallery in Ajdovščina, the Riko Debenjak Gallery in Kanal and the Zoran Mušič Gallery in Dobrovo Castle in Goriška brda.

**Number of pupils - 1998**

|                                       |        |
|---------------------------------------|--------|
| Pre-school                            | 3 580  |
| Primary                               | 11 280 |
| Lower secondary                       | 1 449  |
| Higher secondary (vocational/general) | 4 919  |
| Tertiary (higher education)           | 3 625  |
| Total                                 | 24 853 |



## Obalno-kraška

### Slovenia's only coastal region

Small in terms of both size and population, this is the only Slovenian region which extends all the way to the Adriatic Sea. Its geographical position along with its natural, cultural and historical characteristics mark it out from other Slovenian regions. It is exceptionally important for Slovenia as its "gateway to the world", specifically to the Mediterranean Sea and beyond.

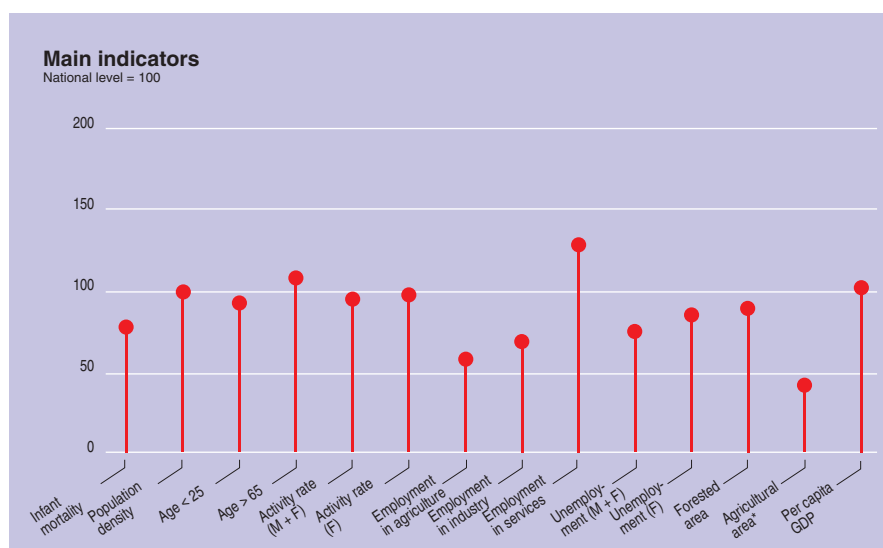
Unlike continental Slovenia, which was under the influence of Germanic culture for more than a millennium, the coastal area was influenced by Mediterranean culture since the 1st century BC, when it became part of the Roman Empire. Later, it was governed by the Patriarchs of Aquileia and the Venice Republic. The area was under Habsburg rule only from 1797 (with the Treaty of Campo-Formio) until the end of World War I, a period which brought a considerable economic boom to the rural hinterland of Trieste. The area was ceded to Italy with the Treaty of Rapallo (1920). After World War II the Allies established the short-lived Free Territory of Trieste in the disputed area which was subsequently divided between Italy and Yugoslavia in 1954, and eventually confirmed by the Treaties of Osimo (1975). Meanwhile, the sea border between Slovenia and Croatia has still not been definitively determined.

In terms of landscape, the region can be divided into two: a waterless karst interior, descending with a picturesque cliff into gently undulating Mediterranean hills along the coast. In the area named Kras (Carso in Italian, Karst in German) in the immediate hinterland of Trieste, the first scientific karst research was carried out in the 19th century. Since then, natural phenomena of this kind all over the world have been named after this region.

Obalno-kraška is divided among 7 municipalities, and the region has good access to both the Slovenian and Italian road and railway networks. Connections with tourist areas in the Croatian part of the Istria peninsula are also relatively good. The most important Slovenian port is situated in Koper, from which there are good links to Austria, Slovakia and Hungary.



Tartini Square in Piran honours the local composer, Giuseppe Tartini (1692-1770) (Photograph: Matej Gabrovec)



### Slovenia's window on the world

Although the region has had an extremely turbulent history in the 20th century and witnessed drastic demographic and economic changes, it can still be considered one of the most economically successful regions in Slovenia.

A large proportion of the economy is related to the sea in one way or the other - from the Port of Koper with its harbour activities to the towns of Portorož, Piran and Izola with their marine tourism, and agriculture which is oriented towards Mediterranean crops and wine-growing. As a whole, the region is only slightly behind the Osrednjeslovenska region in terms of its economic prosperity, and has successfully

taken advantage of its coastal position.

Only 47 km in length, the Slovenian coastline is too short for all the activities (from different kinds of tourism to port activities and industry) which Slovenia wants to develop there. Policies, which were successful in moving both the population and economic activities from the hinterland to the coast, are now one of the causes of the saturated coastal belt and in some places polluted sea.

Koper is a small port by European standards, and was established after 1945 in direct competition to the nearby and larger Trieste. For the time being its connections with the hinterland are not as good as those of Trieste, but its opportunities for further territorial expansion are better, pro-

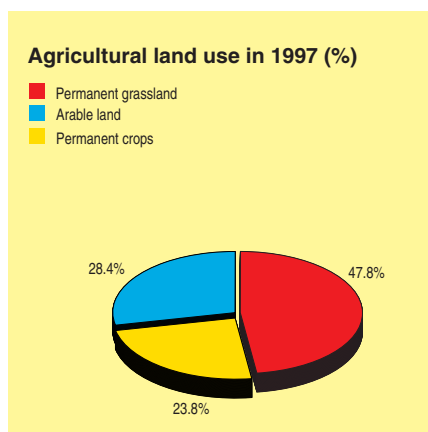


viding that competition is replaced by the division of activities between both ports in the future. Slovene and Italian minorities on both sides of the border could be considered an important bridge for future co-operation.

A serious factor limiting further development is the lack of drinking water, since most of the region is supplied from two large karst water sources. Agriculture, primarily growing Mediterranean crops, has problems with both water scarcity and the lack of suitable agricultural land, given the stony karst terrain in the majority of the Kras area.

### By the Slovenian sea

With an area of 1044 km<sup>2</sup> (5.2% of the national territory), Obalno-kraška can be divided into two parts, one being the karst interior, covering almost two thirds of the region, and the other the low-lying hills on the coastal belt. The karst interior is characterised by an undulating landscape, dotted with numerous karst depressions (dolines), and no water sources or surface waters. The only surface water is the Reka river, which disappears underground in the magnificent Škocjan caves and flows through unknown channels towards karst springs on the Timavo river near Monfalcone in Italy. More than one third of the karst region is covered with broadleaf and pine forest and shrubs. The rest is pasture-land which is being rapidly overgrown, as well as fields, meadows and vineyards



around villages, typically clustered on low hilltops.

The karst area descends with a picturesque, up to 300 m high cliff towards the hilly flysch country, which extend all the way to the Adriatic coast. Here villages with fields, vineyards and orchards are situated on wide ridges at altitudes of 100-400 m. Steep slopes, mostly overgrown by scrub and economically unimportant broadleaf forest, descend into the valleys of short streams, and most of the region's flat land is found around their outlet into the sea. The largest rivers are the Rižana and the border river Dragonja, at whose mouth extensive salt pans are located.

The climate is sub-Mediterranean with approximately 1 000 mm of annual precip-

### Which regions are similar to Obalno-kraška?

#### Land use:

50% forest

Kirde-Eesti (EE)  
Övre Norrland (S)  
Steiermark (A)

#### Age structure:

29% under 25

Castilla y León (E)  
Dorset and Somerset (UK)  
Riga (LV)

#### Employment structure:

69% services

Brnenský (PL)  
East Anglia (UK)  
Sydsverige (S)

### Agriculture 1997

|   |       |
|---|-------|
| Number of private farms   | 3 083 |
| Persons working in agriculture                                      | 1 081 |
| Total agricultural area (ha)  | 9 602 |
| Total livestock   | 8 238 |
| Cattle per 100 ha of total agricultural land                        | 33.1  |
| Pigs per 100 ha of total agricultural land                          | 18.9  |
| Main products - proportion of arable land devoted to production of: |       |
| Cereals   | 25.5  |
| Sugar beet  | 0.0   |
| Fodder plants   | 34.4  |
| Potatoes  | 9.8   |

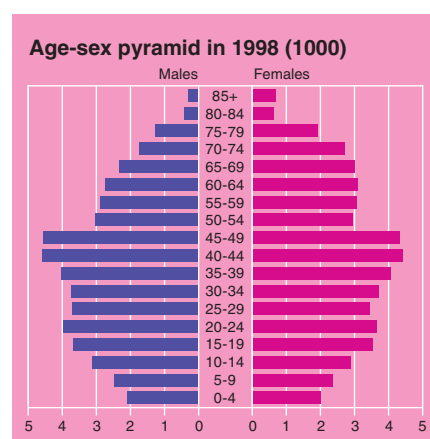
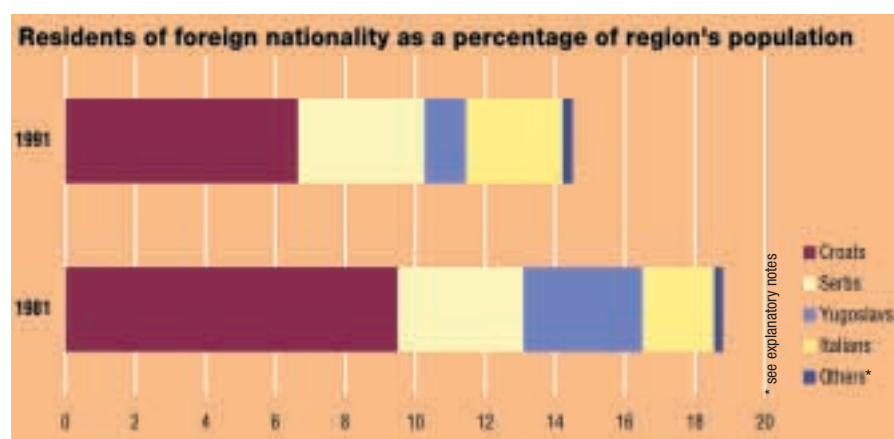
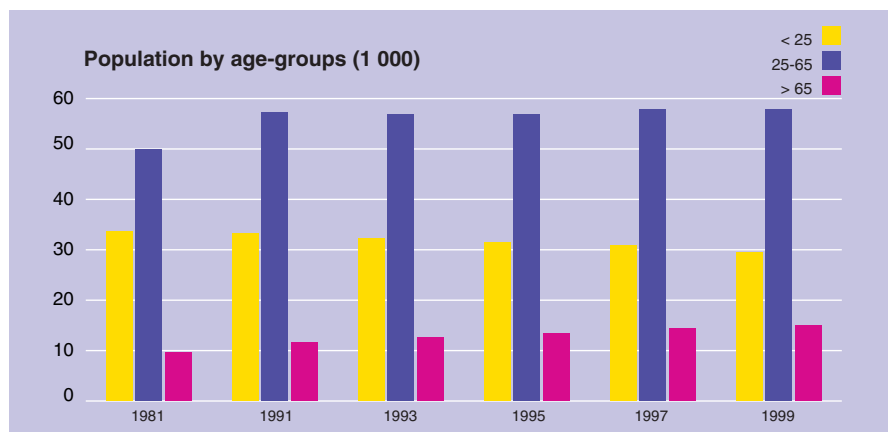
itation and average temperatures between 4.9°C (January) and 22.8°C (July).

Situated along the coast are the old towns of Koper (Capodistria, population 24 000), Izola (Isola, 10 600) and Piran (Pirano, 5 000). They have preserved all the characteristics of old Mediterranean towns, while the tourist resort of Portorož (Portorose, 3 100) was established later. Inland, along the main Vienna - Trieste railway and road, are the towns of Sežana (4 700) and Divača (1 300).

The region's most important natural resource is the sea, important for tourism, the fishing industry and salt production and, of course, as Slovenia's gateway to the world. It also has proportionally the smallest agricultural land area (9.2%) of all



Slovenian regions and suffers from a shortage of drinking water, the supply being almost entirely dependent on the Rižana river karst spring and a karst water well near Brestovica in the western part of Kras.



### Population concentrated along the coast

At the end of 1998, 102 418 people (5.2% of the country's population) lived in Slovenia's only coastal region. The average population density in the region (98.1 people per km<sup>2</sup>) is slightly above the national average. However there are big differences between the coastal belt where the density is over 400 people per km<sup>2</sup> and the sparsely settled karst interior where the density ranges between 20 and 35 people per km<sup>2</sup>.

Obalno-kraška is among the few regions in Slovenia where the population slightly increased during the 1990-1998 period. However a slow decline has been recorded since 1995. This population growth was mostly the consequence of immigration from other regions with the positive migratory balance increasing even more after 1994. Natural growth indicators are less encouraging; the region has the lowest birth rate in Slovenia, resulting in a mortality rate well above the birth rate. The number of births decreased by one third in the 1985-1997 period, which is substantially above the national average.

Despite the high influx of immigrants, the

percentage of people below the age of 25 in Obalno-kraška is below the national average and the percentage of people above the age of 65 exceeds the national average. As in other parts of Slovenia, the younger population decreased by more than 10% during the 1990-1997 period, while the older population increased by almost one third in the same period (as against the Slovenian average of 24.1%). The ageing of the population is greatest in the karst interior, although the average age of the population in all three coastal municipalities is also above the national average.

With a quarter of its population of non-Slovene extraction, this is by far the highest percentage of all Slovenian regions. Apart from Slovenes, approximately 3 000 members of the Italian ethnic minority (2.8% of the region's population) live in coastal towns and near-by villages. Their rights are guaranteed by the constitution, as both Italian and Slovenian are official languages in municipalities where there is an Italian minority. Nevertheless, after World War II, and especially after the Free Territory of Trieste was abolished, most of the Italian population moved to Italy.

Initially immigrants from other Slovenian

regions were attracted to coastal towns, while during the 1970s and 1980s, people from neighbouring Croatia and also from other parts of former Yugoslavia migrated to the region. Of these immigrants and their descendants, Croats (6.7 %) and Serbs (3.6 %) are the most numerous.

### Main enterprises

| Name  | Activity            |
|---|---------------------|
| Luka koper  | Cargo handling      |
| Splošna bolnišnica Izola                                | Hospital activities |
| Mehano Izola  | Toys                |
| Promo d.o.o. Koper                                      | Motorcycles         |
| Casino Portorož d.d.                                    | Casino              |
| Mednarodno podjetje Lama Dekani                         | Locks and hinges    |
| "Intereuropa d.d., dejavnost cestnega transporta blaga" | Road transport      |
| Ortopedska bolnišnica Valdoltra                         | Hospital activities |
| SGP Kraški Zidar Sežana                                 | Construction        |
| Cimos Koper d.o.o.                                      | Vehicle parts       |



### Service activities are the backbone of region's vital economy

The region's share in generated national gross value added (5.3%) rank it among the smaller Slovenian regions, however it is economically one of the most successful. Service activities are by far the most important, generating 70.8% of the region's gross value added, which is the highest percentage among the Slovenian regions. The secondary sector contributes 25.3%, and agriculture and fishing 3.7%.

Fruit, wine and vegetable growing predominate in the region's agriculture which suffers from insufficient water resources for irrigation and is hindered by small, fragmented farms.

The fishing industry had been relatively important up until the 1990s. Since then, it has been reduced considerably because Slovenian fishermen are no longer allowed unlimited fishing in Croatian territorial waters. Mussel aquaculture is expanding in the Bay of Piran where salt has also been produced in salt pans for centuries.

As in Goriška, industry was introduced here only in the 1950s and 1960s. The most

important is the manufacture of metal products and the machinery industry. The companies in these branches are mostly connected with foreign partners, including producing car parts for the French firm Citroën (Koper, Senožeče). The food industry is based in Portorož and toy manufacturing in Izola.

Transport services, trade, tourism, insurance and commercial services are the main services sector activities. New development incentives will be brought into this area with the expected establishment of the third Slovenian university in Koper.

The port of Koper is vital to the transport sector, with 8.4 million tonnes of cargo in 1998. This is small in global terms, but important for Slovenia as well as for the wider Central European hinterland. Koper also has the head office of the largest Slovenian road transport company, while in Portorož there is the head office of the only Slovenian ship transport company. Transport and related services are also important in Sežana since the largest freight terminal is situated at the nearby Fernetiči border crossing. Tourism in Portorož and Piran is also a very important activity.

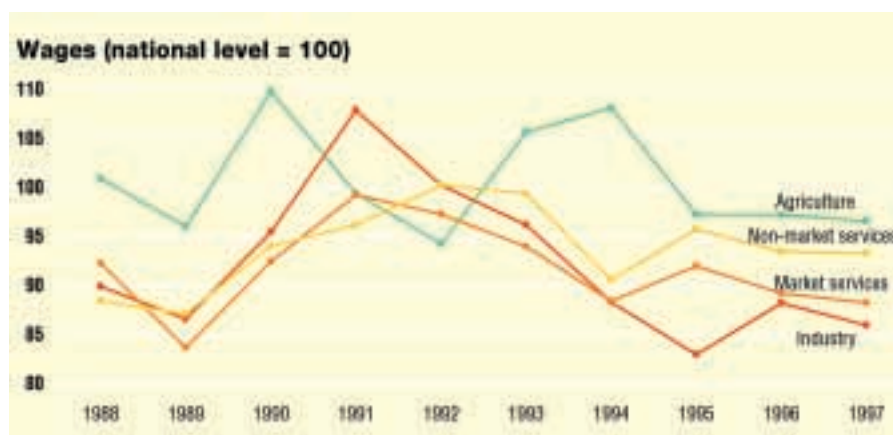
Open access to the world's seas, connections with the Mediterranean over a thousand years, and its border position were factors that undoubtedly contributed to the flourishing of Obalno-kraška and also facilitated the transition from the former socialist regime to a modern market economy. Part of this recovery can be attributed to the local workforce that comes from local high-school centres and three local faculties. A further regional advantage is that the majority of the population is bilingual which eases cooperation with Italian partners.

### Average earnings second highest in Slovenia

Between 1995 and 1998 average net monthly wages in Obalno-kraška increased by only 11.4% which is 2% below the national average, and in fact wage growth was slower only in Pomurska region.

Nevertheless, it is worth noting that average net monthly wages in the region in 1998 were 3.5% above the national average at 557 ECU, and overall the second highest in Slovenia after Osrednjeslovenska. Wages in the region's industry (472 ECU), construction (500 ECU) and commercial services sectors (564 ECU) are among the highest in Slovenia, while wages in the non-commercial services sector are slightly below the national average (618 ECU).

Earned income represent more than a half of all household income, while one third comes from pensions and other social insurance sources. Furthermore, many people also receive Italian pensions. In rural areas there is a high percentage of mixed farmer-employee households receiving additional income from agriculture, while tourism is an additional source of income in tourist resorts.







## Plenty of jobs in the services sector

After Slovenia regained its access to the open sea following the abolishment of the Free Territory of Trieste (1954), the construction of the Port of Koper and the planned industrialisation of coastal towns attracted a lot of labour from other parts of Slovenia. In the following decades, the concentration of jobs in the coastal belt caused rapid depopulation of the hinterland, leaving only Sežana as a large centre of employment.

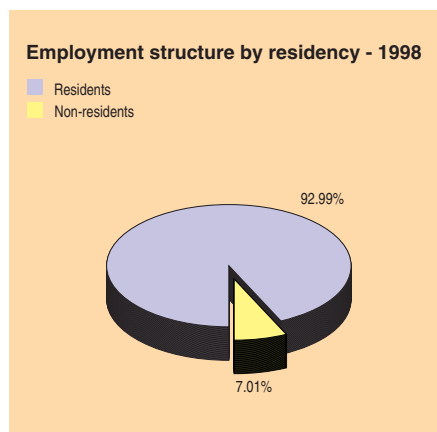
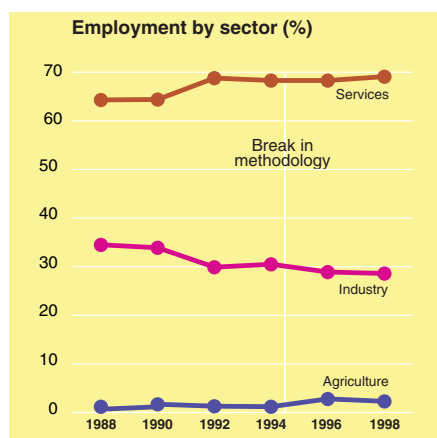
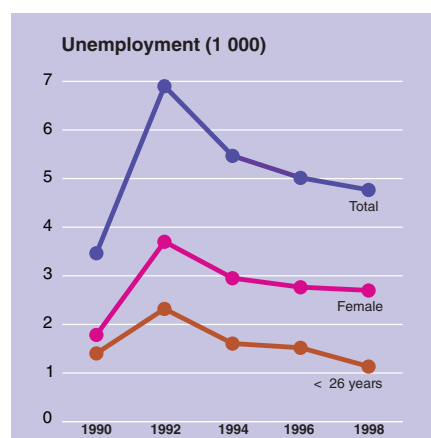
With the development of transport services and tourism, by the 1970s the services sector had already become more important than industry. In 1998, the services sector employed 69.1% of the workforce, which was the highest percentage of all the Slovenian regions. On the other hand, Obalno-kraška had the lowest percentage of its workforce (28.6%) employed in the industrial sector.

Unlike other regions, the problems associated with restructuring industry were not so severe here. As a result the number of employees in this sector increased by 10.9% during the 1991-1998 period (at the national level this number decreased by

13.3% during the same period), while in the service sector an increase of 30% was recorded. These favourable trends are expected to continue in the future since the region will soon be connected to the hinterland by a motorway.

As elsewhere in Slovenia, the majority of employees have full-time employment, while the percentages of women employed and employees with temporary employment are close to the national average. There are rather few commuters from neighbouring regions, while a substantial percentage of people commute daily to nearby Trieste.

The unemployment rate (10.5%) in Obalno-kraška is among the lowest in Slovenia. Nevertheless, the transition from a socialist to a market economy caused an enormous increase in unemployment in this region also. It doubled between 1990-1993, as companies shed large numbers of surplus employees. A large portion of the redundant workforce found new employment in the services sector, so that the unemployment rate has been decreasing persistently since 1993. There are relatively few young job-seekers among the unemployed, and the share of the long-term unemployed is also smaller than in other Slovenian regions.



## Gateway to the world

Slovenia has only 47 km of Adriatic coast, but it is extremely important for the country as this gives it access to the sea. After the port of Trieste was cut off from its hinterland by the Italian-Yugoslav border, Yugoslavia opened a new port at Koper in 1958. Although not a large port, it is very important for Slovenia and as a transit port for a large section of the Central European hinterland, especially Austria, Hungary, the Czech Republic and Slovakia. In 1998, it handled 8.4 million tons of cargo. Specialising in container shipments and ro-ro transport, it also has terminals for general cargo, cars, iron ore and coal, grain, fruit and other perishable goods, livestock, timber and liquid fuels. The entire port area has Free Trade Zone status with attractive business and financial advantages for domestic and foreign investors.

Two smaller ports are also located in Izola and Piran, while Izola and Portorož also have marinas.

The port of Koper is connected to the hinterland by a major road, due to be upgraded to a motorway by 2004, and by a single-track electrified railway built in 1967, which joins the Southern railway in Divača.

Construction of a second track is planned soon. In Prešnica, a single-track railway branches off to Pula (Croatia).

Near Divača, the motorway leading to Sežana and further to Trieste (Italy) branches off from the Ljubljana-Kozina motorway, while at the Fernetiči border crossing there is one of the largest freight terminals in Slovenia. Other important roads include the Trieste-Rijeka road and the coastal road, Koper-Izola-Portorož, which extends northwards to Trieste and southwards to the Croatian part of the Istria peninsula.

Obalno-kraška has a relatively dense network of local, mostly paved roads. The region also has the largest number of cars per capita (46 800 passenger cars or 455 cars per 1 000 persons). Near Portorož, there is a small international airport with a 1 200 m long runway, used primarily by small tourist and business planes.

**Surfaced public roads – 1997**

|  | Obalno-kraška | Slovenia |
|--|---------------|----------|
| Length in km per km <sup>2</sup>                             | 0.29          | 0.23     |
| Length in km per 1 000 population                            | 3.0           | 2.4      |
| Length in km per 1 000 private passenger cars                | 6.5           | 6.1      |
| % private passenger cars in total number of vehicles         | 86            | 86       |
| Number of accidental deaths per 1 000 private passenger cars | 0.4           | 0.5      |

**Shallow sea and enormous pressure on the coastal belt**

Slovenia has only 180 km<sup>2</sup> of the sea in the shallow Gulf of Trieste, part of the Adriatic Sea, where the average depth is only 19 m. Since the Gulf of Trieste is relatively closed, sea currents are weak. As a result, occasionally eutrophication occurs, causing algal blooms. The seawater is not particularly clean, with most of the pollution coming from the Po river in Italy. In closed bays along the Slovenian coast, pollution is also caused by the discharging of municipal and other waste water into the sea, as none of the coastal towns have adequate municipal waste water treatment plants.

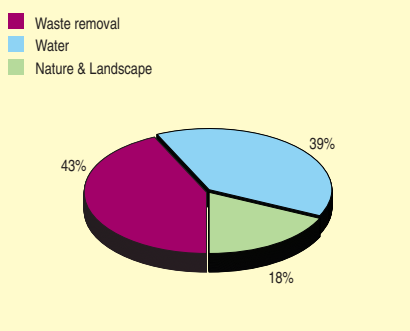
Along the Slovenian coast the environment is also under enormous pressure due to the high concentration of population on the coastal belt, intensive agriculture in the immediate hinterland and mass tourism during the summer.

The interior of Obalno-kraška is essentially karst in character with no surface water and almost no water sources. Underground runoff prevails, making karst waters extremely vulnerable due to their low self-purification capacity.

Water supply in the region depends almost entirely on two large karst water sources. However, the proximity of the road and railway leading inland from Koper makes the Rižana karst spring most vulnerable to spills of hazardous substances. Water quantity is already insufficient during the peak consumption months in the summer, while new sources of drinking water have not been found so far. Municipal waste is disposed of without any treatment at more or less adequately maintained landfills.

Obalno-kraška is the only region in Slovenia that is not connected to the natural gas network. On the other hand, its telephone penetration is the highest in Slovenia with 479 telephone lines per

1 000 inhabitants, exceeding the national average by more than 30%.

**Current expenditure for environmental protection - 1997****Mediterranean character still evident**

Obalno-kraška is characterised by being a part of the Mediterranean cultural area, which survived even the large population and historical changes following World War II. Close ties with nearby Trieste are also important where ethnic minorities, Italians on the Slovenian side of the border and Slovenes in and around Trieste, have played an important intermediary role.

Cultural, educational and other activities are dispersed among all three old coastal towns and in Portorož which is of more recent origin. Sežana is the only important centre in the hinterland. In contrast to Pomurska, where bilingual education has been established, education in areas settled by a mixed Slovene and Italian population is separated at both primary and secondary levels. As well as the Slovenian high schools in Koper, Izola, Piran, Portorož and Sežana, there are also Italian grammar schools in Koper and Portorož and a secondary school in Izola. In the coastal towns there are also four faculties which should be brought together to form the basis of the third Slovenian university in the near future.

**Utilities - 1997**

|   | Obalno-kraška | Slovenia |
|---|---------------|----------|
| Dwellings connected to water supply system (%)    | 97.7          | 97.6     |
| Dwellings connected to sewerage system (%)        | 97.7          | 97.6     |
| Per capita consumption of water (m <sup>3</sup> ) | 77.4          | 71.9     |
| Telephone connections per 1000 population         | 479           | 357      |
| Number of doctors per 1000 population             | 2.2           | 2.2      |
| Number of hospital beds per 1000 population       | 6.3           | 5.7      |

The only large research institution is the Marine Biological Station in Piran which operates within Ljubljana University. There is a regional general hospital in Izola, and an orthopaedic hospital in Ankaran.

Important cultural institutions include the Regional Museum in Koper, the Maritime Museum in Piran, coastal galleries in Piran and Koper and a central study library in Koper. The Koper-Capodistria radio-television centre, broadcasting in Italian and in Slovenian, is part of the national radio and television network.

**Number of pupils - 1998**

|                                       |               |
|---------------------------------------|---------------|
| Pre-school                            | 3 235         |
| Primary                               | 9 228         |
| Lower secondary                       | 1 435         |
| Higher secondary (vocational/general) | 3 790         |
| Tertiary (higher education)           | 3 115         |
| <b>Total</b>                          | <b>20 803</b> |

## Explanatory notes

Sources: Statistical Office of the Republic of Slovenia (all data relating to Slovenia)  
Eurostat database REGIO (all EU data)

### Notes on specific graphs and tables

#### Table: Main indicators

Reference year: 1997, except for population density (1999), population < 25 (1999), population > 65 (1999), employment in agriculture (1998), in industry (1998), in services (1998), unemployment (1998) and GDP per capita (1996).  
Activity rate: labour force as a percentage of the population aged 15 and over.  
Employment, unemployment: data from the Statistical register of Employment, at 31st December each year

#### Table: Agriculture - 1997

- 1) Only areas cultivated by EU comparable farms are included.  
EU comparable farms are those having:
  - a) at least one hectare of area farmed, or
  - b) having less than one hectare of area farmed, but
    - \* at least 0.1 hectare of area farmed and 0.9 hectare of forest or
    - \* at least 0.3 hectares of vineyards and/or orchards or
    - \* two or more livestock units (LSU) or
    - \* 0.15 to 0.3 hectare of vineyards/orchards and one to two LSU
- 2) Permanent Crops: orchards - plantations, orchards - extensive, vineyards.
- 3) Arable land also includes kitchen gardens.
- 4) Sums not equal due to rounding.  
Persons working in agriculture: data taken from Statistical Register of Employment

#### Table: Main enterprises

Source: Business Register of Slovenia 1999

#### Graph: Residents of foreign nationality as a percentage of region's population

The graph excludes persons whose origin is unknown (i.e. they are not included under 'Others').  
By contrast, references in the text do include such persons under 'non-Slovenes'.

#### Graph: Employment by sector (%)

Source: Statistical Register of Employment at 31 October each year

##### Definition of sectors:

Agriculture - agriculture, hunting and forestry, fishing (NACE Rev.1. codes A-B);  
Industry - mining, manufacturing, electricity, gas and water supply, construction (NACE Rev.1. codes C-F);  
Services - trade, services, etc. (NACE Rev.1. codes G-P);

#### Graph: Gross value added by sector - 1996 (%)

The gross value added by sector is based on gross value added at basic prices.

#### Graph: Wages by sectors - 1997 (ECU)

Definition: gross monthly average wages and salaries.

#### Graph: Unemployment (1000)

Source: Ministry of Employment, Family & Social Affairs: database on registered unemployment at 31st October of each year

#### Graph: Current expenditure for environmental protection - 1997

Source: Statistical Office of RS, Statistical Yearbook 1999

### Note on comparability

The definitions and methods used by the Statistical Office of the Republic of Slovenia do not always coincide with those used by the Member States of the European Union. Comparisons of Slovenian regions with regions in the EU should therefore be made with caution.



## BIBLIOGRAPHY AND INFORMATION SOURCES

Atlas Slovenije (Atlas of Slovenia). 440 pp. Ljubljana 1996.

Bobek, V., 2000: Foreign trade system of Slovenia. 133 pp. Maribor.

Climate of Slovenia. 70 pp. Ljubljana.

Gams, I. — I. Vrišer (eds.), 1998: Geografija Slovenije (Geography of Slovenia). 501 pp. Ljubljana.

Geografski atlas Slovenije (Geographical atlas of Slovenia). 360 pp. Ljubljana.

Interaktivni atlas Slovenije (Inter-active atlas of Slovenia). CD-ROM. Ljubljana 2000.

Mejač, Ž. (ed.), 2000: Negotiating positions of the Republic of Slovenia for negotiations on accession to the European Union. Ljubljana.

Možina, S. (ed.), 1999: Government of the Republic of Slovenia 1999. The Government Public Relations and Media Office. 160 pp. Ljubljana.

Natek, K. — M. Natek, 1998: Slovenija. Geografska, zgodovinska, pravna, politična, ekonomska in kulturna podoba Slovenije (Slovenia. geographical, historical, legal, political, economic and cultural characteristics). 415 pp. Ljubljana.

Natek, K. et al., 1999: Discover Slovenia. 136 pp. Ljubljana.

National accounts for the Republic of Slovenia: sources, methods and estimates (OECD publication). 150 pp. Paris.

Reviews of national policies for education (OECD publication). 40 pp. Paris 1999.

Slovenia. A Gateway to Central Europe. 96 pp. Ljubljana 1996.

Slovenia: economic transformation and EU accession. Vol. 1 and 2 (A World Bank country study). Washington 1999.

Slovenia: the tourist guide. 720 pp. Ljubljana 1999.

Taxation in Slovenia. Ministry of Finance. Ljubljana 2000.

Welcome to Slovenia (multi-media presentation of Slovenia's tourist offer). CD\_ROM. Murska Sobota 1999.

Zidarič, B., 1999: Doing business in Slovenia. 132 pp.

## STATISTICAL PUBLICATIONS AND SOURCES

Statistični letopis - Statistical Yearbook of the Republic of Slovenia  
Statistical Office of the Republic of Slovenia, Ljubljana  
(Available in English since 1994)

Slovenija v številkah - Slovenia in Figures  
Statistical Office of the Republic of Slovenia, Ljubljana (Available in English since 1991)  
Prebivalstvo Republike Slovenije - Population of the Republic of Slovenia

Statistical Office of the Republic of Slovenia, Ljubljana (Available in English since 1995)

Popis prebivalstva, gospodinjstev, stanovanj in kmečkih gospodarstev v Republiki Sloveniji v letu 1991  
(Rezultati po občinah) - Census of the population, households, housings and agricultural holdings in  
the Republic of Slovenia in 1991 (Results by municipalities)  
Statistical Office of the Republic of Slovenia, Ljubljana

Trg dela, Slovenija - Labour Market, Slovenia  
Statistical Office of the Republic of Slovenia, Ljubljana (Available in English since 1996)

Osnovne in srednje šole na začetku in koncu šolskega leta (Primary and secondary schools at the beginning and  
the end of the school year)  
Statistical Office of the Republic of Slovenia, Ljubljana

### **Other sources**

Centralni register prebivalstva Republike Slovenije (Central Register of Population of the Republic of Slovenia)

Statistični register delovnoaktivnega prebivalstva (Statistical Register of Employment)

Poslovni register Slovenije (The Business Register of Slovenia)

Internet: <http://www.sigov.si/zrs>.

## Legend to maps

|  |                                  |
|--|----------------------------------|
| <b><u>LJUBLJANA</u></b>  | National capital                 |
| <b><u>Kranj</u></b>  | Regional capital                 |
| <b><u>LJUBLJANA</u></b><br> | Town of over 100 000 inhabitants |
|  <b>Velenje</b>            | Town of over 20 000 inhabitants  |
|  <b>Sevnica</b>           | Town of over 10 000 inhabitants  |
|  <b>Piran</b>             | Other locality                   |

|   |                           |
|---|---------------------------|
|    | State border              |
|    | Regional border           |
|    | Motorway                  |
|    | Road                      |
|    | Railway                   |
|    | Frontier crossing         |
|    | Railway frontier crossing |
|   | Port                      |
|  | Airport                   |
|  | National Park             |

# LEGEND

## Regions of Slovenia

Maps revised and supplemented by **Marko Krevs, Ph.D**

Department Geography, Faculty of Arts  
Ljubljana University, Slovenia, 2000

Following initial map compilation and design by

**András Trócsányi and Zoltán Wilhelm**

Janus Pannonius University, Pécs, Hungary

## Symbols and abbreviations

|   |                                 |
|---|---------------------------------|
| > | Greater than                    |
| ≥ | Greater than or equal           |
| < | Less than                       |
| : | Not available                   |
| 0 | Less than half of the unit used |

|        |                   |
|--------|-------------------|
| GVA    | Gross value-added |
| LU     | Livestock unit    |
| inhab. | Inhabitant        |
| M      | Male              |
| F      | Female            |
| ha     | Hectare           |
| km     | Kilometre         |
| m      | Metre             |

## **European Commission**

### **Volume 9: Portrait of the Regions – Slovenia**

Luxembourg: Office for Official Publications of the European Communities

2000 – VIII, 80 pp. – 21.0 x 29.7 cm

Classification themes: 13 and 17

ISBN: 92-828-9404-5

Price (excluding VAT) in Luxembourg: ECU 25,00

Volume 9 of the "Portrait of the Regions" series comprises a detailed presentation of the regions of the Republic of Slovenia. Slovenia's 12 regions are each presented in a consistent format, using maps, diagrams, statistical tables and commentaries. Topics covered include population patterns and trends, employment, the economic fabric, the environment and the strengths and weaknesses of each region.

Based on the most comparable official statistics available, the analyses have been compiled by observers with a detailed knowledge of the regions concerned.



## ..... Eurostat Data Shops

### **BELGIQUE/BELGIË**

**Eurostat Data Shop**  
Bruxelles / Brussel  
Planistat Belgique  
124 Rue du Commerce  
Handelsstraat 124  
B-1000 Bruxelles/Brussel  
Tel. (32-2)-234 67 50  
Fax (32-2)-234 67 51  
E-mail: datashop@planistat.be

### **DANMARK**

**Danmarks Statistik**  
Bibliotek og Information  
Eurostat Data Shop  
Sejrøgade 11  
DK - 2100 KØBENHAVN Ø  
Tel. (45-39) 17 30 30  
Fax (45-39) 17 30 03  
E-mail : bib@dst.dk

### **DEUTSCHLAND**

**Statistisches Bundesamt**  
Eurostat Data Shop Berlin  
Otto-Braun-Straße 70-72  
D - 10178 BERLIN  
Tel. (49-30)-2324 6427/28  
Fax (49-30)-2324 6430  
E-mail:  
datashop@statistik-bund.de

### **ESPAÑA**

**INE**  
Eurostat Data Shop  
Paseo de la Castellana 183  
Oficina 009  
Entrada por Estébanez  
Calderón  
E - 28046 MADRID  
Tel. (34-91)-583 91 67  
Fax (34-91)-579 71 20  
E-mail:  
datashop.eurostat@ine.es

### **FRANCE**

**INSEE Info Service**  
Eurostat Data Shop  
195, rue de Bercy  
Tour Gamma A  
F - 75582 PARIS CEDEX 12  
Tel. (33-1)-53 17 88 44  
Fax (33-1)-53 17 88 22  
E-mail : datashop@insee.fr

### **ITALIA — ROMA**

**ISTAT — Centro di Informazione**  
Statistica — Sede di Roma  
Eurostat Data Shop  
Via Cesare Balbo 11a  
I - 00184 ROMA  
Tel. (39-06)-46 73 31 02/06  
Fax (39-06)-46 73 31 01/07  
E-mail: dipdiff@istat.it

### **ITALIA — MILANO**

**ISTAT — Ufficio Regionale per la**  
Lombardia  
Eurostat Data Shop  
Via Fieno 3  
I - 20123 MILANO  
Tel. (39-02)-8061 32 460  
Fax (39-02)-8061 32 304  
E-mail: Mileuro@tin.it

### **LUXEMBOURG**

**Eurostat Data Shop Luxembourg**  
BP 453  
L - 2014 LUXEMBOURG  
4, rue A. Weicker  
L - 2721 LUXEMBOURG  
Tel. (352) 43 35 22-51  
Fax (352)-43 35 22 221  
E-mail:  
dslux@eurostat.datashop.lu

### **NEDERLAND**

**Statistics Netherlands**  
Eurostat Data Shop - Voorburg  
po box 4000  
NL - 2270 JM VOORBURG  
Tel. (31-70)-337 49 00  
Fax (31-70)-337 59 84  
E-mail: datashop@cbs.nl

### **PORTUGAL**

**Eurostat Data Shop Lisboa**  
INE / Serviço de Difusão  
Av. António José de Almeida, 2  
P - 1000-043 LISBOA  
Tel. (351 21) 842 61 00  
Fax (351 21) 842 63 64  
E-mail: data.shop@ine.pt

### **SUOMI/FINLAND**

**Statistics Finland**  
Eurostat Data Shop Helsinki  
Tilastokirjasto  
PL 2B  
00022 Tilastokeskus  
Työpajakatu 13 B, 2 krs,  
Helsinki  
Tel. (358 9)-1734 22 21  
Fax (358 9)-1734 22 79  
E-mail: datashop.tilastokeskus@  
tilastokeskus.fi  
Internet:  
<http://www.tilastokeskus.fi/tk/kk/datashop.html>

### **SVERIGE**

**Statistics Sweden**  
Information service  
Eurostat Data Shop  
Karlavägen 100  
Box 24 300  
S - 104 51 STOCKHOLM  
Tel. (46-8)-5069 48 01  
Fax (46-8)-5069 48 99  
E-mail : infoservice@scb.se  
URL: [http://www.scb.se/info/  
datashop/eudatashop.asp](http://www.scb.se/info/datashop/eudatashop.asp)

### **UNITED KINGDOM**

**Eurostat Data Shop**  
Enquiries & advice and publica-  
tions  
Office for National Statistics  
Customers and Electronic  
Services  
Unit B1/05  
1 Drummond Gate  
UK - LONDON SW1V 2QQ  
Tel. (44-171)-533 56 76  
Fax (44-1633)-81 27 62  
E-mail:  
eurostat.datashop@ons.gov.uk

**Electronic Data Extractions,**  
enquiries & advice  
r.cade

**1L Mountjoy Research Centre**  
University of Durham  
UK-Durham DH1 3SW  
Tel. (44-191) 374 7350  
Fax (44-191) 384 4971  
E-mail: r-cade@dur.ac.uk  
Internet: [http://www-  
rcade.dur.ac.uk](http://www-rcade.dur.ac.uk)

### **NORGE**

**Statistics Norway**  
Library and Information Centre  
Eurostat Data Shop  
Kongens gate 6  
P.O.Box 8131 Dep.  
N-0033 OSLO  
Tel: (47-22) 86 46 43  
Fax: (47-22) 86 45 04  
E-mail: Datashop@ssb.no

### **SCHWEIZ/SUISSE/SVIZZERA**

**Statistisches Amt des Kantons**  
Zürich  
Eurostat Data Shop  
Bleicherweg 5  
CH-8090 Zürich  
Tel. (41 1) 225 12 12  
Fax (41 1) 225 12 99  
E-mail: datashop@zh.ch  
Internet:  
<http://www.zh.ch/statistik>

### **UNITED STATES OF AMERICA**

**Haver Analytics**  
Eurostat Data Shop  
60 East 42nd Street  
Suite 3310  
NEW YORK, NY 10165  
Tel. (1-212)-986 9300  
Fax (1-212)-986 5857  
E-mail: eurodata@haver.com

### **EUROSTAT HOMEPAGE**

[www.europa.eu.int/comm/eurostat/](http://www.europa.eu.int/comm/eurostat/)

### **MEDIA SUPPORT** **EUROSTAT**

(Nur für Journalisten —  
only for professional journalists —  
seulement pour les journalistes  
professionnels)  
Postanschrift — Postal address —  
Adresse postale:  
Bâtiment Jean Monnet  
L-2920 LUXEMBOURG  
Bâtiment Bech — A3/48  
5, rue Alphonse Weicker  
L-2721 Luxembourg  
Tel. (352) 43 01-33408  
Fax (352) 43 01-32649  
E-Mail: [media.support@cec.eu.int](mailto:media.support@cec.eu.int)

Venta • Salg • Verkauf • Πωλήσεις • Sales • Vente • Vendita • Verkoop • Venda • Myynti • Försäljning  
<http://eur-op.eu.int/general/en/s-ad.htm>

BELGIQUE/BELGIË

**Jean De Lannoy**

Avenue du Roi 202/Koningslaan 202  
B-1190 Bruxelles/Brussel  
Tél. (32-2) 538 43 08  
Fax (32-2) 538 08 41  
E-mail: jean.de.lannoy@infoboard.be  
URL: <http://www.jean-de-lannoy.be>

**La librairie européenne/  
De Europese Boekhandel**

Rue de la Loi 244/Wetstraat 244  
B-1040 Bruxelles/Brussel  
Tél. (32-2) 295 26 39  
Fax (32-2) 735 08 60  
E-mail: mail@libeurop.be  
URL: <http://www.libeurop.be>

**Moniteur belge/Belgisch Staatsblad**

Rue de Louvain 40-42/Leuvenseweg 40-42  
B-1000 Bruxelles/Brussel  
Tél. (32-2) 552 22 11  
Fax (32-2) 511 01 84  
E-mail: eusales@just.fgov.be

DANMARK

**J. H. Schultz Information A/S**

Herstedvang 12  
DK-2620 Albertslund  
Tlf. (45) 43 63 23 00  
Fax (45) 43 63 19 69  
E-mail: schultz@schultz.dk  
URL: <http://www.schultz.dk>

DEUTSCHLAND

**Bundesanzeiger Verlag GmbH**

Vertriebsabteilung  
Amsterdamer Straße 192  
D-50735 Köln  
Tel. (49-221) 97 66 80  
Fax (49-221) 97 66 82 78  
E-Mail: Vertrieb@bundesanzeiger.de  
URL: <http://www.bundesanzeiger.de>

ΕΛΛΑΔΑ/GREECE

**G. C. Eleftheroudakis SA**

International Bookstore  
Panepistimiou 17  
GR-10564 Athina  
Tel. (30-1) 331 41 80/1/2/3/4/5  
Fax (30-1) 323 98 21  
E-mail: elebooks@netor.gr  
URL: <http://www.hellasnet.gr>

ESPAÑA

**Boletín Oficial del Estado**

Trafalgar, 27  
E-28071 Madrid  
Tel. (34) 915 38 21 11 (libros)  
913 84 17 15 (suscripción)  
Fax (34) 915 38 21 21 (libros),  
913 84 17 14 (suscripción)  
E-mail: clientes@com.boe.es  
URL: <http://www.boe.es>

**Mundi Prensa Libros, SA**

Castelló, 37  
E-28001 Madrid  
Tel. (34) 914 36 37 00  
Fax (34) 915 75 39 98  
E-mail: libreria@mundiprensa.es  
URL: <http://www.mundiprensa.com>

FRANCE

**Journal officiel**

Service des publications des CE  
26, rue Desaix  
F-75727 Paris Cedex 15  
Tél. (33) 140 58 77 31  
Fax (33) 140 58 77 00  
E-mail: europublications@journal-officiel.gouv.fr  
URL: <http://www.journal-officiel.gouv.fr>

IRELAND

**Alan Hanna's Bookshop**

270 Lower Rathmines Road  
Dublin 6  
Tel. (353-1) 496 73 98  
Fax (353-1) 496 02 28  
E-mail: hannas@iol.ie

ITALIA

**Licosa SpA**

Via Duca di Calabria, 1/1  
Casella postale 552  
I-50125 Firenze  
Tel. (39) 055 64 83 1  
Fax (39) 055 64 12 57  
E-mail: licosa@licosa.com  
URL: <http://www.licosa.com>

LUXEMBOURG

**Messageries du livre SARKL**

5, rue Raiffeisen  
L-2411 Luxembourg  
Tél. (352) 40 10 20  
Fax (352) 49 06 61  
E-mail: mail@mdl.lu  
URL: <http://www.mdl.lu>

NEDERLAND

**SDU Servicecentrum Uitgevers**

Christoffel Plantijnstraat 2  
Postbus 20014  
2500 EA Den Haag  
Tel. (31-70) 378 98 80  
Fax (31-70) 378 97 83  
E-mail: sdu@sdu.nl  
URL: <http://www.sdu.nl>

ÖSTERREICH

**Manz'sche Verlags- und  
Universitätsbuchhandlung GmbH**

Kohlmarkt 16  
A-1014 Wien  
Tel. (43-1) 53 16 11 00  
Fax (43-1) 53 16 11 67  
E-Mail: manz@schwinge.at  
URL: <http://www.manz.at>

PORTUGAL

**Distribuidora de Livros Bertrand Ld.º**

Grupo Bertrand, SA  
Rua das Terras dos Vales, 4-A  
Apartado 60037  
P-2700 Amadora  
Tel. (351) 214 95 87 87  
Fax (351) 214 96 02 55  
E-mail: dlb@ip.pt

**Imprensa Nacional-Casa da Moeda, SA**

Sector de Publicações Oficiais  
Rua da Escola Politécnica, 135  
P-1250-100 Lisboa Codex  
Tel. (351) 213 94 57 00  
Fax (351) 213 94 57 50  
E-mail: spoce@incm.pt  
URL: <http://www.incem.pt>

SUOMI/FINLAND

**Akateeminen Kirjakauppa/  
Akademiska Bokhandeln**

Keskuskatu 1/Centralgatan 1  
PL/PB 128  
FIN-00101 Helsinki/Helsingfors  
P./ftn (358-9) 121 44 18  
F./fax (358-9) 121 44 35  
Sähköposti: sps@akateeminen.com  
URL: <http://www.akateeminen.com>

SVERIGE

**BTJ AB**

Traktorvägen 11-13  
S-221 82 Lund  
Tlf. (46-46) 18 00 00  
Fax (46-46) 30 79 47  
E-post: btjeu-pub@btj.se  
URL: <http://www.btj.se>

UNITED KINGDOM

**The Stationery Office Ltd**

Customer Services  
PO Box 29  
Norwich NR3 1GN  
Tel. (44) 870 60 05-522  
Fax (44) 870 60 05-533  
E-mail: book.orders@theso.co.uk  
URL: <http://www.itsofficial.net>

ÍSLAND

**Bokabud Larusar Blöndal**

Skólavörðustíg, 2  
IS-101 Reykjavík  
Tel. (354) 552 55 40  
Fax (354) 552 55 60  
E-mail: bokabud@simnet.is

NORGE

**Swets Blackwell AS**

Østenjovøien 18  
Boks 6512 Etterstad  
N-0606 Oslo  
Tel. (47) 22 97 45 00  
Fax (47) 22 97 45 45  
E-mail: info@no.swetsblackwell.com

SCHWEIZ/SUISSE/SVIZZERA

**Euro Info Center Schweiz**

c/o OSEC  
Stampfenbachstraße 85  
PF 492  
CH-8035 Zürich  
Tel. (41-1) 365 53 15  
Fax (41-1) 365 54 11  
E-mail: eics@osec.ch  
URL: <http://www.osec.ch/eics>

BĂLGARIA

**Europress Euromedia Ltd**

59, blvd Vitoshka  
BG-1000 Sofia  
Tel. (359-2) 980 37 66  
Fax (359-2) 980 42 30  
E-mail: Milena@mbox.cit.bg  
URL: <http://www.europress.bg>

ČESKÁ REPUBLIKA

ÚVIS

odd. Publikaci  
Havelkova 22  
CZ-130 00 Praha 3  
Tel. (420-2) 22 72 07 34  
Fax (420-2) 22 71 57 38  
URL: <http://www.uvis.cz>

CYPRUS

**Cyprus Chamber of Commerce and Industry**

PO Box 21455  
CY-1509 Nicosia  
Tel. (357-2) 88 97 52  
Fax (357-2) 66 10 44  
E-mail: demetrap@ccci.org.cy

EESTI

**Eesti Kaubandus-Tööstuskoda**

(Estonian Chamber of Commerce and Industry)  
Toom-Kooli 17  
EE-10130 Tallinn  
Tel. (372) 646 02 44  
Fax (372) 646 02 45  
E-mail: einfo@koda.ee  
URL: <http://www.koda.ee>

HRVATSKA

**Meditrade Ltd**

Pavla Hatza 1  
HR-10000 Zagreb  
Tel. (385-1) 481 94 11  
Fax (385-1) 481 94 11

MAGYARORSZÁG

**Euro Info Service**

Szt. István krt. 12  
II emelet 1/A  
PO Box 1039  
H-1137 Budapest  
Tel. (36-1) 329 21 70  
Fax (36-1) 349 20 53  
E-mail: euroinfo@euroinfo.hu  
URL: <http://www.euroinfo.hu>

MALTA

**Miller Distributors Ltd**

Malta International Airport  
PO Box 25  
Luqa LQA 05  
Tel. (356) 66 44 88  
Fax (356) 67 67 99  
E-mail: gwirth@usa.net

POLSKA

**Ars Polona**

Krakowskie Przedmiescie 7  
Skr. pocztowa 1001  
PL-00-950 Warszawa  
Tel. (48-22) 826 12 01  
Fax (48-22) 826 62 40  
E-mail: books119@arspolona.com.pl

ROMÂNIA

**Euromedia**

Str.Dionisie Lupu nr. 65, sector 1  
RO-70184 Bucuresti  
Tel. (40-1) 315 44 03  
Fax (40-1) 312 96 46  
E-mail: euromedia@mailcity.com

SLOVAKIA

**Centrum VTI SR**

Nám. Slobody, 19  
SK-81223 Bratislava  
Tel. (421-7) 54 41 83 64  
Fax (421-7) 54 41 83 64  
E-mail: europ@tbb1.sltk.stuba.sk  
URL: <http://www.sltk.stuba.sk>

SLOVENIJA

**Gospodarski Vestnik**

Dunajska cesta 5  
SLO-1000 Ljubljana  
Tel. (386) 613 09 16 40  
Fax (386) 613 09 16 45  
E-mail: europ@gvestnik.si  
URL: <http://www.gvestnik.si>

TÜRKIYE

**Dünya Infotel AS**

100, Yil Mahallesi 34440  
TR-80050 Bagclar-Istanbul  
Tel. (90-212) 629 46 89  
Fax (90-212) 629 46 27  
E-mail: infotel@dunya-gazete.com.tr

ARGENTINA

**World Publications SA**

Av. Cordoba 1877  
C1120 AAA Buenos Aires  
Tel. (54-11) 48 15 81 56  
Fax (54-11) 48 15 81 56  
E-mail: wpbooks@infovia.com.ar  
URL: <http://www.wpbooks.com.ar>

AUSTRALIA

**Hunter Publications**

PO Box 404  
Abbotsford, Victoria 3067  
Tel. (61-3) 94 17 53 61  
Fax (61-3) 94 19 71 54  
E-mail: jpdavies@ozemail.com.au

BRESIL

**Livraria Camões**

Rua Bittencourt da Silva, 12 C  
CEP  
20043-900 Rio de Janeiro  
Tel. (55-21) 262 47 76  
Fax (55-21) 262 47 76  
E-mail: livraria.camoes@incm.com.br  
URL: <http://www.incem.com.br>

CANADA

**Les éditions La Liberté Inc.**

3020, chemin Sainte-Foy  
Sainte-Foy, Québec G1X 3V6  
Tel. (1-418) 658 37 63  
Fax (1-800) 567 54 49  
E-mail: liberte@mediom.qc.ca

**Renouf Publishing Co. Ltd**

5369 Chemin Canotek Road, Unit 1  
Ottawa, Ontario K1J 9J3  
Tel. (1-613) 745 26 65  
Fax (1-613) 745 76 60  
E-mail: order.dept@renoufbooks.com  
URL: <http://www.renoufbooks.com>

EGYPT

**The Middle East Observer**

41 Sherif Street  
Cairo  
Tel. (20-2) 392 69 19  
Fax (20-2) 393 97 32  
E-mail: inquiry@meobserver.com  
URL: <http://www.meobserver.com.eg>

INDIA

**EBIC India**

3rd Floor, Y. B. Chavan Centre  
Gen. J. Bhosale Marg.  
Mumbai 400 021  
Tel. (91-22) 282 60 64  
Fax (91-22) 285 45 64  
E-mail: ebicindia@vsnl.com  
URL: <http://www.ebicindia.com>

JAPAN

**PSI-Japan**

Asahi Sanbancho Plaza #206  
7-1 Sanbancho, Chiyoda-ku  
Tokyo 102  
Tel. (81-3) 32 34 69 21  
Fax (81-3) 32 34 69 15  
E-mail: books@psi-japan.co.jp  
URL: <http://www.psi-japan.co.jp>

MALAYSIA

**EBIC Malaysia**

Suite 45.02, Level 45  
Plaza MBF (Letter Box 45)  
8 Jalan Yap Kwan Seng  
50450 Kuala Lumpur  
Tel. (60-3) 21 62 92 98  
Fax (60-3) 21 62 61 98  
E-mail: ebic@tm.net.my

MÉXICO

**Mundi Prensa México, SA de CV**

Río Pánuco, 141  
Colonia Cuauhtémoc  
MX-06500 México, DF  
Tel. (52-5) 533 56 58  
Fax (52-5) 514 67 99  
E-mail: 101545.2361@compuserve.com

PHILIPPINES

**EBIC Philippines**

19th Floor, PS Bank Tower  
Sen. Gil J. Puyat Ave. cor. Tindalo St.  
Makati City  
Metro Manila  
Tel. (63-2) 759 66 80  
Fax (63-2) 759 66 90  
E-mail: eccpcom@globe.com.ph  
URL: <http://www.eccp.com>

SOUTH AFRICA

**Eurochamber of Commerce in South Africa**

PO Box 781738  
2146 Sandton  
Tel. (27-11) 884 39 52  
Fax (27-11) 883 55 73  
E-mail: info@eurochamber.co.za

SOUTH KOREA

**The European Union Chamber of  
Commerce in Korea**

5th Fl, The Shilla Hotel  
202, Jangchung-dong 2 Ga, Chung-ku  
Seoul 100-392  
Tel. (82-2) 22 53-5631/4  
Fax (82-2) 22 53-5635/6  
E-mail: eucock@eucock.org  
URL: <http://www.eucock.org>

SRI LANKA

**EBIC Sri Lanka**

Trans Asia Hotel  
115 Sir Chittampalam  
A. Gardiner Mawatha  
Colombo 2  
Tel. (94-1) 074 71 50 78  
Fax (94-1) 44 87 79  
E-mail: ebicsl@slnet.lk

UNITED STATES OF AMERICA

**Bernan Associates**

4611-F Assembly Drive  
Lanham MD 20706-4391  
Tel. (1-800) 274 44 47 (toll free telephone)  
Fax (1-800) 865 34 50 (toll free fax)  
E-mail: query@bernan.com  
URL: <http://www.bernan.com>

ANDERE LÄNDER/OTHER COUNTRIES/  
AUTRES PAYS

**Bitte wenden Sie sich an ein Büro Ihrer  
Wahl/Please contact the sales office of  
your choice/Veuillez vous adresser au  
bureau de vente de votre choix**

Office for Official Publications of the European  
Communities  
2, rue Mercier  
L-2985 Luxembourg  
Tel. (352) 29 29-42455  
Fax (352) 29 29-42758  
E-mail: info-info-opoce@cec.eu.int  
URL: <http://eur-op.eu.int>

Price (excluding VAT) in Luxembourg: ECU 25,00



OFFICE FOR OFFICIAL PUBLICATIONS  
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-828-9403-7



9 789282 894033