

# PORTRAIT OF THE REGIONS

VOLUME 8  
ESTONIA  
LATVIA  
LITHUANIA



OSCE: 1 B





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VOLUME 8

ESTONIA

LATVIA

LITHUANIA

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Cataloguing data can be found at the end of this publication

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## Foreword

With extensive and wide-ranging accession discussions already underway with all ten of the Phare countries of Central and Eastern Europe, the demand for statistical data concerning these countries has never been greater. In particular, there is keen interest in regional differences across each of these countries. This need continues to be met by the "Portrait of the Regions" series. After four volumes covering the fifteen countries that today constitute the European Union, coverage was extended in 1997 to a fifth volume on the regions of Hungary. The sixth volume was devoted to the Czech Republic and Poland, while the seventh focused on the Slovak Republic and Romania.

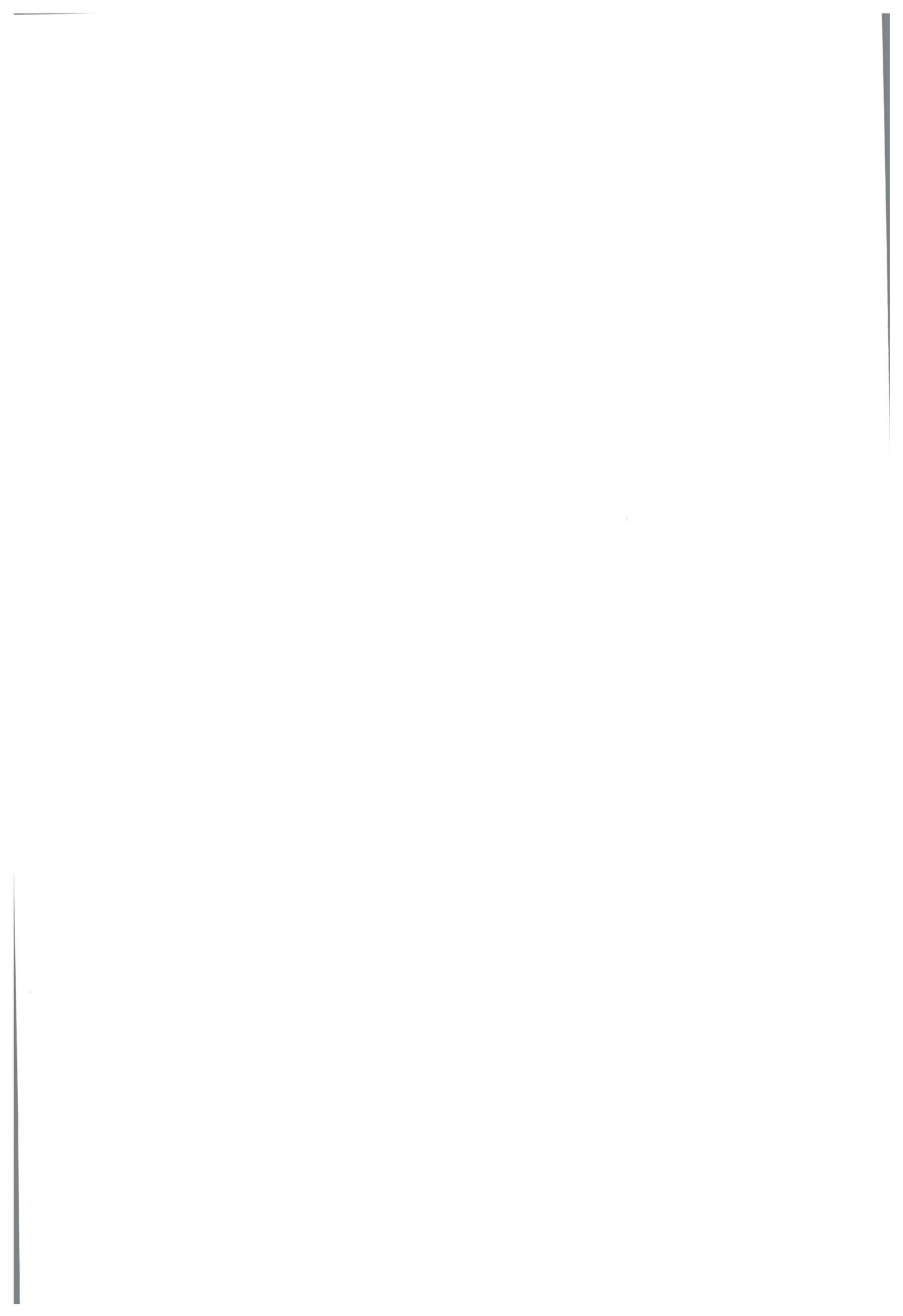
This eighth volume in the series, dedicated to Estonia, Latvia and Lithuania is very similar in layout to the earlier publications. Maps, diagrams and statistical tables back up an informative text focussing on key aspects of the region. As before, the text examines demographic and economic issues, the labour market, education, resources and the particular strengths and weaknesses of each region. Efforts have been made with this volume, however, to make the maps and graphs even clearer and more informative.

This issue of the "Portrait of the Regions" series is the outcome of very extensive co-operation between Eurostat and the Estonian, Latvian and Lithuanian Statistical Offices. 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 Estonian, Latvian and Lithuanian Statistical Offices, whose contribution to this valuable work enabled its publication.

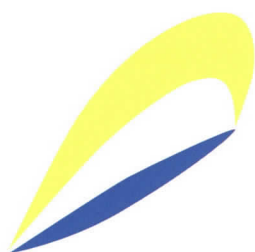


Yves Franchet  
Director-General of Eurostat



This volume was produced with the collaboration of the Central Statistical Offices of Estonia, Latvia and Lithuania and was coordinated 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 Estonian were prepared by staff of the Statistical Office of Estonia. A full list of contributors may be found at the end of the Estonian section.



Original texts in Latvian were prepared by staff of the Central Statistical Bureau of Latvia. A full list of contributors may be found at the end of the Latvia section.



Original texts in Lithuanian were prepared by staff of the Statistical Office of Lithuania. A full list of contributors may be found at the end of the Lithuanian section.



## Structure of the publication

In each of the three countries, each region 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:

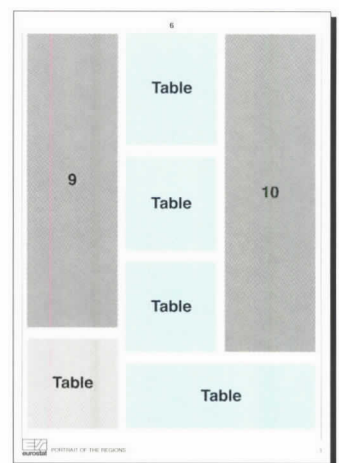
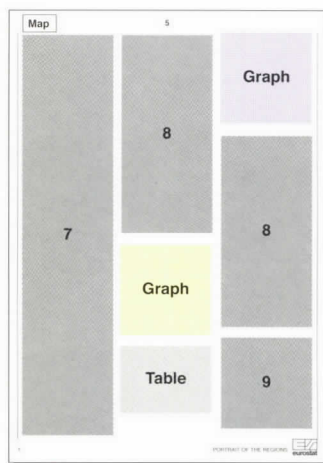
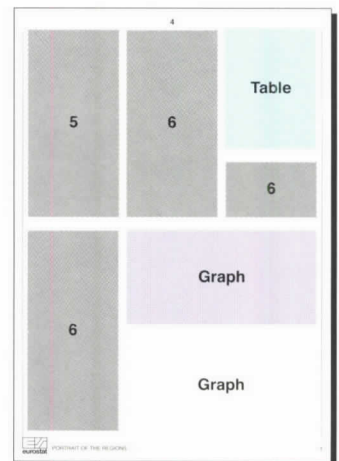
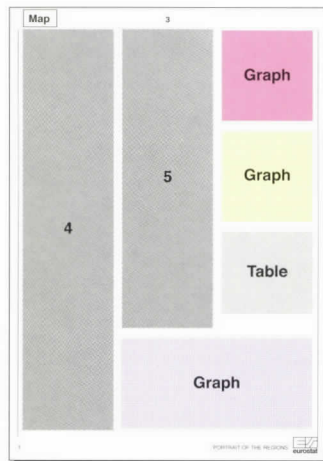
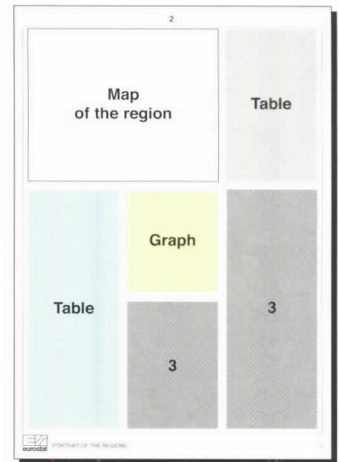
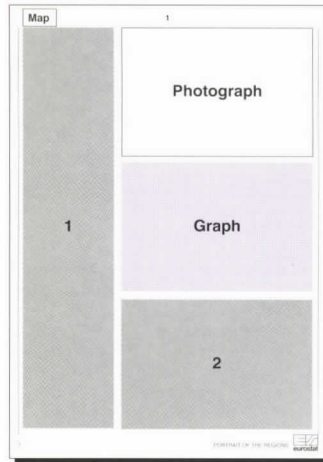
- economic structure (5)
- incomes (6)

### Page 5:

- employment (7)
- transport (8)

### Page 6:

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



Because of data unavailability, the ethnic nationality graph on page 3 of each region is provided for Estonia and Latvia only.

For each of the three countries, 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  
Benelux  
Denmark
- Volume 2 France  
United Kingdom  
Ireland
- Volume 3 Portugal  
Spain  
Italy  
Greece
- Volume 4 Austria  
Finland  
Sweden  
Iceland  
Liechtenstein  
Norway  
Switzerland
- Volume 5 Hungary
- Volume 6 Czech Republic  
Poland
- Volume 7 Slovakia
- Volume 8 Estonia  
Latvia  
Lithuania
- Volume 9 Slovenia
- Volume 10 Bulgaria

## Table of contents

## VOLUME 8

### ESTONIA

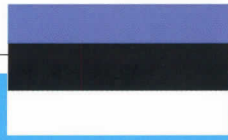
### LATVIA

### LITHUANIA

ESTONIA	1	LITHUANIA	69
Põhja-Eesti	2	Alytus	70
Kesk-Eesti	8	Kaunas	76
Kirde-Eesti	14	Klaipėda	82
Lääne-Eesti	20	Marijampolė	88
Lõuna-Eesti	26	Panevėžys	94
		Šiauliai	100
Explanatory notes	32	Tauragė	106
		Telšiai	112
LATVIA	35	Utena	118
		Vilnius	124
Rīga	36		
Vidzeme	42	Explanatory notes	130
Kurzeme	48	Bibliography	132
Zemgale	54		
Latgale	60	Legend to maps	133
		Symbols and abbreviations	133
Explanatory notes	66		



# ESTONIA



The Republic of Estonia lies on the shores of the Baltic Sea. It has an area of 45 227 km<sup>2</sup> and a population of one and a half million (as of 1 January 1999). Thanks to its geographical location, Estonia forms an important link between east and west. In the east, Estonia's frontier with the Russian Federation runs through Lake Peipsi. To the north and west, Estonia borders on the Baltic Sea, and in the south on the Republic of Latvia. The main landscape regions of Estonia are the North Estonian Plateau, the West Estonian Lowland, the Central Estonian Plain, and the Sakala and Haanja Uplands in the south.

Estonia's history is full of battles, first against the Danes, thereafter against the Teutonic Knights, the Swedes and the Russians, who all by turns ruled the country for many centuries. Estonia was declared a Republic in 1918. In 1940, Estonia was incorporated into the former

Soviet Union and was part of it until 1991, when it regained its independence in August of that year. According to the Constitution adopted by the referendum on 28 June 1992 Estonia is a unitary state.

Furthermore, the Territory of Estonia Administrative Division Act states that the administrative units of Estonia's territory are at county, town and rural municipality level. The Republic of Estonia consists of 15 counties with 46 towns and 207 rural municipalities (as of 1 July 1999). The state administration on the regional level is carried out by county governments, while local administration in towns and rural municipalities is handled by local authorities.

Estonia's administrative divisions are currently undergoing changes, the process of amalgamation of towns and rural municipalities is under way and that

of counties will take place in the years to come. In this publication, the five regions of Estonia are purely statistical regions and not administrative ones.

Since the country regained independence, life in Estonia has undergone substantial change. The former links with the East are quite weak now. The transition from a centrally planned to a market economy caused the closing or restructuring of many big industries on the one hand and the emergence of numerous new enterprises on the other. The most striking feature of Estonia's regional development is the rapid development of the capital Tallinn in comparison with the rest of Estonia. This difference in development has become more pronounced in recent years, with Tallinn continuously attracting more foreign capital, investment, and tourists than other areas of Estonia. Banks, light industry, trade, and other service industries are concentrated here.



# Põhja-Eesti

## Hinterland of the capital

Põhja-Eesti is situated on the southern shore of the Gulf of Finland and covers the historic Harjumaa region, including the capital Tallinn.

Põhja-Eesti is a region which dates from prehistoric times. In 1220, it was conquered by the Danes and thereafter ruled by the Teutonic and Livonian Orders. In 1238, with the Stensby Peace Treaty, Põhja-Eesti was restored to Denmark. In the early 13th century, Põhja-Eesti had a well-developed manorial economy. The area was sold to the German Order in 1347, thereafter pledged to the Livonian Order. From 1561 to 1710, Põhja-Eesti was under Swedish rule followed by Russian control from 1710 to 1917. There were peasant disturbances in Põhja-Eesti in 1805 and 1858, but there was no strong nationalist movement.

The capital, Tallinn, was first mentioned in written records in 1154, on the map of the world by an Arab geographer, al-Idrisi. In 1285, it became a member of the Hanseatic League to protect its trading rights. In the 18th century, Tallinn was a strong sea fortress, and by the beginning of the 20th century, it had developed into an important economic centre.

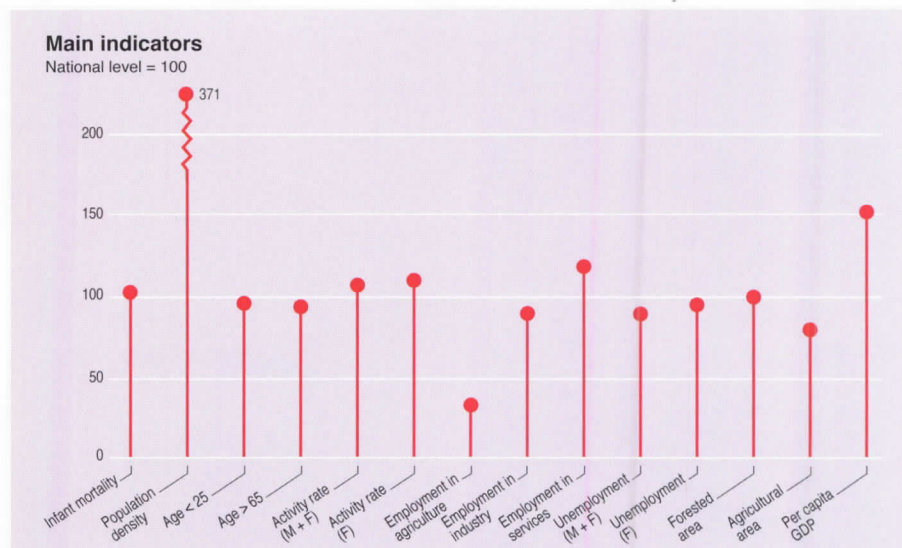
Põhja-Eesti is inhabited mostly by Estonians (54%) and Russians (37%), with the Estonian and Russian languages dominating. More than one third of Estonia's population lives in the capital, Tallinn.

The region comprises only one county, Harju. There are 7 towns, 19 rural municipalities, 1 township, 28 large villages and 371 villages in the region.

A significant role in the region's life is played by the capital, Tallinn. It is the centre of Estonia's economic and cultural life. Tallinn is famous for the Old Town which has retained its mediaeval appearance: narrow streets, red-roofed houses, Gothic churches, the town wall and towers, and Toompea Castle. Tallinn influences life in the region as a whole: entrepreneurship is livelier and the standard of living in Põhja-Eesti is higher than elsewhere in Estonia.



Life in Põhja-Eesti is dominated by the capital, Tallinn



## Development menaced by international competition

The integration of Estonia into the North-European economic space makes the region a gateway through which goods, investment, innovation and the majority of tourists can enter the country. Põhja-Eesti's location between the developed European countries and north-west Russia as well as its good transport and communications network favour the rapid internationalisation of the region's development, both in terms of transit trade and its economy generally.

In addition, its research institutes and highly qualified work force continue to contribute to the region's economic development. Due to its diversified economy, the

region has experienced no major recessions in restructuring its economy. Together, these factors give Põhja-Eesti a head start over the other regions of Estonia in guaranteeing economic and social development. In the 1990s, Põhja-Eesti enjoyed the highest wages in the country, immigration of a young and educated work force from the other regions of Estonia and relatively low levels of unemployment.

However, Põhja-Eesti's economic potential is currently falling behind that of major centres in neighbouring countries such as Helsinki in Finland, Riga in Latvia, and St. Petersburg in Russia. If this is not compensated for by economic development and a rising standard of living, the region may easily lag behind in international competition. The high rate of crime, an over-



Scale: 1: 1 400 000

0 30 km

## Which regions are similar to Põhja-Eesti?

**Area:**  
4 332 km<sup>2</sup>

Pleven (BG)  
Alpes-Maritimes (F)  
Pinzgau-Pongau (A)

**Population:**

540 000 inhabitants  
Aisne (F)  
Bács-Kiskun (HU)  
Bremen, Kreisfreie Stadt (D)

**Employment structure:**

3% agriculture  
Limburg (NL)  
Rhône-Alpes (F)  
Gorenjska (SI)

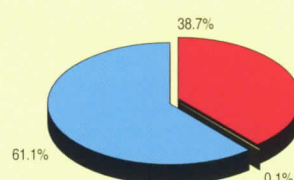
### Agriculture 1998

Number of private farms	2 113
Persons working in agriculture *	7 900
Total agricultural area (ha)	85 700
Total livestock	44 900
Cattle per 100 ha of total agricultural land	23.0
Pigs per 100 ha of total agricultural land	27.3
Share of crop products in total agricultural output (%) *	37.4
Main crops (1 000 tonnes)	
Cereals	34.9
Potatoes	6.9

\* data from 1997

### Agricultural land use in 1997 (%)

■ Permanent grassland  
■ Arable land  
■ Permanent crops



burdened transport system, poverty and homelessness may start to influence the quality of life in Põhja-Eesti.

## Rivers with picturesque waterfalls

The area of Põhja-Eesti is 4 333 km<sup>2</sup>. It is situated on the North Estonian Plateau, the westernmost part stretches to the West Estonian Lowland. In the north, there are coastal plains of varying width. The relief in Põhja-Eesti is mostly flat. Extensive meadows and wetlands occur in low-lying sections. 47% of the region is under forest, and the largest forests occur in the south-east in the Kõrvemaa Area.

In the south, Põhja-Eesti borders on Keski- and Lääne-Eesti; in the east, on Kirde-Eesti. In the north, it borders on part of the Baltic Sea, in the Gulf of Finland. The largest towns of Põhja-Eesti are the capital Tallinn (415 299), Maardu (16 375), and Keila (9 993).

In terms of natural resources, deposits of limestone, brick clay, building sand, peat and phosphorite are to be found in Põhja-Eesti. Clay is the raw material from which bricks, drainage pipes and cement are made. Limestone, brick clay and building sand are used in construction work.

Põhja-Eesti possesses 34 rivers and other bodies of water. The longest rivers are the Keila (115 km), Pirita (105 km) and Jägala (97 km). The Keila, Jägala, Valgejõgi and Loobu rivers form picturesque waterfalls on descending from the North Estonian Plateau. Karst areas are widespread. Lakes number 100, with the biggest situated on the coastal plain.

Soil quality is not high. The more fertile areas, with a moraine surface cover, are mostly under cultivation.



## Home to over a third of Estonia's population

Põhja-Eesti is the most densely populated area in Estonia. In 1998, the number of inhabitants of the region was about 540 000, that is more than one third of Estonia's population.

Settlement in Põhja-Eesti varies greatly between urban and rural areas. Smaller towns and urbanised settlements surround the capital, Tallinn. More than 45% of Estonia's urban population lives in this region. As a result, the percentage of urban population in Põhja-Eesti is much higher than in Estonia on average (85% in Põhja-Eesti, 69% in Estonia).

In Tallinn, the population density is over 2 600 inhabitants per km<sup>2</sup> while in the other urban municipalities of the region it ranges from 100 to 1 500. The population density of rural areas in Põhja-Eesti is higher than that in Estonia on average, 19 as against 10.

During the 1990s, there were significant demographic changes in both Estonia as a whole and in Põhja-Eesti. Põhja-Eesti and Kirde-Eesti were the first regions where the overall decline in the population started, at the beginning of the 1990s. If the tendency to underestimate migration, especially in large urban areas, is also taken into account, then there is no doubt that the population has decreased to a point where there is an excess of deaths over births.

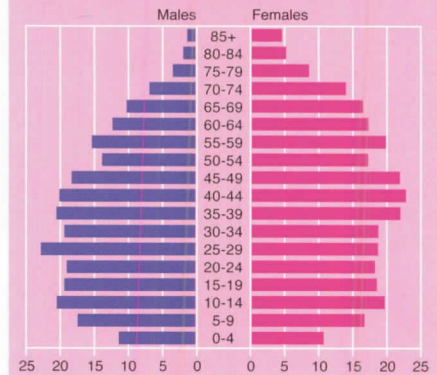
Põhja-Eesti is a region whose number of births per 1 000 population is lower than in Estonia on average. The number of births has considerably decreased during the 1990s. In 1997 it was only 7.7 births per 1 000 population. The number of deaths per 1 000 population in Põhja-Eesti is also lower than in Estonia on average. This is due to the specific age composition of the region's population — the percentage of people aged 65 and over is lower than in the other regions of Estonia. About 18% of the population of Põhja-Eesti are younger than 15, while 13% are above 65.

Generally, life expectancy has been low in Estonia, its specific feature being the big difference between male and female life expectancy where there is a gap of more than 10 years. In 1997, life expectancy at birth in Tallinn was 66.1 years for men and 76.0 years for women. Life expectancy was slightly higher for women and 1.4 years higher for men in Tallinn than in Estonia as a whole. As a result, women comprise 68% of the population aged 65 years and over.

Põhja-Eesti is one of two regions in Estonia where the proportion of the immigrant population is very high. According to the

most recent population census, of every 1 000 people in Tallinn, only 660 were born in Estonia. The proportion of the population with an immigrant background is much higher because of second generation immigrants who were born in Estonia.

Age-sex pyramid in 1998 (1 000)



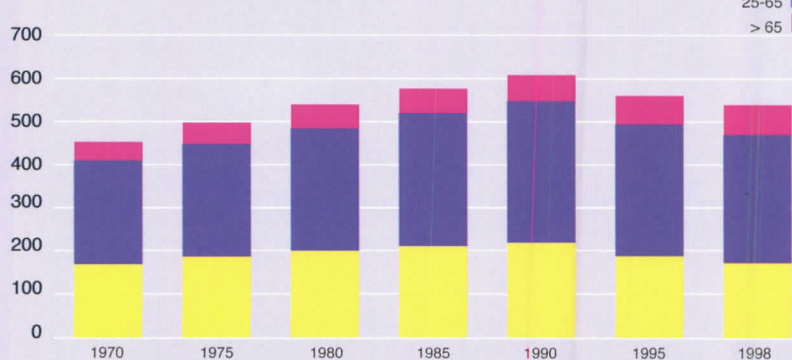
Resident population by ethnic nationality - 1998



Demographic account (1 000)

Population (01 01 90)	607.2
Births	42.5
Deaths	54.8
Migration	-56.7
Population (01 01 98)	538.1

Population by age-groups (1 000)



## Economic engine of Estonia

For many years, Põhja-Eesti has been the most attractive place for living, working and investing. In the 1990s, this dominance became even more marked. Between 1950 and 1990, the population and the number of employees more than tripled. The region accounts for more than half of gross domestic product and exports, and more than three-quarters of foreign investment in Estonia.

Until the 1990s, Tallinn was the most important industrial centre in the country. Industry, especially mechanical engineering, was mostly orientated towards the Soviet market in the east. Political and economic changes in the early 1990s brought about very rapid structural changes in the economy as well. Economic links with the eastern market were abandoned and large-scale enterprises were privatised and reorganised. The number of industrial enterprises alone has grown from one hundred to more than one thousand in recent years. The most profitable agricultural enterprises were also situated in Põhja-Eesti. By the mid-1990s, the share of those employed in agriculture decreased to below 5%, most of these enterprises having reoriented towards small-scale industrial production, trade and warehousing.

By the mid-1990s, Põhja-Eesti had developed into a region characterised by a high share of services in terms of its economic structure. All branches of the economy, except for agriculture, are of national importance. In comparison with other regions in the country, tourism, business services and air and sea transport are of considerable significance in Põhja-Eesti. Differences in the standard of living as well as in the prices of goods and services between Estonia and Western Europe have favoured the development of so-called "shopping tourism" to Tallinn, mainly from Finland which is only 80 km away. In 1998, the number of Finnish same-day visitors exceeded 6 million.

The headquarters of all Estonian banks, insurance companies and other service-related companies, as well as branches of international service companies are located in Tallinn. Muuga Harbour near Tallinn is one of the biggest transit complexes on the Baltic Sea, shipping oil products, grain and machines between Eastern and Western Europe. In industry, however, subcontract work in mechanical engineering, electronics and in the textile industries predominates.

## Highest standard of living in the country

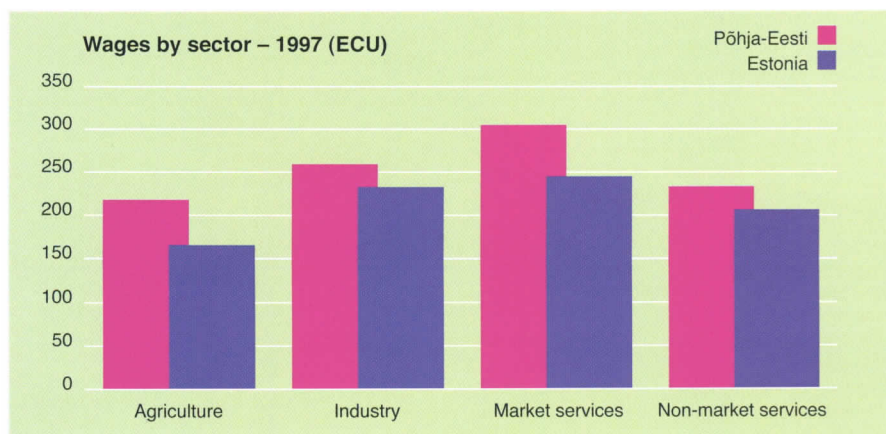
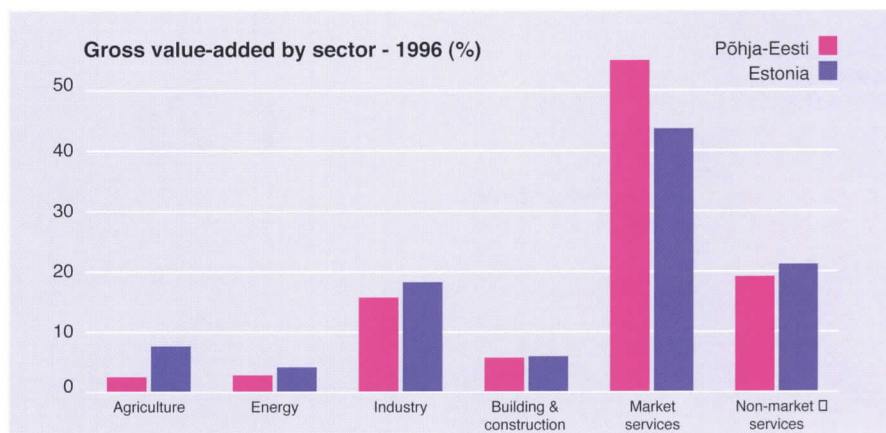
Characteristic of Põhja-Eesti, and especially in the capital, Tallinn, is the higher standard of living as compared to the rest of Estonia. In 1997, the average monthly wages and salaries, at 273 ECU, were 38 to 49% higher than in the other regions. Wages and salaries in all economic sectors were highest in Põhja-Eesti. In market services, wages and salaries were 304 ECU, i.e. 12% higher than the region's average, but in agriculture, hunting, forestry, fishing, they were only 217 ECU - 80% of the region's average. Nevertheless, wages and salaries in this group of activities were still 29 to 58% higher than in the other regions.

The average monthly net income per household member was 42 to 57% higher than in the other regions. Between 1996 and 1998, the monthly household income increased by 41%, more than in the other regions, accentuating the difference between Põhja-Eesti and the other regions. The share of wages and salaries in

### Main enterprises

Name	Activity
Eesti Raudtee AS	Rail transport
Eesti Post AS	National postal services
Eesti Telefon AS	Telecommunications
Eesti Energia AS	Electricity production
Elcoteq Tallinn AS	Electronic components
Hansapank AS	Monetary institution
Eesti Mere-laevandus AS	Overseas freight transport
Eesti Ühispank AS	Monetary institution
Tallinna Trammi- ja Trollibussikoondise AS	Passenger transport company
Tallinna Sadam AS	Sea port and pier operator

income has been higher than in the other regions, and in 1998 it was 71%. On the other hand, the share of pensions, social benefits and other transfers was 19%, i.e. lower than in the other regions. At 3%, the income from non-market activities was insignificant.







## More chance of getting a job

40% of Estonia's labour force lives in Põhja-Eesti. This region's activity rate is the highest in Estonia. This may be accounted for by the higher economic activity of women. Between 1989 and 1997, the activity rate of women aged 15 and over decreased from 67 to 58%, but remained throughout the whole period 5-6 percentage points higher than Estonia's average.

The labour force of Põhja-Eesti is more educated than in other regions of Estonia. In 1997, only 10% of Põhja-Eesti's labour force did not have at least upper secondary education (13% in Estonia as a whole), 54% had upper secondary education (57% in Estonia as a whole) and the share of tertiary education (36%) was considerably higher than in other regions.

Põhja-Eesti has the highest share of employment in the services sector. Although the size of the services sector workforce increased only a little in 1989-1997, the decrease in employment in agriculture and industry meant that in 1997 this sector accounted for two-thirds of employment as against one-half in 1989. Total employment in the region decreased by 23%, which was as much as in Estonia on average.

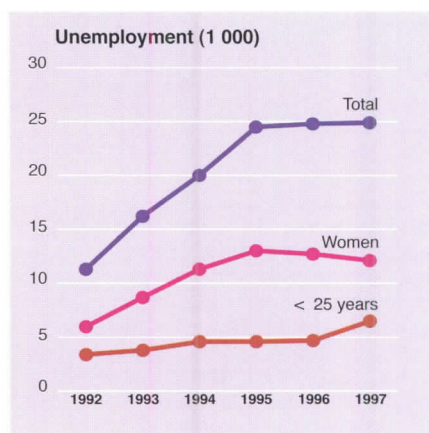
The employment rate of women in the region is the highest in Estonia. In 1997, 53% of women aged 15 and over were employed as against Estonia's average of 48%. At the same time, employees accounted for 94% of all the employed. Between 1989 and 1996, the number of part-time employees doubled, and their presence in the workforce increased from 3 to 9%, although in 1997 it decreased to 6%.

In 1997, 270 000 people worked in Põhja-Eesti. Of them, 97% were residents and 3% non-residents having a job in the region. The most significant role in this respect was played by Tallinn. Of the 229 000 people who worked in Tallinn, 200 000 (87%) lived in Tallinn, 20 000 (9%) outside Tallinn in Põhja-Eesti and 9 000 (4%) came in to work from other regions.

Unemployment in Põhja-Eesti tends to be lower than in other regions. In 1997, the unemployment rate in Põhja-Eesti was 8.6% as against Estonia's 9.7%. Since 1995, the male unemployment rate in Estonia as a whole has been higher than the female rate, but in Põhja-Eesti, the female unemployment rate has been higher. 48% of the unemployed in Põhja-Eesti were women. The unemployment rate of the young (under 25) was 15%, which is a little higher than Estonia's average of 14% in 1997. The number of long-term unem-

ployed in Põhja-Eesti was considerably lower than in other regions, as 39% of the unemployed in Põhja-Eesti had been looking for a job for more than one year, as against 46% in Estonia as a whole.

On average, 9 800 unemployed job seekers were registered each month at state employment agencies in Põhja-Eesti in 1997. This accounted for 40% of the unemployed. Of the registered unemployed job seekers, 5 700 were, pursuant to the Unemployed Social Protection Act, registered unemployed, which means that they were entitled to unemployment benefit. Of the 5 700 registered unemployed in Põhja-Eesti, women accounted for 70%.



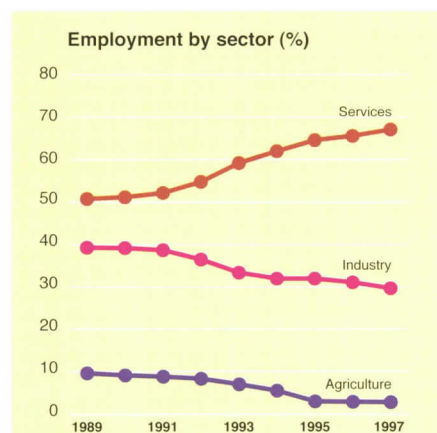
## Main transport centre

As the capital of Estonia, Tallinn is the main centre of all modes of transport in Estonia, being the point of destination of air, sea, rail and road transport. From Tallinn, major rail lines as well as main roads radiate in all directions all over Estonia, as well as to Russia and Latvia. The total length of roads in Põhja-Eesti is 5 228 km, of which 29% are national roads. 20% of all roads are hard-surface national roads.

Estonia's only international airport is located in Tallinn. Today Tallinn Airport maintains regular passenger air traffic with many countries. While passenger turnover decreased until 1996, it has been increasing since then. In 1998, 285 497 passengers were embarked and 278 449 disembarked at Tallinn Airport. The freight and post transport is growing, too. In 1992, 871 tons of freight and 253 tons of post were loaded and unloaded, in 1998, 5 185 and 807 tons, respectively.

Tallinn is also a famous seaport. There is regular passenger traffic between Tallinn and Helsinki, Stockholm, and Kiel. Goods are mainly transported through Muuga Harbour near Tallinn, which is also important as a transit point to and from Russia. Passenger turnover is growing, being in 1998 twice the 1993 figure. In 1998, 2 425 681 passengers were embarked and 3 161 933 disembarked. In the transport of goods by sea, exports exceeded imports. In 1998, 20 605 thousand tons of goods were loaded and 4 551 unloaded. Exports of goods by sea increased from 5 710 thousand tons in 1993 to 20 605 tons in 1998.

At the end of 1998, the number of vehicles registered in Põhja-Eesti was the highest in Estonia – 225 098 or 42% of all vehicles in Estonia. The number of vehicles per 100 population, 42, and that of private passenger cars, 29, was the highest, too.



### Employment by age group - 1997 (%)

	15-24 years	25-54 years	55-64 years
Men	15	72	13
Women	13	75	12
Total	14	73	13

## Environment suffers from urbanisation

Urbanised Põhja-Eesti may be characterized by a considerable environmental impact stemming from urban activities.

In 1998, Põhja-Eesti was the major user of water for domestic purposes (52 m<sup>3</sup> per capita) and the leading user of water for aquaculture. The amount of municipal waste collected from households, 326 kg per capita, was the highest in Estonia. Also the share of the residential population connected to waste water treatment plants was the highest in Estonia, 87% as against the national average of 69%. The wastewater subject to treatment accounted for 25% of Estonia's total. The region accounted for 68% of oil products, 34% of total nitrogen and 38% of total phosphorus discharged to water bodies and soil in Estonia. In 1998, 430 thousand tons of industrial waste was generated in Põhja-Eesti. Of this, only an insignificant proportion was recycled.

Air pollution from stationary sources in Põhja-Eesti was relatively high. The region accounted for 45% of volatile organic compounds, 15% of nitrogen oxides and 86% (39 tons) of highly hazardous heavy metal compounds emitted to the air from stationary sources in Estonia.

In 1998, the environmental expenditures of local municipalities remained on the same level as in 1992 and formed 21% of environmental expenditures of all municipalities.

Põhja-Eesti is equipped with considerably better telephone communications than the other regions of Estonia. At the end of 1998, there were 227 114 main telephone lines in Põhja-Eesti. There were 424 main telephone lines per 1 000 inhabitants in Põhja-Eesti, rising in Tallinn to 479. The level of digitalisation of the telephone network is higher than elsewhere in Estonia – 57% of the main telephone lines were connected to the digital network.

### Surfaced public roads – 1999

	Põhja-Eesti	Estonia
Length in km per km <sup>2</sup>	0.24	0.19
Length in km per 1 000 population	2.0	5.8
Length in km per 1 000 private passenger cars	6.7	21.2
% private passenger cars in total number of vehicles	70	73
Number of accidental deaths per 1000 private passenger cars	0.5	0.7

### Environment - 1998

	Põhja-Eesti	Estonia
Population connected to public water supply (%)	96.5	87.6
Population connected to public sewerage (%)	87.0	68.5
Sewerage subject to treatment (%)	52.7	19.6
Per capita consumption of water (m <sup>3</sup> )	51.8	42.0

### Number of pupils - 1998

	Total	Female %
Pre-school	20 808	49
Primary	44 353	48
Lower secondary	21 883	49
Higher secondary (vocational/general)	21 466	52
Tertiary (higher education)	30 630	54
Total	139 140	50

### Health care - 1998

	Põhja-Eesti	Estonia
Number of hospitals	25	79
Number of doctors per 10 000 population	38.6	31.1
Number of hospital beds per 10 000 population	85.5	74.2

### Telephone services

	1997		1999	
	Põhja-Eesti	Estonia	Põhja-Eesti	Estonia
Lines per 1 000 population	373	300	424	345
% connected to digital network	34.4	26.7	57.0	47.8

## Pioneer of private tertiary education

In 1997, education in Põhja-Eesti was provided by 160 schools, of which 20 were kindergarten-primary schools, 11 primary schools, 48 basic and 81 secondary schools. There were 4 public and 4 private universities, and 3 public and 10 private higher schools. All but one of these educational institutions are located in the capital Tallinn. Private tertiary education is well established in Põhja-Eesti.

In terms of health care, Põhja-Eesti ranked first in 1997 among Estonian regions with 25 hospitals with 4 602 beds. Of these, 5 hospitals with 158 beds were private. Doctors and dentists totalled 2 079 and 416, respectively. 131 doctors and 216 dentists worked in private practice. Põhja-Eesti's figure of doctors per 10 000 population, 39, was the highest in Estonia, that of dentists (8) being the second highest after Lõuna-Eesti.

The region's 34 museums attracted 426 000 visitors in 1997, far outstripping the other regions' respective figures. Museum visits per 1 000 population numbered 788. One of the most attractive museums is the Open-Air Museum at Rocca al Mare on the outskirts of Tallinn reflecting Estonian peasant life in the 19th century.

The tradition of song festivals in Estonia dates back to the 19th century, and every five years magnificent song and dance festivals are organised in Tallinn.



# Kesk-Eesti

## In the very heart of Estonia

Most of Kesk-Eesti is situated in Central Estonia but it also includes more northern and southern parts of the country.

The first signs of human activity in Kesk-Eesti date from the 7th to 6th millennia BC at the settlement of Omedu on the shore of Lake Peipsi. The oldest settlement in Järva county, founded in the third millennium BC, was at Jändja on the banks of the Pärnu River. At the beginning of the 13th century, Kesk-Eesti was quite a densely populated area with a large number of primitive fields.

Around this time Kesk-Eesti, like other regions of Estonia, was turned into a battlefield by foreign invaders. The region yielded first to the Danes, was thereafter ruled by Germans, Swedes and Russians, as well as Poles and Lithuanians. The population at Lake Peipsi grew when Estonian and Russian fishermen, and especially Russian Old Believers, settled down in this region at the end of the 17th century.

In 1710, Kesk-Eesti was, together with other regions of Estonia, incorporated into the Russian Empire. In terms of economic development Viljandi county ranked first among Estonian counties in the second half of the 19th century and was at the fore-front of the nationalist movement. In 1900, a railway between Viljandi and Tallinn was opened.

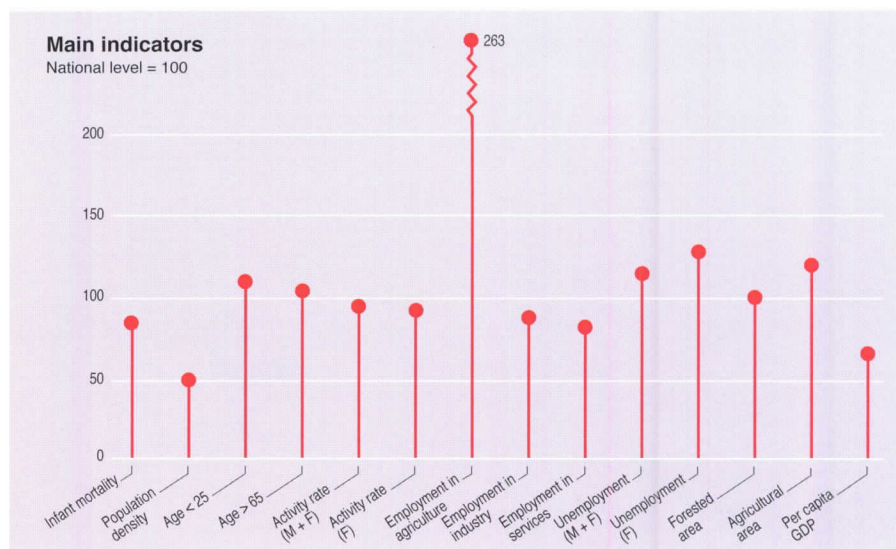
In the 1918-1920 Estonian War of Independence, a significant role was played by local partisans of exceptional fighting spirit. The partisan units were formed in Kesk-Eesti by one of the most famous Estonian army leaders, Lieutenant Julius Kuperjanov.

Kesk-Eesti comprises four counties, Jõgeva, Järva, Rapla and Viljandi. There are 11 towns, 51 rural municipalities, 3 townships, 43 large villages and 916 villages in Kesk-Eesti. The region is populated mainly by ethnic Estonians (91%), and the Estonian language prevails.

Due to its geographical location Kesk-Eesti may be called the heart of Estonia. It has only a very short external border (with Latvia) and no access to the sea. There is no regional centre nor any large towns (the population of the region's largest town, Viljandi, is 21 659).



Cattle grazing in Estonia's most developed agricultural region



## Challenges for economic diversification

The dominance of the agricultural sector in Kesk-Eesti is both its strength and its weakness. On the one hand, the land is very fertile and farms are large-scale, making them more competitive than in other regions. Although Estonia's agricultural production is declining overall, Kesk-Eesti has managed to retain its share. On the other hand, inefficient large-scale production has continued. As agriculture nowadays has the lowest profitability of all economic sectors, average income in the region is the lowest in the country.

Another strength of the region relates to its central location in the country, which gives other regions easy access to its goods and

services. Further valuable resources are the availability of cheap labour, and a safe living environment. Current developments in communications enable the most northerly parts of the region to become the hinterland of the capital, Tallinn, which enhances the attractiveness of the region as a place of residence and investment.

With its dependence on agriculture, any further decrease in the share of primary sector activities in the economic structure may lead to higher unemployment, unless this is off-set by the growth of new economic branches. The region lacks large towns and scientific research institutes, therefore the development of the services sector and the distribution of new technological innovation in Kesk-Eesti has been modest. The trend for young people to



Scale: 1: 2 000 000

0 40 km

**Agriculture 1998**

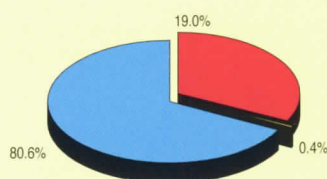
Number of private farms	10 488
Persons working in agriculture *	18 500
Total agricultural area (ha)	345 300
Total livestock	288 600
Cattle per 100 ha of total agricultural land	33.2
Pigs per 100 ha of total agricultural land	48.7
Share of crop products in total agricultural output (%) *	45.9
Main crops (1 000 tonnes)	
Cereals	209.2
Potatoes	65.8

\* data from 1997

move to the larger towns, along with the lack of available capital, has made it difficult for enterprises to attract qualified staff. This lop-sided economic structure, combined with the absence of an industrial tradition, has been accompanied by a low level of entrepreneurship.

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

- Permanent grassland
- Arable land
- Permanent crops

**Fertile soil**

The area of Kesk-Eesti is 11 796 km<sup>2</sup> and its relief can be characterised as mostly undulating.

In the north, Kesk-Eesti borders on the regions of Põhja- (Harju county) and Kirde-Eesti (Lääne-Viru and Ida-Viru counties); to the south, on Lõuna-Eesti region and the Valmiera district of the Republic of Latvia. In the west, Kesk-Eesti borders on Lääne-Eesti, while the eastern border follows Lake Peipsi. Kesk-Eesti's larger towns are Viljandi (21 659), Paide (10 356), Türi (6 984), Jõgeva (6 623), and Rapla (6 303).

The major landscape regions are the North Estonian Plateau, the Central Estonian Plain, the Southeast Estonian Plateau, and

**Which regions are similar to Kesk-Eesti?****Land use:**

30% agriculture

Principado de Asturias (E)

Guadeloupe (F)

Spodnjeposavska (SI)

**Population density:**16 inhabitants per km<sup>2</sup>

Keski-Suomi (FIN)

Shetland Islands (UK)

Baixo Alentejo (P)

**Employment structure:**

29% industry

Kärnten (A)

Riga (LV)

Limburg (NL)

the Sakala Upland. Kesk-Eesti's eastern part is characterised by drumlins. Typical drumlins occur in the Vooremaa area. The drumlins are covered with fields, and between the fields there are boggy meadows and lakes. The region's eastern part also has large forested areas, particularly in Jõgeva county where 44% of the land is under forest, while Viljandi county is characterised by scenic primeval valleys.

In Kesk-Eesti, deposits of peat, limestone, dolomite, gravel, sand, lake mud (sapropel) and brick clay are to be found. Limestone is used in the production of cement, lime and building stone. Gravel and sand are used in construction work.

Kesk-Eesti's longest rivers are the Pedja (95 km) and the Halliste (76 km). Estonia's second largest lake, Lake Võrtsjärv, of which 62% (167 km<sup>2</sup>) is situated in Kesk-Eesti, is also worth mentioning. The region's next largest lake, Lake Veisjärv, is only 4.9 km<sup>2</sup>. Although Kesk-Eesti is abundant in small lakes, Rapla county in the region ranks last among Estonian counties by number of lakes. There are also numerous swamps and bogs in Kesk-Eesti. The biggest are the Endla mire complex (143 km<sup>2</sup>), the Soosaare mire complex (127 km<sup>2</sup>) and the Kuresoo bog (108 km<sup>2</sup>). Estonia's largest karst springs are also to be found in this region.

Where well drained, the soil is quite fertile and suitable for agriculture.



## Predominantly rural population

The population of Kesk-Eesti stands at 188 000, which represents 13% of the total Estonian population. It shares with Lääne-Eesti the lowest population density in the country, at 16.2 inhabitants per km<sup>2</sup>.

Characteristic of Kesk-Eesti is that the majority of people live in rural settlements. While the proportion of urban population in the region at 41% is much lower than the national average, this is not exceptional as the share of urban population in some counties of the other regions is even lower. The reason is that towns in this region are small with a population of 10 000 and less. Only one town, Viljandi, has a population of over 20 000.

In Kesk-Eesti, the proportion of young people (under 25 years) in the population is higher than in the other regions of Estonia. In 1997, it was 37%, as against 34% in Estonia as a whole. At the same time, the share of those aged 65 years and older was only slightly higher than in Estonia on average. This situation may be partly explained by the fertility rate in this region. In the 1990s, the number of births per 1 000 inhabitants was on average higher in the region than in Estonia as a whole. In 1997, there were 10.1 children born per 1 000 population in Kesk-Eesti and 8.7 in Estonia. The number of deaths in Kesk-Eesti has also been higher than the Estonian average — 13.3 deaths per 1 000 population.

The region is also characterised by high migratory flows from and to other regions of Estonia. As in other counties where the urban population is smaller than the rural one, counties in Kesk-Eesti gained population in the 1990s due to internal migration. However, if the influence of the natural decrease is taken into account, the overall population changed little despite these internal movements, and showed the least change of all regions along with Lääne-Eesti.

Although the proportion of ethnic Estonians in the region is very high (90% as against 65% in Estonia as a whole), this is in line with other rural areas throughout the country where ethnic Estonians dominate the local population.

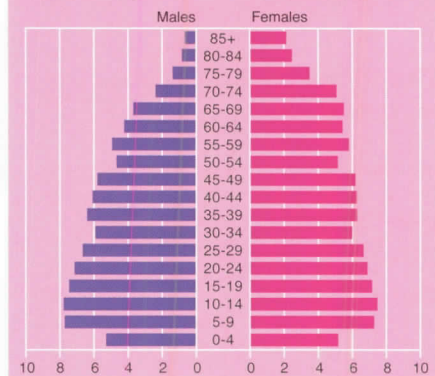
## Unfavourable economic conditions

Kesk-Eesti's economy is heavily skewed towards agriculture, a sector whose share in Estonia's economy has decreased considerably since 1991. Few new activities and enterprises have emerged since 1992 and the region has not been attractive to foreign capital investment.

The region lacks important mineral resources and large-scale industry. The share of services is below the national average, and what little there is comprises mainly retail trade and services, as well as public services orientated towards the local market. Wood-processing and other small-scale industries are also present. In the course of economic reforms numerous small metal shops and construction enterprises were formed on the basis of former collective farms but they have had a negligible impact on the economic structure. The region's most important industries are the Baltic States' biggest window and door factory in Viljandi, Estonia's biggest saw mill in Järva county and its only glassworks in Rapla county. Although some tourist enterprises have been formed, Kesk-Eesti has not been considered as attractive as the other regions of Estonia and tourism is not well established here.

The dominant economic sector in the region is agriculture and the associated food industry (mainly dairy, meat and local fruit wines). While large-scale agricultural enterprises have mainly survived, the number of small farms formed has been low. Due to the nature of Estonia's agricultural reforms, restructuring processes have been slow and limited in scope, ownership has remained wide-spread, and it is difficult to get capital for investment in agricultural projects. The Estonian market is small and the Russian market unstable but entering the Western European one requires exhaustive modernisation of enterprises. Many of these enterprises have plunged into great difficulties, and as

Age-sex pyramid in 1998 (1 000)



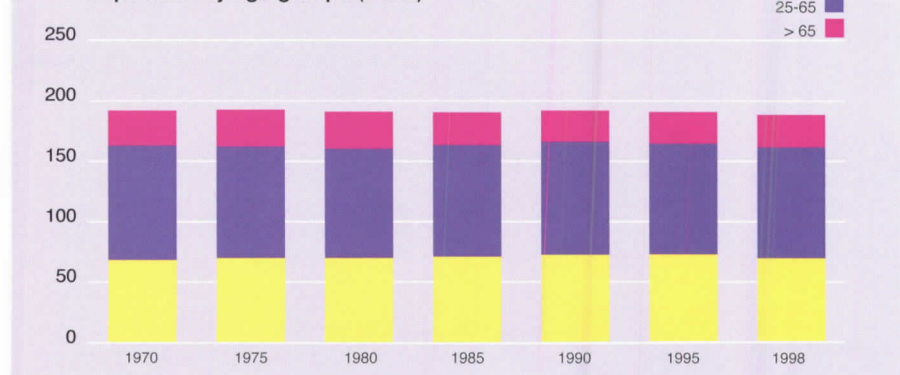
Resident population by ethnic nationality - 1998



Demographic account (1 000)

Population (01 01 90)	191.4
Births	19.0
Deaths	21.8
Migration	-0.7
Population (01 01 98)	187.9

Population by age-groups (1 000)



a result, a rapid increase in unemployment could be imminent.

### The lowest wages and salaries

In 1997, average wages at 183 ECU were lower than in any other region, and on average were two-thirds lower than the wages and salaries earned in Põhja-Eesti. The highest wages and salaries were earned by those employed in industry, which were 20% higher than the region's average. The lowest wages and salaries were paid to those in the agricultural sector, where they were 15% lower than the region's average, and in market services, which were 13% lower than the region's average.

Just as wages and salaries were two-thirds of those earned in Põhja-Eesti, so too was the average monthly net income per household member. From a monthly income of 103 ECU, just over half was earned from wages and salaries, while pensions, benefits and other transfers formed just over a quarter of the monthly income in the region. The share of income from non-market sector activities has been decreasing from year to year, and in 1998 it was 11%. Between 1996 and 1998, the average income increased by 24%, and in the same period income from wages and salaries increased a little more, by 30%.

The standard of living was lower in the eastern part of the region, particularly in Jõgeva county, where the income per household member was 85% of the region's average.

### Greatest primary sector employment

12% of Estonia's labour force lives in Kesk-Eesti. The activity rate of the region's population aged 15 and over is lower than in Estonia on average. The activity rate, which steadily decreased between 1989 and 1997, was 2-3 percentage points lower than in Estonia on average, and in the case of women even 5-6 percentage points lower.

The educational level of Kesk-Eesti's labour force is the lowest in Estonia, with 18% having attained only a basic level of education as against a national figure of 13% of the labour force with at least a minimum education level.

Kesk-Eesti also has the highest share of employment in the agricultural sector. In 1989, 40% of those employed here were engaged in the agricultural sector. Although this figure had dropped to 25% by 1997, the corresponding figure for Estonia as a whole had decreased to only 9%. Over this period agricultural employment dropped by around two-thirds in Estonia, whereas in Kesk-Eesti it halved from 39 000 to 19 000. At the same time as the overall size of the workforce was

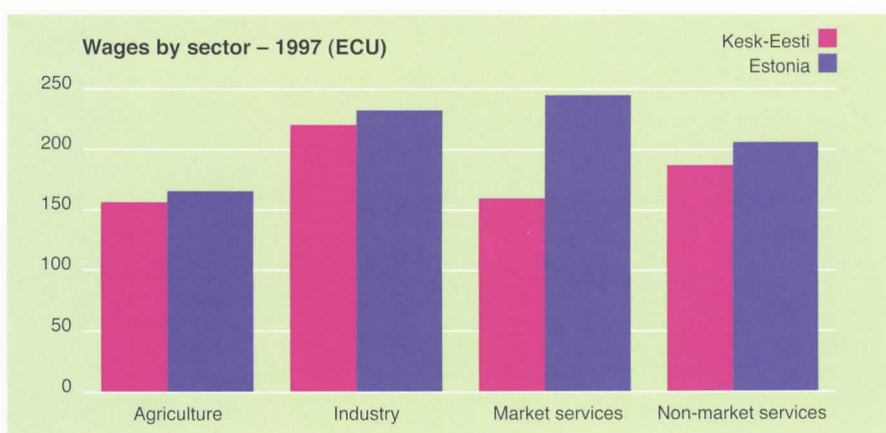
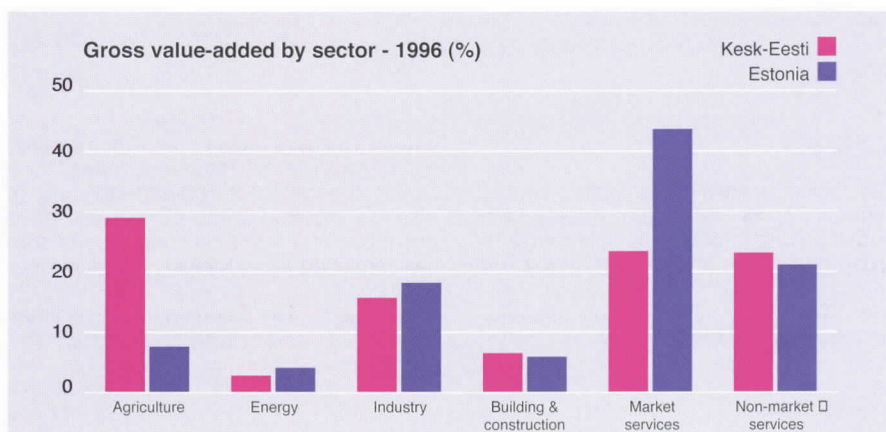
### Main enterprises

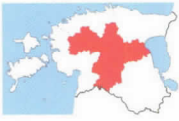
Name	Activity
Edelaraudtee AS	Rail transport
Järva Tarbijate Ühistu	Food retailer
Saile AS	Bread manufacturer
Estonia OÜ	Agriculture
Mulgi Meier AS	Milk producer
Aravete Agro OÜ	Agriculture
Järvamaa Haigla AS	General hospital
Väätsa Agro OÜ	Agriculture
Viljandi Aken ja Uks AS	Door manufacturer
Paide Piima-kombinaat AS	Dairy producer

decreasing, the number of part-time employees was increasing, so that the percentage of part-timers increased from 3% in 1989 to 8% in 1997.

The lowest female employment is to be found in Kesk-Eesti. In 1997, the employment rate of women aged 15 and over was 43%, strikingly lower than Põhja-Eesti's 53%, the highest in Estonia.

In 1997, wage and salary earners accounted for 87% of all the employed. The remaining 13% were therefore self-employed, and together with Lääne-Eesti,





these two regions have the highest percentage of self-employed in Estonia.

Until 1996, the number of unemployed in Kesk-Eesti increased steadily, reaching 10 000, and only began to drop again in 1997 to 9 000. The unemployment rate of 11% was higher than in Estonia on average, and among women it was Estonia's highest at 12%.

In 1997, the unemployment rate of the young (under 25 years) was 15% which was higher than the Estonian average of 14%. The share of long-term employment at 46% was as high as in Estonia as a whole.

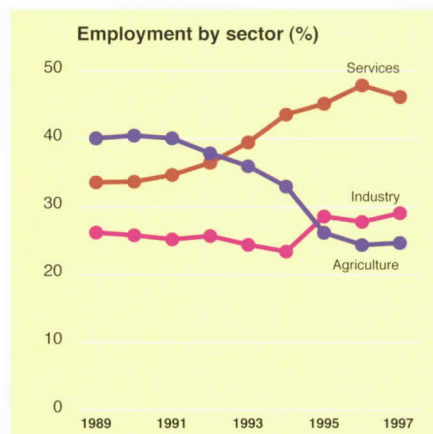
In 1997, the unemployed job seekers registered at employment offices totalled 5 000 which was half the total unemployment figure. Of the 5 000, 3 100 were, pursuant to the Unemployed Social Protection Act, the registered unemployed. While women accounted for 70% of the registered unemployed, they made up 49% of the total unemployed.

## Cross-roads of the country

Owing to its central location in Estonia, several main roads and main railway lines pass through Kesk-Eesti. The Tallinn-Viljandi railway crosses almost the entire width of the region, branching at Lelle station towards Pärnu. Two arterial roads pass through the region, the Tallinn-Pärnu-Riga highway and the Tallinn-Tartu highway. Road and rail traffic is not locally generated but is transit traffic. The total length of roads in Kesk-Eesti is 14 030 km, of which 31% are national roads. The share of hard surface roads, at 18% of all roads, is the second lowest among the regions of Estonia.

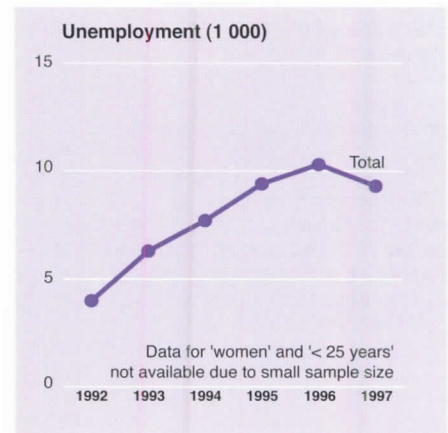
Of the rivers in Kesk-Eesti, the Omedu River is navigable over a distance of 1.8 km only. Kesk-Eesti has neither access to the sea nor any inland waterway transport. The region lacks an airport too.

At the end of 1998, there were 68 941 vehicles in Kesk-Eesti, 84% of them private. This number of vehicles represents 13% of the national figure. The number of private passenger cars in the region, 51 426, and the total number of vehicles are the second lowest figures after Lääne-Eesti. Nevertheless, the number of vehicles per 100 population, 37, and that of private passenger cars, 28, correspond to the respective Estonian averages (37 and 27).



### Employment by age group - 1997 (%)

	15-24 years	25-54 years	55-64 years
Men	13	74	14
Women	8	80	12
Total	11	76	13



## Low air pollution

Although Kesk-Eesti has experienced little environmental degradation from industrial sources, the environmental impact resulting from agricultural activities was high, as was the rate at which the region's forests were being logged. Almost half of all pesticide usage by Estonian enterprises was applied by those based in Kesk-Eesti.

Kesk-Eesti's use of water was of little significance in overall terms, with half of it for aquaculture. At the same time, only a small percentage of Estonia's total waste generation came from Kesk-Eesti.

The share of the residential population connected to public sewerage (42%) and per capita water use in the domestic sector (27 m<sup>3</sup>) were also the lowest in Estonia. Only 23 thousand tons of Estonia's total industrial waste was generated in Kesk-Eesti, and the rate of recycling in 1998 was 9%.

Between 1992 and 1998, progress was made in the treatment of waste water, so that by 1998 the percentage of purified waste water of the total waste water needing purification was up to 90% from 75% in 1992.

Air pollution from stationary sources in Kesk-Eesti was insignificant and contributed little to overall emission levels in Estonia.

Environmental expenditure by local municipalities in Kesk-Eesti has remained constant in recent years at 20% of the total environmental expenditure in Estonia.

Almost one third of Estonia's timber felling took place in Kesk-Eesti, although at the same time, Kesk-Eesti's contribution to forest renewal was also the highest at 25.1%. Nevertheless, felling volumes tended to run higher than forest renewal throughout the 1990s.

There were 54 460 main telephone lines in Kesk-Eesti at the beginning of 1999. The number of main telephone lines per 1 000 population was 291. The telephone network was not evenly distributed in the region: in the western part, in Rapla county, there were 321 main telephone lines per 1 000 population, whereas in the eastern part, in Jõgeva county, the number was barely 273. The level of digitalisation of the telephone network has been growing from year to year, and has virtually doubled from 1996 to 1998 to reach 36%.

### Environment - 1998

	Kesk-Eesti	Estonia
Population connected to public water supply (%)	73.0	87.6
Population connected to public sewerage (%)	42.1	68.5
Sewerage subject to treatment (%)	41.3	19.6
Per capita consumption of water (m <sup>3</sup> )	26.6	42.0

### Number of pupils - 1998

	Total	Female %
Pre-school	6 629	49
Primary	17 876	48
Lower secondary	8 096	48
Higher secondary (vocational/general)	6 285	55
Tertiary (higher education)	2 567	46
Total	41 453	49

### Health care - 1998

	Kesk-Eesti	Estonia
Number of hospitals	11	79
Number of doctors per 10 000 population	19.6	31.1
Number of hospital beds per 10 000 population	66.8	74.2

### Few doctors

In Kesk-Eesti, education in 1997 was provided by 16 kindergarten-primary schools, 24 primary schools, 70 basic schools and 33 secondary schools, with a total number of 41 453 students. In addition, 242 students attended the Viljandi College of Culture in 1997 to study fine and applied arts and librarianship. In September 1997, Türi College of Tartu University was opened with 30 students in environmental science. There is one private educational institution – the Viljandi Free Waldorf School.

Since 1996, the Mulgi Institute in Viljandi has been a regional scientific research institute. Research is also conducted at the Polli Institute of Horticulture of the Estonian Agricultural University, the Olustvere Experimental Station and the Viljandi Experimental Seed Centre.

In 1997, the 145 public libraries had 68 000 registered readers. Museums numbered 13, with 67 000 visitors. There were 358 museum visits per 1 000 population which was Estonia's lowest figure.

At the end of 1997, there were 11 hospitals with 1 255 beds in Kesk-Eesti. The number of physicians per 10 000 population, 20, was the lowest in Estonia. The number of dentists per 10 000 population was 6, and again was less than the national average of 7. Of the region's 369 physicians, 143 (39%) worked in Viljandi county. Of the 106 dentists, 69 worked in private practice.

### Surfaced public roads – 1999

	Kesk-Eesti	Estonia
Length in km per km <sup>2</sup>	0.17	0.19
Length in km per 1 000 population	10.5	5.8
Length in km per 1 000 private passenger cars	38.3	21.2
% private passenger cars in total number of vehicles	75	73
Number of accidental deaths per 1000 private passenger cars	1.1	0.7

### Telephone services

	1997		1999	
	Kesk-Eesti	Estonia	Kesk-Eesti	Estonia
Lines per 1 000 population	261	300	291	345
% connected to digital network	18.6	26.7	36.3	47.8





# Kirde-Eesti

## Industrial east and agricultural west

Kirde-Eesti covers the historic Virumaa region on the southern shores of the Gulf of Finland. Some 8 000 years ago, Stone-Age hunters and fishermen here were among Estonia's earliest settlers as indicated by a 5 000-year-old piece of pottery, the oldest ever discovered in Estonia, found on the banks of the Narva River.

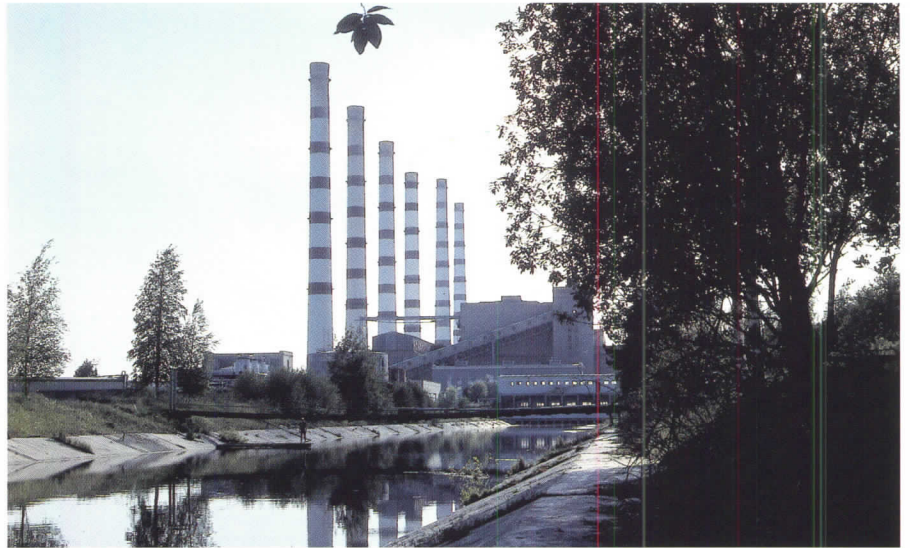
Virumaa's history is replete with battles and fluctuating foreign rule. Following raids by German Teutonic knights at the beginning of the 13th century, Virumaa was conquered and christianised by the Danes in 1220, then ruled by Germans, Swedes and Russians. In November 1918, the War of Independence broke out with the capture of Narva by the Red Army. The January 1919 counterattack by the Estonians retook Narva and the front moved to southern Estonia. It was at Narva in 1939 that ratification of the military bases agreement put an end to the 22-year period of Estonian independence. Soviet troops then entered Estonia's territory and Estonia became part of the Soviet Union, remaining in it for 50 years, up to 1991. At the end of World War II, severe battles were fought in vain for the freedom of Estonia and Narva, a town of unique architectural heritage, was razed to the ground.

As large-scale industry developed in this mineral-rich region, workers were imported from other republics of the former Soviet Union, mainly from Russia and the Ukraine. After Estonia regained its independence, most decided to remain in Kirde-Eesti, accounting for the large majority of Russians and Russian speakers. The one third of the region's population who are ethnic Estonians live mainly in Lääne-Viru county.

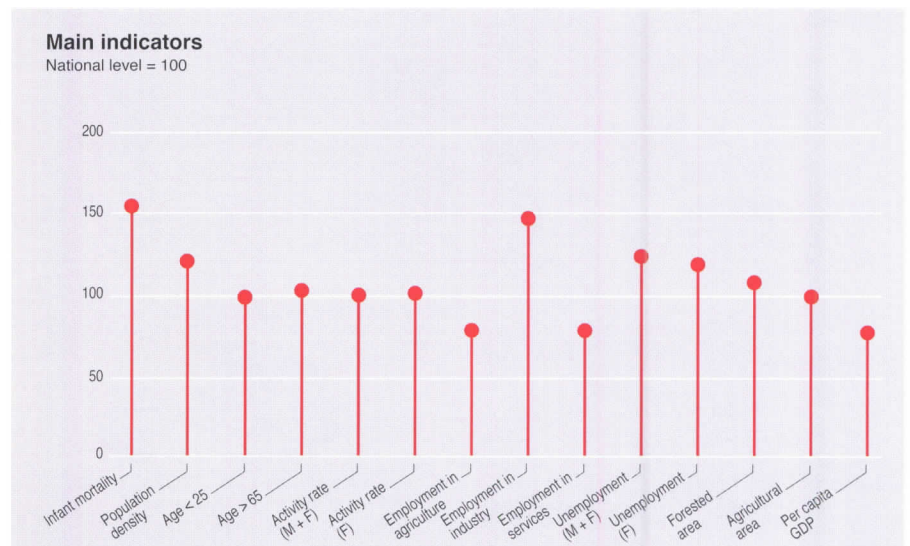
Kirde-Eesti consists of two counties: Lääne-Viru to the west and Ida-Viru to the east. There are 11 towns and 31 rural municipalities, 1 township, 31 large viljages and 558 villages.

Ida-Viru is an urbanised industrial region, most of its people living in the three bigger industrial towns of Narva, Kohtla-Järve, and Sillamäe. Lääne-Viru, by contrast, is oriented towards agriculture and over half its population live in rural areas.

The main trade routes from Russia pass through Narva and the eastern border of this characteristically frontier region is also Estonia's eastern frontier.



The Baltic Thermal Power Plant on the outskirts of Narva



## Border location, "mature" economy

Kirde-Eesti's location tends to favour the development of transit and border trade. With the north-west Russian market around St. Petersburg sitting on its eastern border, and Finland lying close by, the development of trilateral economic links is important. Other positive factors relate to the main towns being situated on the major transit routes, to the skilled workforce available and to the good infrastructure. Taken together, these factors encourage some foreign investment here.

A further advantage can be found in the picturesque coastline along the Gulf of Finland and on the banks of Lake Peipsi in the south-eastern corner, which are both

valuable assets for the tourist industry.

There are, however, a number of important weaknesses. They include factors such as the difficulties in converting large-scale industry, the region's negative image (environmental damage, high unemployment, the high proportion of non-Estonians), an insufficient support to entrepreneurs, as well as a lack of capital. The high number of non-nationals with no or limited qualifications is a further addition to this list. All this hinders the flow of further foreign investment to Virumaa, deters potential entrepreneurs and makes the development of new and modern business sectors more difficult. The situation is also problematic due to the rural nature of the western and southern parts of Kirde-Eesti. It is highly questionable whether the development of



Scale: 1: 2 000 000

0 40 km

### Which regions are similar to Kirde-Eesti?

**Land use:**  
50% forest

Obalno-kraška (SI)  
Övre Norrland (S)  
Steiermark (A)

**Population density:**  
40 inhabitants per km<sup>2</sup>

Rodopi (EL)  
Östergötlands län (S)  
Alytus (LT)

**Age structure:**  
33 % under 25

Brabant Wallon (B)  
Utena (LT)  
Balears (E)

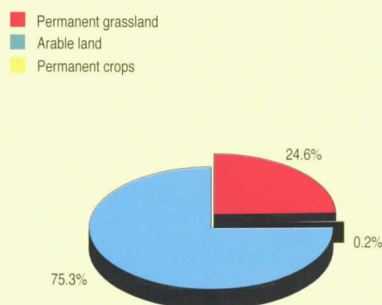
### Agriculture 1998

Number of private farms	4 862
Persons working in agriculture *	8 500
Total agricultural area (ha)	167 700
Total livestock	93 100
Cattle per 100 ha of total agricultural land	25.6
Pigs per 100 ha of total agricultural land	28.4
Share of crop products in total agricultural output (%) *	44.8
Main crops (1 000 tonnes)	
Cereals	97.2
Potatoes	20.4

\* data from 1997

tourism and local resources-based small business will compensate for the loss of jobs in agriculture.

### Agricultural land use in 1997 (%)



### World ranked oil-shales

Kirde-Eesti covers 6 829 km<sup>2</sup>, extending from the southern shore of the Gulf of Finland in the north to Lake Peipsi in the south. To the east Kirde-Eesti borders on the Narva River which is also Estonia's eastern frontier with Russia. The main natural regions are the undulating Pandivere Upland in the south, the Northeast Estonian Plateau in the north and the forested Alutaguse Area in the southeast. The entire coast of the Gulf of Finland is bordered by the North Estonian Bluff, whose highest point at Ontika reaches 56 m above sea level.

While lacking large rivers (except the Narva River) and lakes, Kirde-Eesti is rich in mires and bogs. The biggest are the Puhatu mire

complex (570 km<sup>2</sup>) and the Muraka bog (127.9 km<sup>2</sup>) in the eastern part of the region. Forests cover 47%, mires and bogs 13% of Kirde-Eesti. Although the eastern part has poor soils, in the western part, in Lääne-Viru county, the soil is fertile and highly suitable for agriculture.

Kirde-Eesti is rich in natural resources such as oil-shale, phosphorite, blue clay, building sand, peat, and forests. The world's largest exploited oil-shale deposit is to be found here, having 3 954 million tons of proven reserves (as of 1 January 1998). Oil-shale, the most important mineral in the country, comes from the remains of animals and plants deposited on the sea-floor during the Ordovician Period. It is unique in the world for its relatively high heating value, low sulphur content and good oil concentration and separation capacity from organic substance. The bulk of oil-shale produced is used by power plants and as a raw material by the chemical industry. 13 000 tons were mined in 1997.

Blue clay and building sand are mostly used in the building materials industry. Peat is used to produce peat briquettes for heating purposes in small boilerhouses, and in horticulture. Pollution risks have so far blocked exploitation of phosphorite deposits.

The largest towns in Kirde-Eesti are industrial Narva (74 572), Kohtla-Järve (67 413), Sillamäe (18 965) in Ida-Viru county, and Rakvere (19 085) in Lääne-Viru county.

There are many picturesque beaches here, 70 km along the sea coast, and 42 km along the shore of Lake Peipsi. Estonia's first national park, Lahemaa National Park, is situated in Kirde-Eesti.



## Urbanised east, rural west

With its population of 274 000 and population density of 40 inhabitants per km<sup>2</sup>, Kirde-Eesti ranks second among Estonian regions after Põhja-Eesti. Of the five largest Estonian cities, two are situated in Kirde-Eesti.

The proportion of the urban population in the region is 77%. This is due to Ida-Viru county, the most urbanised in Estonia, having an urban population of 89%. On the other hand, the urban population accounts for only 47% of the population in Lääne-Viru.

In Kirde-Eesti the population has grown due to immigration from Russia and from other regions of the former Soviet Union during the last few decades. Migratory flows were directed towards the industrial centres of Ida-Viru county. Today, the consequences of this process are reflected in the settlement and ethnic structure of this part of the region.

Furthermore, the region has the highest share of immigrants in its total population in all Estonia, with ethnic Estonians constituting only one third of the region's population. In 1997, this figure in Ida-Viru county was only 19%. However, in rural areas this figure reached 67%. An entirely different ethnic structure is found in Lääne-Viru county where the proportion of ethnic Estonians in 1997 was 80%.

Within Kirde-Eesti, the two counties of Ida-Viru and Lääne-Viru, differ greatly in population structure. The overall demographic profile of the whole region is mainly influenced by industrialised Ida-Viru county due to its higher population size.

The region is characterised by a very low number of births. In 1997, there were 8.0 births per 1 000 population in Kirde-Eesti, which was less than in Estonia as a whole. At the same time, the birth rate in Lääne-Viru county was higher by 2.5 births per 1 000 population than in Ida-Viru county.

At 13.5 deaths per 1 000 population in 1997 in Kirde-Eesti, the number was higher than in Estonia on average. However, in the 1990s, the average death rate in Kirde-Eesti was not the highest among Estonian regions. Similarly with all other demographic indicators, the death rates of the two counties vary very much. In 1997, the death rate of 14 deaths per 1 000 inhabitants in Ida-Viru was quite high, whereas the rate for Lääne-Viru (12 deaths per 1 000 inhabitants) was one of the lowest among all Estonian counties.

## Large-scale industry undergoing conversion

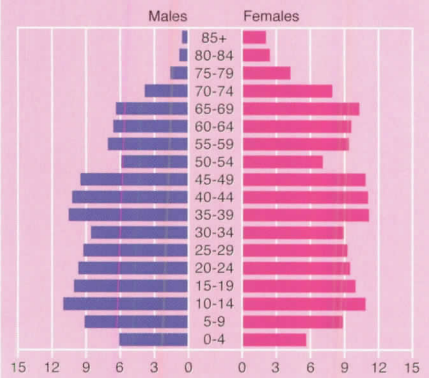
Rapid development of the economy in Kirde-Eesti began in the 1950s. Due to its economic structure the region can be considered as a classically "mature" industrial region, and is the only one of this kind in Estonia. The main industry is the power industry, with 95% of Estonia's energy being produced at the region's two largest oil-shale-based thermal power plants. If mined less extensively, oil-shale should suffice for hundreds of years. A great many of the country's large-scale industries (oil-shale chemical and textile industries) are also situated in Kirde-Eesti.

Up to now the economic structure has caused many problems and the social consequences of economic reforms have been more serious than elsewhere in Estonia. Since the beginning of the 1990s alone, the total number of industrial workers has decreased by almost 50%. Privatisation and the restructuring of big inefficient enterprises has proceeded so slowly that it has had little impact on their competitiveness. The situation is particularly difficult in those heavy industries which were closely associated with the eastern market (machine-manufacturing, metal industries, and the chemical industry). Crucial restructuring of the region's economy, launched in 1999, may result in thousands of job losses in the chemical and mining industries based on oil-shale.

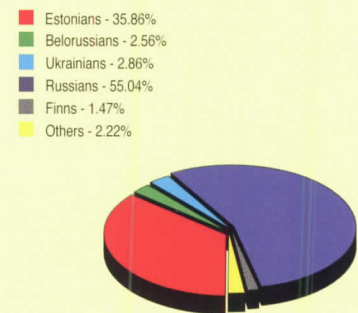
Furthermore, foreign investment is quite rare and the establishment of new enterprises has been slow. New enterprises have been mainly formed as a result of restructuring and to compensate for the deficit in the services sector, a hangover from the old socialist economy. Since independence, Russian tourists, who previously holidayed here, have become rare.

Some enterprises have managed to adapt themselves to the new situation and orien-

Age-sex pyramid in 1998 (1 000)



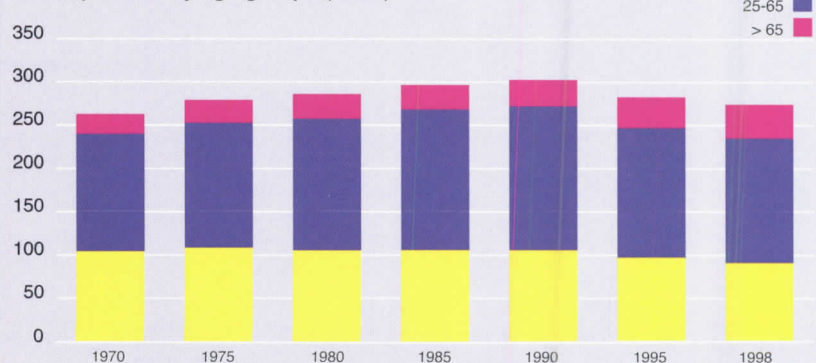
Resident population by ethnic nationality - 1998



Demographic account (1 000)

Population (01 01 90)	302.0
Births	22.2
Deaths	31.9
Migration	-18.6
Population (01 01 98)	273.7

Population by age-groups (1 000)



tate production away from the eastern market towards the western one. This has mainly been possible due to the presence of cheap labour and easily available land. At the same time, enterprises have been forced to alter production, moving from finished goods and intermediate products to manufacturing fittings for Western enterprises. These heavy industries are located mainly in the central and eastern parts of the region.

The western and southern parts of Kirde-Eesti are geared towards agriculture. In the region's western part, the transformation process was quite successful in the 1990s. The decrease in agricultural production has been compensated for by the development of small-scale industries and the services sector. Kirde-Eesti possesses one of Estonia's largest forests, which is an important source of raw materials for the industries in the region's rural areas. Up until 1997, the fish-processing and food industries also managed well but contraction of the Russian market has forced a decrease in the volume of production.

### Higher wages but low income

Relatively high wages and salaries are quite typical in Kirde-Eesti, and the average monthly salary of 197 ECU in 1997 makes workers here the second highest paid after those in Põhja-Eesti.

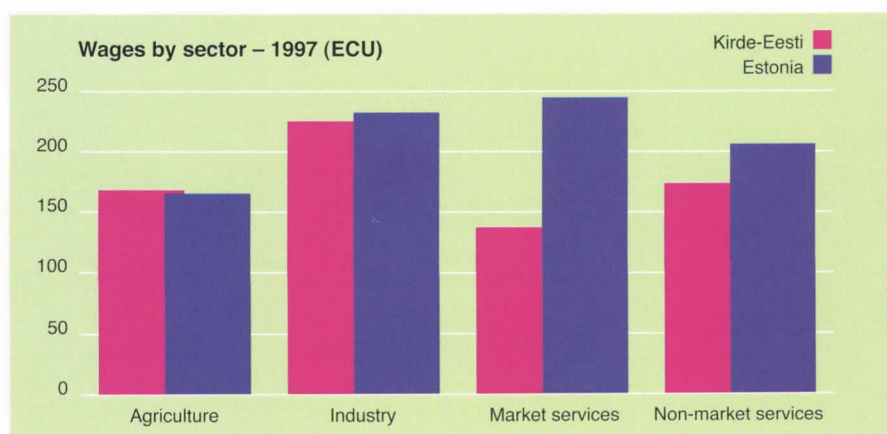
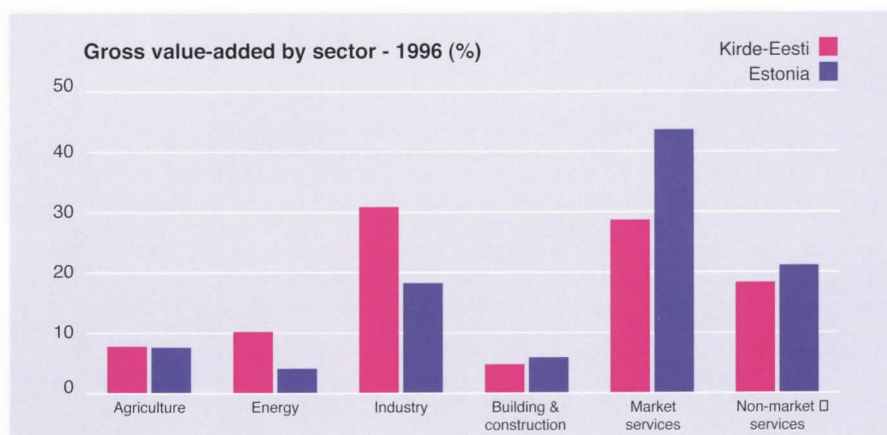
Wages and salaries in the mining and quarrying industries have been traditionally high, and in 1997 were 225 ECU, 14% higher than the regional average. In market services, wages and salaries at 137 ECU in Kirde-Eesti were the lowest in Estonia, and only 70% of the average salary. Those employed in electricity, gas and water supply companies received some of the highest wages (322 ECU) both in the country and in Kirde-Eesti, although they were still somewhat lower than salaries paid in this sector in Põhja-Eesti.

The average monthly income per household member in Kirde-Eesti was, on the contrary, lower than anywhere in Estonia, and in 1998, it was 97 ECU. 60% of the income was earned from wages and salaries. At 30% the share of transfers in the income of a household member was the highest in Kirde-Eesti. Pensions accounted for 77% of transfers. The share of income from non-market activities was 6%.

### Main enterprises

Name	Activity
Kiviter AS	Oil-shale products
Estonia Kaevandus AS	Oil shale mining and quarrying
Kreenholmi Ketruse AS	Cotton manufacturer
Kreenholmi Kudumise AS	Cotton manufacturer
Viru Rand AS	Fishing
Kreenholmi Frotee AS	Textile manufacturer
Sillamäe linna hariduskoondis	Educational administration
Sirgala Karjäär AS	Oil shale mining and quarrying
Rakvere Liha-kombinaat AS	Meat products
Ahtme Kaevandus AS	Oil shale mining and quarrying

Due to the changes in the region's economic structure and the reorganisation of large-scale industry, there are many inhabitants who are unable to find work and whose only means of subsistence come from social benefits and pensions. Those able to get a job can manage quite well.





## Hard hit by unemployment

One-fifth of Estonia's labour force lives in Kirde-Eesti, and of these 64% are non-Estonians. It has been more affected by the decrease in employment than any other Estonian region, as between 1989 and 1997, the number of employed persons decreased by 29%, as against 23% in Estonia as a whole.

Employment in the industrial sector is higher here than in any other region, and takes the largest share of the labour force in Kirde-Eesti. Between 1989 and 1993, however, this share decreased from 48 to 44%, thereafter rising again to 49% in 1997. By 1997, the number of those employed in the industrial sector had dropped by about one-third compared to the same figure for 1989 and totalled 58 000. Of these, 44 000 worked in the mining and manufacturing industries.

The decline in employment in the agricultural sector was also dramatic, decreasing by 70% from 29 000 to 9 000 workers, and the share of the agricultural sector in total employment decreased from 17 to 7%.

While 44% of the workforce are currently employed in the services sector, this is the lowest percentage in Estonia.

Female employment has traditionally tended to be slightly lower than male employment, and dropped to 46% in 1994 before returning to its normal level of 49% in 1997.

In 1997, wage and salary earners in the region accounted for 95% of all the employed. The share of self-employed was 5% - Estonia's lowest rate of self-employed. In the last decade part-time employment has more than doubled from 2% in 1989 to 5% in 1997.

The highest overall unemployment figure, youth unemployment and long-term unemployment in Estonia are currently recorded here. Until 1995, the number of unemployed steadily increased, reaching 18 000, while the unemployment rate increased to 13%. In 1996-1997, the number of unemployed decreased to 16 000, the unemployment rate dropping to 12%, although still over 3% higher than the Estonian average. Youth unemployment reached 20% in 1995-1996, although by 1997 it had dropped back to 16%. In 1996, 68 % of the unemployed had been seeking a job for over one year, in 1997 this figure dropped to 52%. Male unemployment in Kirde-Eesti is higher than female, and reached a peak of 15% in 1995.

In 1997, the unemployed job seekers registered at state employment offices in Kirde-Eesti totalled 8 400. This is more than half

of the total unemployed. Of these, 4 600 were, pursuant to the Unemployed Social Protection Act, the registered unemployed, with women accounting for 65%. Of the total unemployed, 44% were women.

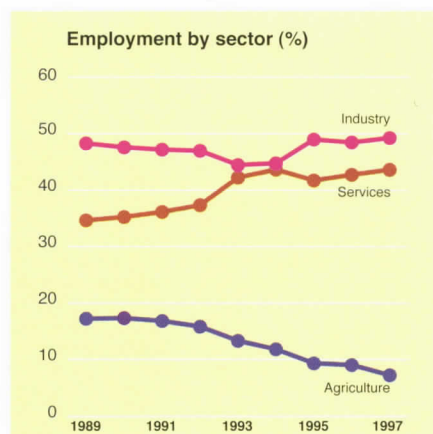


## The main link with Russia

Road and rail are the two principal means of transport in the region. Two major transit routes pass through Kirde-Eesti: the Tallinn-Narva-St.Petersburg highway and the Tallinn-Narva-St.Petersburg railway, which are essential both for trade and passenger transport between Estonia and Russia. Tapa junction plays a central part in Estonian rail transport. From Tapa, railways run to Tallinn, to Tartu in southern Estonia, and to Narva, from there on to St.Petersburg. The total length of roads in Kirde-Eesti is 5 627 km. The share of hard surface roads, 36%, and the share of national roads, 37%, are both the highest in Estonia.

The Narva River flowing on the eastern border of Kirde-Eesti and connecting Lake Peipsi with the Gulf of Finland is navigable over a distance of 72 km but is not used for transport at the present time. Since 1994, the port of Kunda has been used for goods transport. The turnover of the port has increased, and by 1998 the volume of goods loaded at the port of Kunda was twice as high as in 1996.

At the end of 1998, there were 79 904 registered vehicles in Kirde-Eesti, 85% of them private. However, the number of private passenger cars in Kirde-Eesti is lower than in the other regions of Estonia, with 23 private passenger cars per 100 population as against Estonia's average of 27. This number is especially low in the eastern part of the region. The total number of vehicles per 100 population is also lower than in the other regions, 29 as against Estonia's average of 37.



### Employment by age group - 1997 (%)

	15-24 years	25-54 years	55-64 years
Men	13	74	13
Women	12	78	10
Total	12	76	12

## Burdened by serious pollution

Industrialised Kirde-Eesti suffers from considerable environmental pollution originating from industrial activities. Due to the decline in overall industrial production, the emission of pollutants to the environment has decreased, but the region has still the highest levels of air, water and soil pollution. This is caused in the main by solid particles, sulphur dioxide, volatile organic compounds and nitrogen oxide emissions.

Kirde-Eesti accounted for 91.1% (13 million tons) of Estonia's total waste generation, and of the 11 564.2 thousand tons of industrial waste, less than one tenth were recycled in 1998. The amount of municipal waste collected from households per capita, 319 kg was also higher than the national average of 237 kg.

Just under 90% (1.4 thousand million cubic metres) of Estonia's total water consumption is used here, with energy production accounting for the lion's share of Kirde-Eesti's water consumption.

Some 98.0% of waste water was treated but the pollution load of waste water was still the highest in Estonia. Nevertheless, when compared to 1993 levels, waste water pollution loads have nearly halved. In 1998, water use in the domestic sector per capita was also one of the highest in Estonia at 51 m<sup>3</sup> per capita.

There were 79 938 main telephone lines in Kirde-Eesti at the end of 1998, or 292 main telephone lines per 1 000 population. The provision of telephones was considerably better in the region's eastern, industrial part – 312 main telephone lines per 1 000 of population as against 249 in the western part. Digitalisation of the network has been increasing rapidly. At the beginning of 1996, only 11% of the main telephone lines were connected to the digital network, two years later this had gone up to 38%.

### Surfaced public roads – 1999

	Kirde-Eesti	Estonia
Length in km per km <sup>2</sup>	0.25	0.19
Length in km per 1 000 population	6.3	5.8
Length in km per 1 000 private passenger cars	27.1	21.2
% private passenger cars in total number of vehicles	79	73
Number of accidental deaths per 1000 private passenger cars	0.9	0.7

### Environment - 1998

	Kirde-Eesti	Estonia
Population connected to public water supply (%)	90.8	87.6
Population connected to public sewerage (%)	76.7	68.5
Sewerage subject to treatment (%)	14.7	19.6
Per capita consumption of water (m <sup>3</sup> )	51.2	42.0

### Number of pupils - 1998

	Total	Female %
Pre-school	10 046	48
Primary	22 927	48
Lower secondary	11 174	49
Higher secondary (vocational/general)	10 927	55
Tertiary (higher education)	3 680	64
Total	58 754	51

### Health care - 1998

	Kirde-Eesti	Estonia
Number of hospitals	10	79
Number of doctors per 10 000 population	24.6	31.1
Number of hospital beds per 10 000 population	58.3	74.2

### Telephone services

	1997		1999	
	Kirde-Eesti	Estonia	Kirde-Eesti	Estonia
Lines per 1 000 population	254	300	295	345
% connected to digital network	10.8	26.7	37.9	47.8

## Thriving education and culture

Up until 1991, there was no tertiary education in Kirde-Eesti, but in recent years new institutions of higher education have been founded. Narva Teachers' Training College opened in 1991, Virumaa College at Rakvere in 1992, and a private tertiary institute, the Sillamäe Institute of Economics and Management, in 1997.

In 1997 education was provided by 9 kindergarten-primary schools, 47 basic and 8 primary schools, as well as 43 secondary schools.

There were 15 museums in Kirde-Eesti. Museum visits per 1 000 population totalled 1 161 which was the highest number of all the regions and one third higher than Estonia's average.

At the end of 1997, there were 10 hospitals in Kirde-Eesti with 1595 bed places, and 673 physicians. In comparison with other regions, the number of doctors was quite high, at 24 doctors per 10 000 population. The number of dentists per 10 000 population, 4, on the other hand, was much lower than elsewhere in Estonia. At the beginning of 1998, in the industrial eastern part of Kirde-Eesti, medical services were mostly financed from the state budget. In the western part, in Lääne-Viru county, 92% of physicians worked in private practice and the county's only two hospitals, in Tapa and Rakvere, were privatised in 1995 and 1997 respectively.



## Lääne-Eesti

### Embraced by the waves

Lääne-Eesti is situated in the western part of continental Estonia. The two largest Estonian islands, Saaremaa and Hiiumaa, as well as numerous smaller islands and islets, are also included in the region.

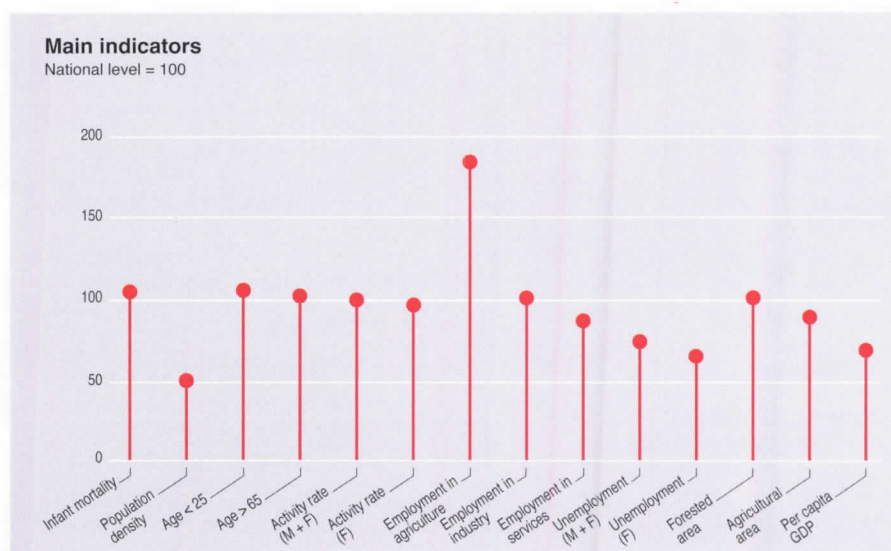
The earliest signs of human habitation here date from the 4th millennium BC. Lääne-Eesti, like the whole of Estonia, was a battlefield and an area prone to looting raids by foreign conquerors for several centuries. The region was alternately part of Sweden, Denmark, Germany and Russia, with the mainland part also under Polish rule. In 1710, Lääne-Eesti was annexed by Russia.

Today, the region consists of four counties: Hiiumaa, Lääne, Pärnu and Saare. There are 7 towns, 51 rural municipalities, 4 townships, 24 large villages and 1 223 villages in Lääne-Eesti. The Estonian population (88%) and the Estonian language are dominant. On Saaremaa and Hiiumaa islands, the proportion of Estonians is as high as 97%.

With its mild climate, scenic beach and warm sea, the town of Pärnu is famous throughout Estonia and farther beyond. There are picturesque beaches south of Pärnu, too. The town of Haapsalu is a popular summer resort, and offers treatments such as mud-baths. Saaremaa and Hiiumaa, as well as the other islands in the region are also well-known tourist and vacation resorts. Lääne-Eesti possesses the largest nature reserve in Estonia, the Matsalu Nature Reserve, a wetland of international significance, whose large number and variety of breeding birds and migrant waterfowl is quite unique. In all, over 250 bird species have been recorded here.



One of Lääne-Eesti's many fishing villages



### Entrepreneurial but with backward areas

In the early 1990s rapid restructuring of the regional economy took place, a process which was helped by close international contacts, a strong regional identity and a reasonable level of entrepreneurship within the local population. The picturesque scenery naturally lent itself to further development of the tourist industry. Other industries were started or modernised in the transformation process.

Lääne-Eesti's participation in international projects acted as a role model for the other Estonian regions. Furthermore, its potential and attractiveness to investors can only be enhanced as improvements are made to its infrastructure. The creation of the Via

Baltica, which will pass through here, and the modernisation of the ports, are two such projects which should assist economic progress.

However, due to the unevenness of economic developments and several structural obstacles, overall economic welfare in Lääne-Eesti has not greatly improved. The location of some parts of the region on islands, its thinly populated areas and a poor transport network prevent the full exploitation of all the region's valuable resources. The lack of a qualified work force as well as insufficient capital make the region unattractive for investment in new, innovative industries. The rapidly developing tourist industry is highly dependent on weather conditions and the tourist season is short.



Scale: 1: 2 000 000

0 40 km

### Agriculture 1998

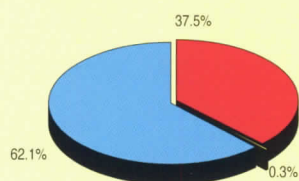
Number of private farms	8 934
Persons working in agriculture * 14 000	
Total agricultural area (ha)	244 900
Total livestock	117 400
Cattle per 100 ha of total agricultural land	27.6
Pigs per 100 ha of total agricultural land	15.6
Share of crop products in total agricultural output (%) *	46.4
Main crops (1 000 tonnes)	
Cereals	88.1
Potatoes	29.3

\* data from 1997

The shortage of jobs, particularly on the islands and in outlying areas, causes high levels of unemployment. The younger people therefore tend to move away to larger towns and settlements in Estonia. Fishing, an important industry for the region, is still orientated towards the eastern market and is dependent on economic developments in Russia and the Ukraine.

### Agricultural land use in 1997 (%)

- Permanent grassland
- Arable land
- Permanent crops



### Low-lying, flat landscape

With a surface area of 11 135 km<sup>2</sup> Lääne-Eesti is Estonia's second largest region. On the mainland, the major landscape features are the Pärnu Lowland in the south, the West Estonian Lowland in the west and the edge of the Sakala Upland in the south-east. The region has an external border in the south-east with Latvia, in the east it adjoins Kesk-Eesti, and in the north Põhja-Eesti. In the west, Lääne-Eesti stretches to the shores of the Baltic Sea. It is Estonia's lowest and most maritime region, and large areas of it are totally flat.

The largest rivers are situated on the mainland, and are the Kasari (112 km) and Pärnu (of which 85 km of its 144 km length is in Lääne-Eesti). There are no big lakes

### Which regions are similar to Lääne-Eesti?

#### Population:

184 500 inhabitants

Enna (I)  
Oberhavel (D)  
Telšiai (LT)

#### Area:

11 135 km<sup>2</sup>

Kalmar län (S)  
Murcia (E)  
Świętokrzyskie (PL)

#### Land use:

22% agriculture

Reunion (F)  
Liguria (I)  
Osrednjeslovenska (SI)

here but Lake Kaali in Saaremaa is unique in being a meteorite impact crater. The relatively mild climate and the variety of soils enable many plant species to grow here; for example, in Saaremaa over 970 (80% of Estonia's) species can be found. There are also extensive forests and wetlands, especially bogs. The biggest are the Läänemaa Suursoo bog (67 km<sup>2</sup>) and the Leidissoo bog (63 km<sup>2</sup>). Most of Hiiumaa's territory is under forest, and typical of Saaremaa are areas that are overgrown with junipers. The quality of soil in Lääne-Eesti is poor, as the soil is very stony, and on the mainland very wet. Areas with more fertile soil have been turned into fields.

Deposits of dolomite, brick clay, gravel sand, gravel, peat, limestone and curative mud can be found here. Limestone and dolomite are used as building materials, gravel and gravel sand in construction work. Bogs cover a quarter of Pärnu county, with the peat layer in them measuring as much as 9.8 m thick, comprising about three-quarters of Estonia's commercial peat reserves. Peat is used mainly as litter for livestock and to make fuel briquettes. The most important deposits of curative mud are to be found in Haapsalu Bay.

The region's largest towns are Pärnu (51 927), Kuressaare (16 291), and Haapsalu (13 533).





## A thinly-populated region

Numbering less than 200 000 inhabitants, the population of Lääne-Eesti is the lowest among the regions of Estonia. There are also a number of islands in the region with very small populations. The largest town is Pärnu which ranks fifth among Estonian towns by population size.

At only 17 inhabitants per km<sup>2</sup>, Lääne-Eesti is the second most sparsely populated region after Kesk-Eesti. The region's rural population density is also the lowest in the country. Although with the exception of Pärnu, the rural population in every county outnumbers the urban one, due to the town of Pärnu and a number of small towns in Pärnu county, the proportion of urban dwellers in the region is as high as 55%. With its proportion of ethnic Estonians currently standing at 88% Lääne-Eesti ranks second among Estonian regions after Kesk-Eesti.

The proportion of young to old people is more favourable here than the average for Estonia. In 1997, about 35% of the population were under 25 years, which can partly be explained by the higher number of births per 1 000 inhabitants. The percentage of those aged 65 years and over was as high as in Estonia as a whole.

There has been a smaller decrease in population in Lääne-Eesti than in other Estonian regions. This is partly due to positive net internal migration but also due to the higher birth-to-death ratio in the 1990s. In the early 1990s, in the two counties situated on the islands, Saare and Hiiumaa, the number of births per 1 000 inhabitants was considerably higher than in the other counties of Estonia. In 1997, the number of births per 1 000 inhabitants in the region as a whole was lower than in Kesk- and Lõuna-Eesti but was still considerably higher than in the two remaining regions of Estonia. There were 9.3 births per 1 000 inhabitants in Lääne-Eesti in 1997, whereas in Estonia as a whole this number was 8.7.

The number of deaths per 1 000 inhabitants was just below the national average, with considerable variation from county to county. In 1997, in three counties this number was lower than the Estonian average, while in Lääne county the indicator was even higher than in most of Estonia's other counties.

## Tourism boosting diversified economy

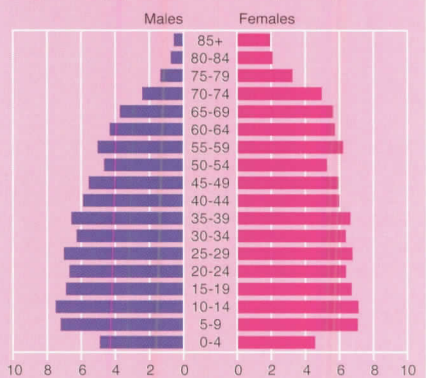
Lääne-Eesti has a diversified economy whose national importance has gradually increased since 1991. The absence of large-scale industry and the shortage of mineral resources meant that the region avoided the mass industrialisation of the 1970s and 1980s, allowing privatisation and restructuring to be quite painless under the present economic conditions. Only a few industrial enterprises have been closed down, and there has been a ten-fold increase in the number of small enterprises which have started up during the transition period to a market economy.

The region's attractiveness as a tourist destination has contributed to the formation of new service enterprises with a rapid turnover and low capital investment. In the 1990s, no large factories were built and the share of foreign capital in new operating activities is at the same level as in the other regions of Estonia (excluding Põhja-Eesti). There are also rural areas where the primary sector is still dominant, and which have remained untouched by the dynamic economic development due to their unfavourable location.

The most famous industrial enterprise in Lääne-Eesti is the ski factory in Pärnu, which also manufactures skis under licence to companies based in other countries. The region also benefits from the textile, wood-processing and food industries. Of the latter, the fish-processing industry is of national importance, and at the same time is the region's biggest industry. While in the primary sector agricultural production has decreased most, forestry and small-scale coastal fishing are growing.

Increasing transport needs have seen the port of Pärnu become an important gateway for exporting local raw materials such as timber and peat. The development of business services has been insignificant;

Age-sex pyramid in 1998 (1 000)



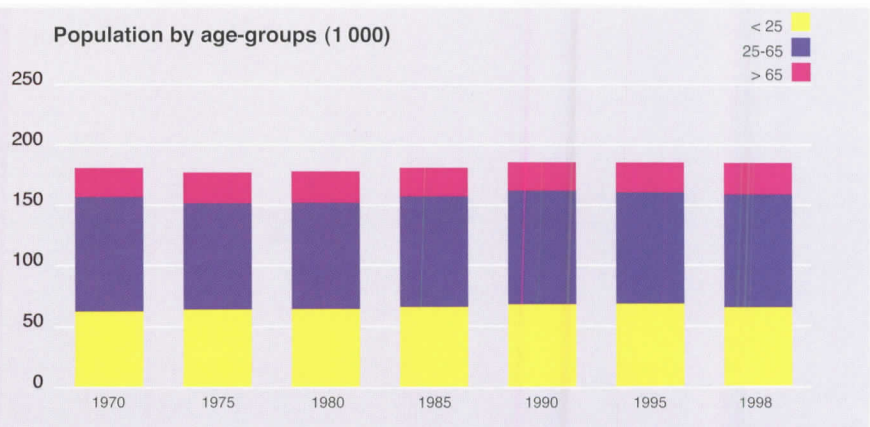
Resident population by ethnic nationality - 1998



Demographic account (1 000)

Population (01 01 90)	185.0
Births	17.7
Deaths	20.0
Migration	1.7
Population (01 01 98)	184.5

Population by age-groups (1 000)



and those operating are of regional importance only. Tourism and its supporting activities continue to have a greater economic impact in the region, with tourists from other countries, especially from Northern Europe, becoming the target group. In coastal areas many yachting harbours and better accommodation have sprung up. In the larger towns the amount of accommodation has improved and the islands have seen farms converting to agro-tourism. The mud-bath resorts in Haapsalu and Pärnu are famous, as are the breeding areas for birds on the coast, which have also favoured the development of nature tourism.

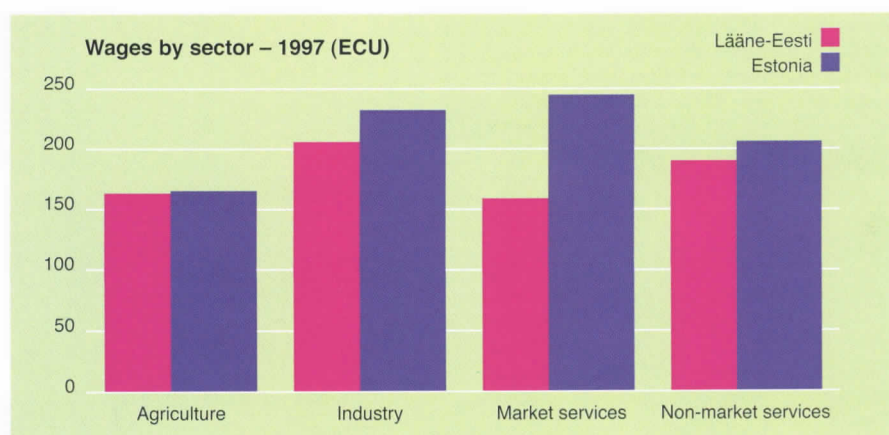
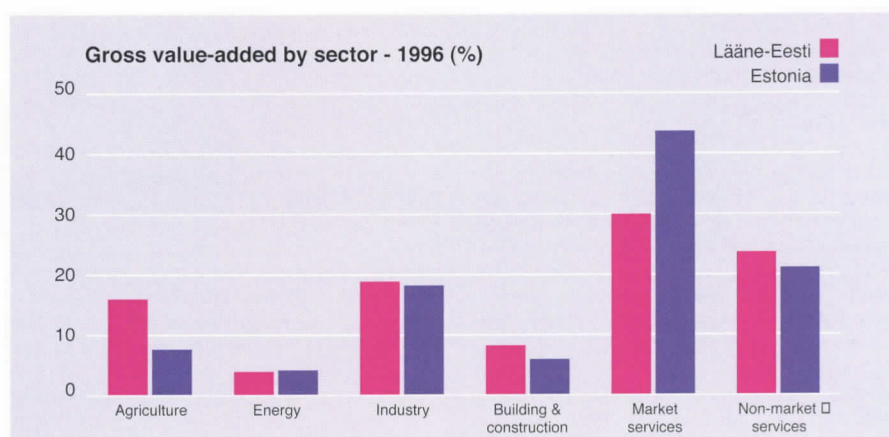
**The smallest increase in income**

In 1997, average earnings stood at 187 ECU, representing two-thirds of average earnings in Põhja-Eesti. At 206 ECU, wages and salaries were 10% above the regional average in the mining, quarrying and manufacturing industries. Construction workers were some of the best paid in the region, with wages 21% above the regional average. The lowest wages were paid to those working in market services, who received 159 ECU (85% of the region's average).

Average monthly income per household member in 1998 was 107 ECU, with 57% of it coming from wages and salaries. In the last two years this share has increased slightly from 54% in 1996 to 57% in 1998. Income from non-market activities decreased in the same period from 16% to 10%, with transfers accounting for 28% of income. With income increasing by only 21% between 1996 and 1998 this was the smallest increase recorded in all of Estonia's regions. The smallest increase in pensions, 25%, also occurred in Lääne-Eesti.

**Main enterprises**

Name	Activity
Viisnurk AS	Furniture manufacturer
Tootsi Turvas AS	Peat extraction
Pärnu ATP AS	Passenger transport company
Saaremaa Tarbijate Ühistu	Food retailer
Saaremaa Liha-ja Piimatööstus AS	Meat processing and preserving
Dagotar AS	Fish processing
Pärnu Linavabrik OÜ	Flax manufacturer
Dagomar AS	Fishing
Edda Wildenau AS	Pig farming
Pärnu Marat AS	Textile manufacturer





## Estonia's fastest growing tertiary sector

Just over a tenth of Estonia's labour force lives in Lääne-Eesti. The activity rate is lower than in Estonia on average, and this is especially true of male activity rates up until 1996 although the situation has improved since then.

While the last decade has seen the number of employed decreasing, Lääne-Eesti has not been as badly hit as other Estonian regions. Between 1989 and 1996, employment decreased by 19% (in Estonia by 23%), rising by 6% in 1997, while in Estonia as a whole there was still a downward trend.

In recent years employment figures dropped in both the primary and secondary sectors, while they actually rose in the tertiary sector. In the primary sector Lääne-Eesti saw employment in this area decrease from 33 to 17%, although still at a relatively high level in comparison to the rest of the country and only Kesk-Eesti has higher employment in this sector (25%).

The secondary sector in Lääne-Eesti has changed least. Between 1989 and 1994, the number of employed decreased by one fifth, and then started to increase again in the following years. In 1997, it was 6% lower than in 1989, while in Estonia as a whole, the number of those employed in the secondary sector decreased by about one third.

In the same period, Lääne-Eesti had the greatest increase in tertiary sector employment in Estonia. In 1997, one fifth more (in total 40 000 people) were employed in the tertiary sector as against 1989, whereas in Estonia as a whole this figure increased by only 4%.

The share of women in employment has been decreasing in the last three years. In 1994, women accounted for 50% of all the employed in Lääne-Eesti. In 1995-1997, this figure dropped to 46%.

In 1997, the vast majority of people were employees, although the share of self-employment, at 13%, was as high as in Kesk-Eesti and Estonia's highest. Between 1989 and 1996, the share of part-time employees increased from 2 to 8%, falling to 7% in 1997.

Lääne-Eesti has the lowest unemployment in Estonia. In 1997, the unemployment rate was 7%, with male unemployment higher than female, at 8 and 6% respectively. However, of the total unemployed, just over half had been out of work for over a year, and this is the highest percentage in Estonia.

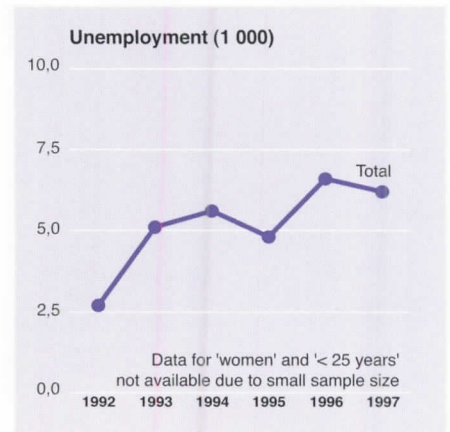
3 800 unemployed job seekers were registered at employment agencies here in 1997. This is more than 60% of the unemployed. Of these, 2 100 were, pursuant to the Unemployed Social Protection Act, registered unemployed, women accounting for 63% of this number. Of the total unemployed, only 35% were women.

## Vital air and sea links

With its coastal location and numerous islands, Lääne-Eesti relies on all forms of transport to meet its various needs. The major road crossing the region is the Tallinn-Pärnu-Riga highway, and in addition there are roads connecting Tallinn with Estonia's two biggest islands, Saaremaa and Hiiumaa. The total length of roads is 11 379 km, one third of them being national roads. 23% of the roads have a hard surface.

There are local airports at Kuressaare on Saaremaa Island and at Kärdla on Hiiumaa Island. Regular passenger air traffic takes place between Tallinn and Kuressaare. Vehicles from the mainland to the biggest islands are carried by ferry several times a day. The causeway between the islands of Muhu and Saaremaa allows traffic to move easily between the two. There is also sea traffic between Saaremaa and Hiiumaa.

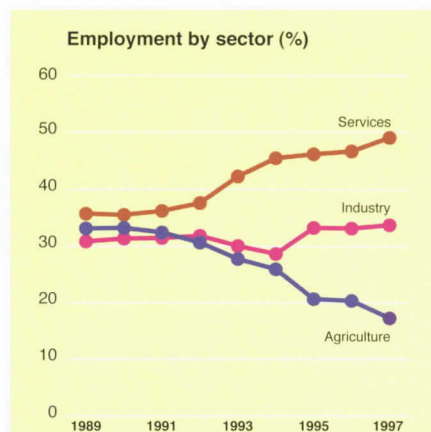
Rail transport is not so important here, and



only the Tallinn-Haapsalu and the Tallinn-Pärnu-Mõisaküla lines pass through the region.

Several ports dot the coast but they are mainly of local importance only. Pärnu Harbour and Lehtma Harbour in Hiiumaa have international sea transport as well. Passenger turnover has dropped markedly since its 1994 level of 13 600, and in 1998, only 48 passengers were embarked and 1 305 disembarked, reflecting difficulties in berthing large vessels. The transport of goods by sea is of increasing importance, and in 1998, 825 000 tons of goods were loaded and 40 000 unloaded in Lääne-Eesti, representing substantial increases since 1993.

At the end of 1998, there were 67 062 vehicles in Lääne-Eesti, 83% of these were private. The number of vehicles per 100 population was 36, that of private passenger cars 27, with both figures comparable to the Estonian average.



	15-24 years	25-54 years	55-64 years
Men	12	74	14
Women	11	78	11
Total	12	76	13

### Little environmental damage

Lääne-Eesti stands out as a region which suffers little environmental impact from human activities, and which has the highest share of its territory (one third) protected as national parks and other reserves.

Water use in the domestic sector, 35 m<sup>3</sup> per capita, is lower than in Estonia on average (42 m<sup>3</sup> per capita). Less than half the population are connected to public sewerage, which is below the national average of 69%.

In terms of waste generated, Lääne-Eesti accounted for less than 1% of Estonia's overall waste, and an even smaller percentage of industrial waste originated here. The per capita amount of domestic waste collected was also one of the lowest figures in Estonia.

The waste water needing treatment accounted for only 3% (10.6 million m<sup>3</sup>) of Estonia's total. In 1992, the share of treated waste water of the total waste water needing treatment was 96%, and by 1998 this figure had risen to 100%.

Air pollution from stationary sources was insignificant and formed only 2.9% of solid particles and 2.6% of total sulphur dioxide emissions for Estonia. In 1998, environmental expenditure by local municipalities remained on the same level as in 1992 and accounted for 21% of total environmental expenditure in Estonia.

Felling intensity in Lääne-Eesti was high, and at 1 354 700 cubic metres solid volume felled represented 22% of Estonia's gross felling. Furthermore, between 1993 and 1998, forest felling more than doubled.

At the end of 1998, there were 55 338 main telephone lines in Lääne-Eesti, a rate of 300 main telephone lines per 1 000 population. Telephone access was best in Hiiu county (387 main telephone lines per 1 000 population). The level of digitalisation of the

#### Surfaced public roads – 1999

	Lääne-Eesti	Estonia
Length in km per km <sup>2</sup>	0.16	0.19
Length in km per 1 000 population	9.6	5.8
Length in km per 1 000 private passenger cars	35.2	21.2
% private passenger cars in total number of vehicles	75	73
Number of accidental deaths per 1000 private passenger cars	0.7	0.7

#### Environment - 1998

	Lääne-Eesti	Estonia
Population connected to public water supply (%)	81.3	87.6
Population connected to public sewerage (%)	46.7	68.5
Sewerage subject to treatment (%)	73.1	19.6
Per capita consumption of water (m <sup>3</sup> )	34.7	42.0

#### Number of pupils - 1998

	Total	Female %
Pre-school	7 346	49
Primary	17 216	48
Lower secondary	7 661	49
Higher secondary (vocational/general)	7 356	54
Tertiary (higher education)	923	55
Total	40 502	49

#### Health care - 1998

	Lääne-Eesti	Estonia
Number of hospitals	12	79
Number of doctors per 10 000 population	22.2	31.1
Number of hospital beds per 10 000 population	62.3	74.2

#### Telephone services

	1997		1999	
	Lääne-Eesti	Estonia	Lääne-Eesti	Estonia
Lines per 1 000 population	264	300	301	345
% connected to digital network	15.4	26.7	36.2	47.8

telephone network has been growing; at the beginning of 1996, 15% of main telephone lines were connected to the digital network, and two years later this had risen to 36%.

### Famous for its health resorts

In 1997, education was provided by 18 kindergarten-primary schools, 36 primary schools, 61 basic schools, and 29 secondary schools to a total of 41 000 pupils. There are no higher education institutes in Lääne-Eesti, but there are three vocational schools – one in Saaremaa and two in Pärnu county – which provide post-secondary technical education (about 2 years after secondary school). These schools have around 900 students who specialise in business and sales management, forestry, hotel and tourism, and design.

The 22 museums here received 194 000 visitors, representing 1 051 visits per 1 000 population for the year 1997.

Lääne-Eesti possessed 12 hospitals in 1997 with 1 150 beds. Physicians numbered 410, of these, 71 worked in private practice. Of the 110 dentists, 65 worked in private practice. The number of physicians per 10 000 population was 22, that of dentists, 6. The region is famous for its health resorts both in Estonia and beyond. Of the 11 health resorts in Estonia, seven are situated here. The towns of Haapsalu and Pärnu have a long tradition of providing mud baths. The first health spa of its kind was founded at Haapsalu over one hundred years ago, and today it has Estonia's first private mud-bath institution. The health resorts in Pärnu and Haapsalu are also visited by Finnish and Swedish people.



## Lõuna-Eesti

### Remote beauty

Lõuna-Eesti is situated in southern Estonia, and is characterised by its border location with Latvia and Russia. The region is also situated further away from the capital, Tallinn, than the other Estonian regions. Its landscape is noteworthy for its natural beauty, round hills and picturesque outcrops of red Devonian sandstone on the Ahja, Piusa and Võhandu rivers.

The region was conquered by German Teutonic knights in the early 13th century. Then in the 16th century Russian forces occupied Lõuna-Eesti during the Livonian War, and later the region came under Polish, Lithuanian and Swedish rule. During the Northern War in 1704, it was incorporated into the Russian Empire. In the mid-19th century there were peasant disturbances, followed by mass emigration of peasants from Lõuna-Eesti to Russia at the end of the century.

Lõuna-Eesti comprises four counties: Põlva, Tartu, Valga and Võru. There are 10 towns, 55 rural municipalities, 47 large villages and 1 293 villages in the region. The region is inhabited mainly by Estonians, and Estonian is the dominant language. The region's economic and cultural centre is the university town of Tartu.

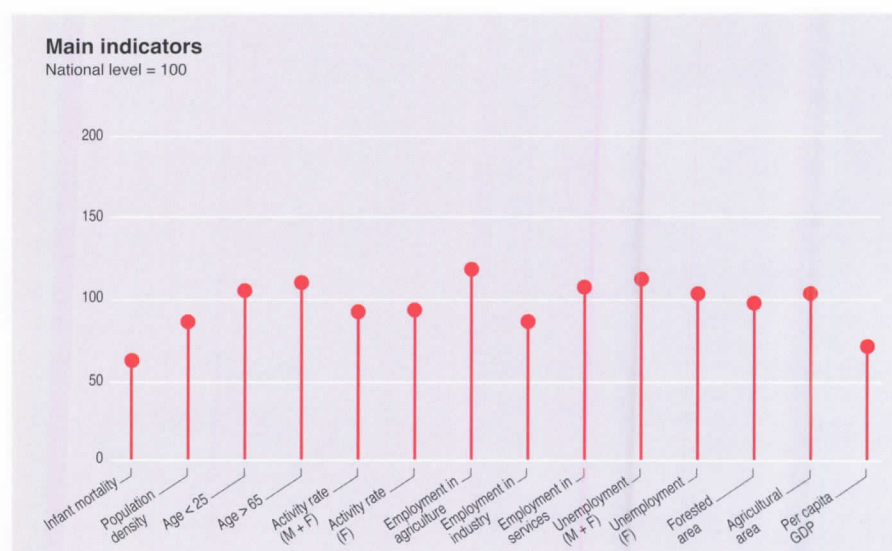
The oldest part of Tartu is called Toomemägi. In the middle of the first millennium the ancient Estonians already had a stronghold called Tarbatu on Toomemägi Hill. The first mention of Tartu came in 1030 in a written record and again in 1248, as a town. Soon after that Tartu became a member of the Hanseatic League and an important trading centre on the Pskov and Novgorod trading route. In 1632, a university was established in Tartu under the name of Academia Gustaviana after its founder, the King of Sweden. In the second half of the 19th century, Tartu became the centre of social and cultural life in Estonia, when the foundations were laid of today's Estonian song festivals, theatre and literature.

### Development centred around Tartu

The university town of Tartu, the country's second largest economic and cultural centre, is situated in the northern part of Lõuna-Eesti. Tartu has a highly qualified work force, scientific research institutes, business services, a well-developed physical infrastructure, as well as numerous



Lõuna-Eesti's characteristic rolling landscape



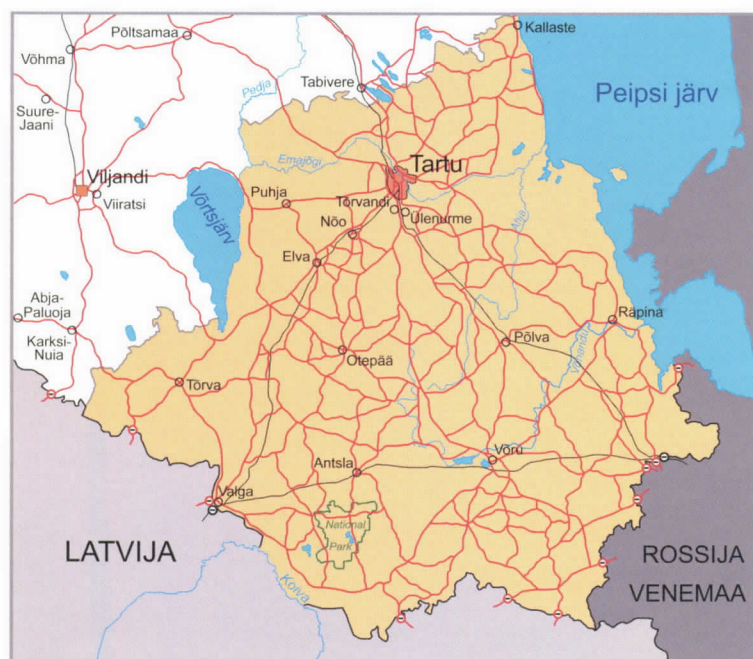
industrial enterprises which have been modernised successfully. At the same time, Tartu is Estonia's foremost medical centre. Taken together, these factors will favour first and foremost the development of new innovative branches in industry and services.

External borders with Latvia and Russia in the south also offer potential for the development of transit and border trade. The Tallinn-Tartu highway, which will shortly be upgraded, will also contribute to the growth of the region's importance. Picturesque landscapes and unspoilt natural beauty are valuable resources for the development of many kinds of tourism throughout the region.

However, the region is hampered by some

negative features, particularly in its southern part. Out-of-date farming methods, the lowest incomes in Estonia, an ageing population and high levels of unemployment are some of the factors which can be cited. In several rural areas, the population has been economically marginalised to such an extent that people live on a combination of state benefits and bartering of produce for what they need.

The restricted development potential of Lõuna-Eesti as a whole means that greater attention must be paid to the quality of economic development as well as to the establishment of niche markets as two key priorities. Furthermore, the disparity in economic development and the economic links between the town of Tartu and the other parts of the region make the implementation of a single development strate-



Scale: 1: 1 400 000

0 30 km

**Agriculture 1998**

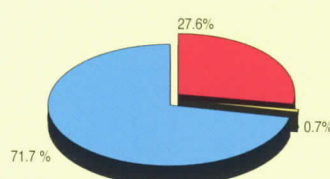
Number of private farms	15 049
Persons working in agriculture *	11 600
Total agricultural area (ha)	241 800
Total livestock	120 700
Cattle per 100 ha of total agricultural land	26.0
Pigs per 100 ha of total agricultural land	20.3
Share of crop products in total agricultural output (%) *	55.3
Main crops (1 000 tonnes)	
Cereals	137.0
Potatoes	30.7

\* data from 1997

gy difficult. Another priority must be investment geared towards establishing more regional cohesion, enabling the use of Tartu's potential by more remote areas.

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

- Permanent grassland
- Arable land
- Permanent crops

**Variety of landscapes**

Lõuna-Eesti covers 9 606 km<sup>2</sup>. In terms of landscape the main areas are the Southeast Estonian Plateau intersected by numerous primeval valleys, and the Sakala, Otepää and Haanja uplands. The higher areas of the Plateau are covered with fields, while marshes and forests predominate in low-lying areas. The greatest variety of landscape features in all of Estonia can also be found here. The soil here tends to have a fertile moraine surface cover and is for the most part cultivated.

In the north and west, Lõuna-Eesti borders on Kesk-Eesti, in the south on the districts of Valga and Aluksne in Latvia, while its eastern border is situated on the banks of Lake Peipsi.

**Which regions are similar to Lõuna-Eesti?****Population:**

270 000 inhabitants

East Derbyshire (UK)

Noord Limburg (NL)

Sofia stolitsa (BG)

**Age structure:**

15% over 65

Comunidad Valenciana (E)

Stockholm (S)

Zasavska (SI)

**Employment structure:**

60% services

Alentejo (P)

Mittelfranken (D)

Pest (HU)

Gravel, building and glassmaking sand, peat, refractory clay, curative mud, lake mud (sapropel), dolomite, mineral water, and wood are the region's main natural resources. Gravel and sand are used in construction work while the dolomite is suitable for making decorative slabs. Lake mud may be used as an organic fertiliser and as supplementary feed for livestock. The "Väraska" brand of mineral water is well-known.

The longest rivers are the Võhandu (162 km), Piusa (109 km), Emajõgi (101 km) and Ahja (95 km) rivers. The Koiva (Gauja) River in the southeast forms the frontier with Latvia over a distance of 26 km. The Otepää and Haanja uplands possess abundant small lakes. The largest lake is Lake Võrtsjärv (of which 100 km<sup>2</sup> is situated in Lõuna-Eesti). The area of the second largest lake, Lake Vagula, is only 5 km<sup>2</sup>. Lõuna-Eesti also has Estonia's deepest lake, Lake Rõuge Suurjärv (38 m). Valga and Võru counties rank first and second among Estonian counties by the number of lakes. There are large mires at the mouth of the Emajõgi (the Emajõe Suursoo mire, 203 km<sup>2</sup>) and in the Võrtsjärv depression (the Sangla mire complex, 323 km<sup>2</sup>).

Lõuna-Eesti's largest towns are Tartu (100 977), Võru (16 042), Valga (15 798), Põlva (7 181), and Elva (6 357).



## Considerable natural decrease in population

With its population of 270 000 and population density of 28 inhabitants per km<sup>2</sup> Lõuna-Eesti ranks third among Estonian regions after Põhja-Eesti and Kirde-Eesti. The proportion of children (0-14 years) and older people (65 years and over) is somewhat higher than in Estonia as a whole.

As in other Estonian regions, Lõuna-Eesti has been faced with a declining population due to natural movement throughout the 1990s. Data on this region show that this decrease began somewhat later than in Estonia as a whole. However, this process in Lõuna-Eesti has varied considerably from county to county. Although the rate of natural decrease in the region in the second half of the 1990s was close to the national average, in three counties, Põlva, Valga and Võru, it was higher (5 to 6 persons per 1 000 population) than in most of the other counties of Estonia. This can partly be explained by the age structure of counties with a predominately rural population. In three counties, Põlva, Valga and Võru, the share of people aged 65 years and over in 1997 was higher than in any other county of Estonia.

In the 1990s, the number of deaths per 1 000 population (13.4 in 1997) in the region as a whole was higher than the national average, with the three counties of Põlva, Valga and Võru, noticeably higher than Tartu county. However, in the 1990s, due to a lower death rate in Tartu county in comparison with the other counties of the region, the region as a whole did not differ from the other regions of Estonia, except Põhja-Eesti.

Lõuna-Eesti's birth rate was higher than in Estonia on average in the same period. The decrease in the number of births in the region was not as sharp as in the other regions. In 1997, a decrease in the birth rate was noticeable, although it was still about one child higher (9.6 births per 1 000 inhabitants) than the national average. This was mainly due to the low birth rate in Põhja-Eesti and Kirde-Eesti forcing down the national average.

The population structure and any demographic change in Lõuna-Eesti is influenced by the second largest city of Estonia, the university town of Tartu, whose population is over 100 000. Due to this, Tartu county also has a high proportion of urban dwellers, and in 1997 they accounted for more than 70% of the population. By contrast, Põlva county has the lowest proportion of urban dwellers in Estonia, at less than 30% in 1997.

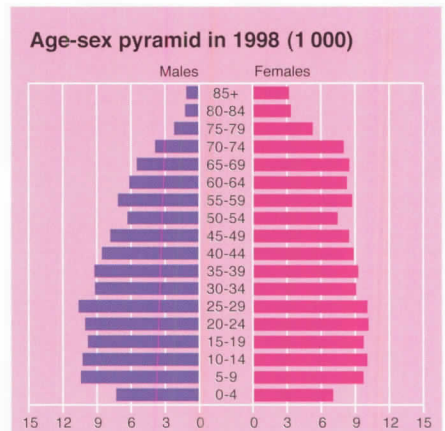
## New service industries replacing primary and secondary activities

Lõuna-Eesti's economy, based primarily on industry and agriculture, has been losing its share of Estonia's economic life in recent years. In particular, its three southerly counties have aroused considerable concern in Estonia.

Until the 1990s, several big machine-building factories were located in the towns of Tartu and Võru. By 1998, the number of employees in these industries had decreased almost tenfold, although on the whole the companies themselves have managed to survive through shifting towards sub-contract work. Of the remaining industrial enterprises, the most important are those engaged in food, timber, building materials and clothing manufacture. Estonia's most important dairy industry is located in Põlva. During the period of transition to a market economy, these enterprises have swung production away from the Estonian market to become major exporting companies.

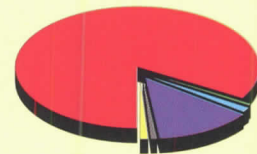
Despite these moves, since 1991 industry's share of employment has decreased in all sectors. New and knowledge intensive industries which have started up in recent years are those related to laser manufacturing and biotechnology, although for the moment they are still small-scale. The region, however, lacks definite specialisation in particular industrial sectors.

If anything, the situation is worst in the agricultural sector, where the number of employees has decreased threefold, as have sown areas and livestock numbers. A number of large-scale farms have closed down, primarily in the southern part of the region, where the hilly landscape prevents competitive large-scale production. A number of small farms and some enterprises producing organic foodstuffs have



## Resident population by ethnic nationality - 1998

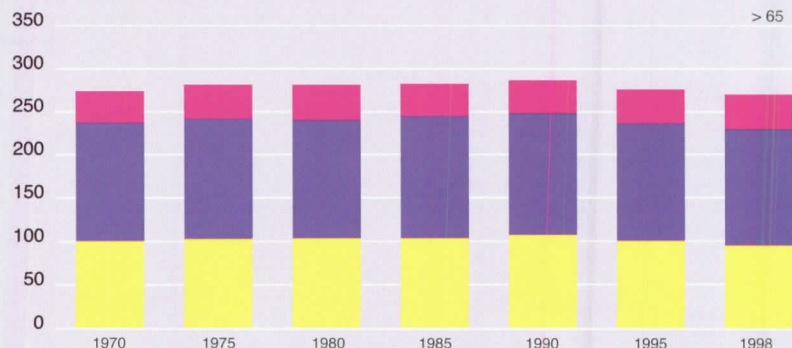
- Estonians - 83.52%
- Belorussians - 0.44%
- Ukrainians - 1.21%
- Russians - 12.95%
- Finns - 0.80%
- Others - 1.08%



## Demographic account (1 000)

Population (01 01 90)	286.0
Births	26.8
Deaths	31.5
Migration	-11.7
Population (01 01 98)	269.6

## Population by age-groups (1 000)



emerged, but they make only a minor contribution to the region's economy.

The town of Tartu has developed into an important educational, scientific and cultural centre for the country. Free economic zones for the development of industry and warehousing have been established in the towns of Võru and Valga to make use of existing transport routes and hopefully invigorate their economies. All-year-round services for the tourist industry have become an important branch of the economy. The town of Otepää was already in the 1970s and 1980s used as a sports centre by champions from the former Soviet Union, while in the favourite spots in the region such as the towns of Tartu and Otepää workshops or seminars are often organised. The number of farms accommodating and catering for tourists in Lõuna-Eesti has rapidly grown. The region's international links, however, are not yet well established and the services offered are mostly of internal importance.

### Uneven standard of living across the region

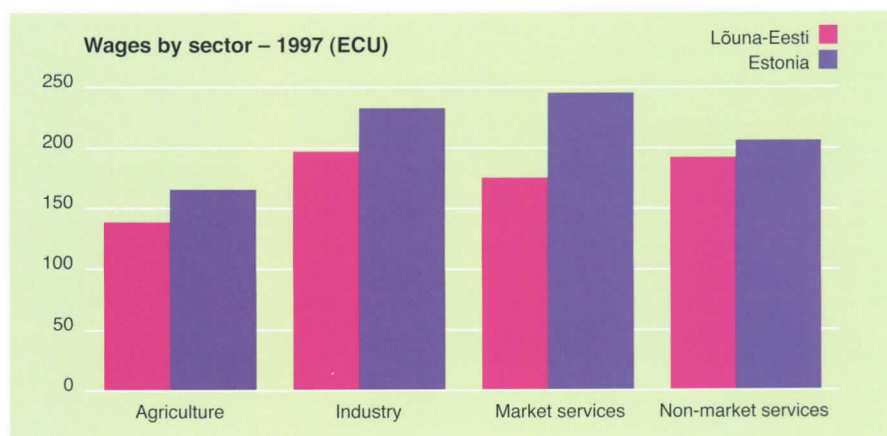
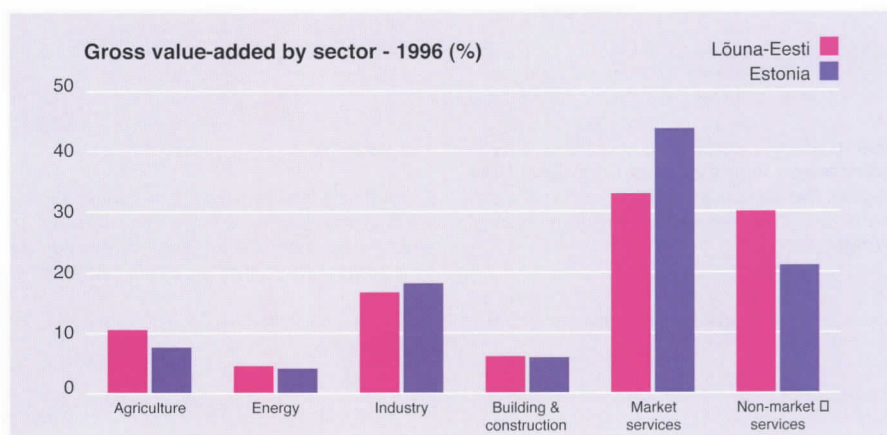
Average wages and salaries paid in the region in 1997 were 187 ECU, or two-thirds of Põhja-Eesti's average earnings. Those employed in the manufacturing industries enjoyed salaries 5% above the regional average, while those working in electricity, gas and water supply, received almost 50% more than the regional average. Workers in agriculture, hunting, forestry and fishing, were the lowest paid, earning three-quarters of the region's average.

In 1998, the average monthly income per household member was 105 ECU, with just over half of this coming from wages and salaries. In the last two years this share has slightly increased, while income from non-market activities decreased. Transfers accounted for 28% of income. In recent years, overall income has increased by just over one quarter in Lõuna-Eesti, with income generated from wages and salaries increasing more than one-third.

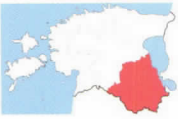
### Main enterprises

Name	Activity
Tarmeko AS	Furniture manufacturer
Tarbus AS	Passenger transport company
Wermo AS	Furniture manufacturer
Sangar AS	Clothing manufacturer
Samelin AS	Footwear manufacturer
Põlva Piim AS	Milk producer
Astri & PK AS	Food retailer
Tarkon AS	Metal working
Eesti Meedia AS	Newspaper publishing
Valga Gomab Mööbel AS	Furniture manufacturer

As regards earnings and income per household member, there was little homogeneity in the region. In the northern part, namely in Tartu county, wages and salaries were 8 to 15% higher, and income 13 to 29% higher than in the other parts of the region.







## The lowest activity rate

Just under one-fifth of Estonia's labour force lives in Lõuna-Eesti, where the activity rate is the lowest in Estonia, both for men and for the working population as a whole. Between 1989 and 1997, the activity rate of the population aged 15 and over in Lõuna-Eesti was on average 4 to 6 percentage points lower than the national figure.

Between 1989 and 1997, total employment in Lõuna-Eesti decreased by one quarter. Only Kirde-Eesti experienced a greater decrease (29%). Employment in the agricultural sector decreased from 26 to 11%, in industry from 34 to 29%. In contrast, Lõuna-Eesti, like Lääne-Eesti, saw a considerable increase in service sector employment during this period. 64 000 people are now employed in the services sector, which represents a 12% increase since 1989.

The number of women in employment increased from the 46-48% of earlier years to 49% in 1997. In the same year, wage and salary earners accounted for 91% of all the employed. With 9% self-employed, this compares with the Estonian average. Between 1989 and 1997 the number of part-time employees doubled.

Unemployment is on average higher in Lõuna-Eesti than in Estonia as a whole. Until 1995, the number of unemployed increased steadily, reaching 14 000, or an unemployment rate of 11%. The last couple of years has seen this figure start to decline again, and the number of unemployed decreased to 13 000. Unemployment is higher among men than women, and reached a peak in 1995 when male unemployment was 13% as against the female rate of 9%.

At 14%, youth unemployment (under 25s) was almost as high as Estonia's average, while the share of long-term unemployment was a little higher than the national average.

In 1997, there were 6 600 registered unemployed job seekers at employment agencies in Lõuna-Eesti, just over half the total unemployed. Of them, 3 700 were, pursuant to the Unemployed Social Protection Act, classified as registered unemployed, with women accounting for 68%. In terms of total unemployment, 42% were women.

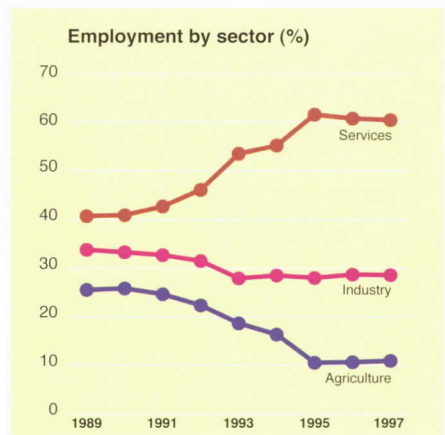
## Dense railway network

The main means of transport in Lõuna-Eesti are road and rail. The military and civil airports near Tartu exploited during Soviet times are not in regular use today. The region has no access to the sea. Rivers in Lõuna-Eesti are navigable over a distance of 140 km, although at present the region does not exploit its inland waterways for transportation purposes.

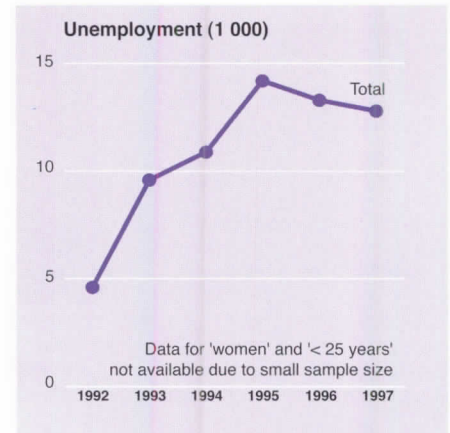
There is a dense railway network in the region. From Tartu, the railway runs in three directions, with regular passenger services to Tallinn in Põhja-Eesti, to Põlva in the southern part of the region, as well as to the border town of Valga, and from there on to Võru. Apart from the line from Narva which connects Estonia with Russia, another important main line crosses the region's southern part, running south-west to Riga from Valga and east to Pskov and on to Moscow.

At the end of 1998, total road length in Lõuna-Eesti stood at 13 216 km, of which 36% were national roads. The proportion of hard surfaced roads was the smallest in Estonia at 17%.

At the end of 1998, there were 96 872 registered vehicles in Lõuna-Eesti, 84% of them private. The total number of vehicles per 100 population was 36, that of private passenger cars 27.



	15-24 years	25-54 years	55-64 years
Men	14	75	11
Women	10	78	12
Total	12	77	11



## Extensive logging, low pollution

As regards emissions to air, water and soil, Lõuna-Eesti experiences a low level of negative environmental impact, whereas large areas of forest are being cleared for logging.

In 1998, at 29 m<sup>3</sup> per capita, water use in the domestic sector was one of the lowest in Estonia (the national average was 42 m<sup>3</sup> per capita). Whereas over two-thirds of the population are connected to public sewerage in Estonia, just over half the population were here.

Lõuna-Eesti produces very little of the waste generated nationally, and similarly the per capita household waste collected was one of the lowest in Estonia (140 kg as against 237 kg per capita nationally). What little industrial waste was produced, had a higher chance of being recycled here than elsewhere in Estonia.

The waste water needing treatment accounted for only 4% (12.3 million m<sup>3</sup>) of Estonia's total. The amount of waste water needing treatment but discharged without treatment made up 35% of the national total. In recent years significant steps have been taken to improve the treatment of waste water, and over three-quarters is now purified as against just over half at the start of the decade. Nevertheless, this is still the lowest figure in Estonia.

Air pollution from stationary sources was insignificant in Lõuna-Eesti and contributed little to overall levels in Estonia. Environmental expenditure by local municipalities in the region more than doubled in the last 6 years and formed 23% of national environmental expenditure.

Although one-fifth of Estonia's territory under nature protection is situated in this region, the highest volume of logging

(1 150 000 m<sup>3</sup> solid volume) occurs here, representing one third of total volume in Estonia. The share of final felling in gross felling was also the highest in Estonia at 67%.

At the end of 1998 there were 81 706 main telephone lines or 303 main telephone lines per 1 000 population. Digitalisation of the telephone network here is currently second only to Põhja-Eesti, and by the end of 1998 47% of the main telephone lines were connected to the digital network. Differences exist within the region, with Võru county having fewer lines, and other counties much lower levels of digitalisation.

#### Environment - 1998

	Lõuna-Eesti	Estonia
Population connected to public water supply (%)	80.9	87.6
Population connected to public sewerage (%)	56.5	68.5
Sewerage subject to treatment (%)	80.9	19.6
Per capita consumption of water (m <sup>3</sup> )	28.6	42.0

#### Number of pupils - 1998

	Total	Female %
Pre-school	10 248	47
Primary	24 299	48
Lower secondary	11 070	49
Higher secondary (vocational/general)	10 458	55
Tertiary (higher education)	14 624	60
Total	70 699	51

#### Health care - 1998

	Lõuna-Eesti	Estonia
Number of hospitals	21	79
Number of doctors per 10 000 population	36.7	31.1
Number of hospital beds per 10 000 population	81.3	74.2

#### Surfaced public roads - 1999

	Lõuna-Eesti	Estonia
Length in km per km <sup>2</sup>	0.19	0.19
Length in km per 1 000 population	7.0	5.8
Length in km per 1 000 private passenger cars	25.7	21.2
% private passenger cars in total number of vehicles	75	73
Number of accidental deaths per 1000 private passenger cars	0.7	0.7

#### Pearl of educational life - Tartu University

In 1997, there were 12 kindergarten-primary schools, 31 primary schools, 83 basic schools and 50 secondary schools in Lõuna-Eesti. Tertiary education was provided by 2 public universities, 2 public colleges, and 2 private denominational tertiary education institutions.

Tartu has traditionally been an important educational, scientific and cultural centre both regionally and nationally. One of Europe's oldest and most famous universities, Tartu University, founded in 1632, is situated here. Tartu University enjoys a long-standing tradition of scientific research work and is also noted for its botanical garden and its library. The Estonian Agricultural University provides tertiary education in its particular area, while other tertiary establishments include the Tartu Aviation College and Tartu Teacher Training College. The Võru Institute is a local scientific research centre in the southern part of the region.

Hospitals in Lõuna-Eesti numbered 21 in 1997 with 2 192 beds, and 990 physicians, of whom, 731 (74%) worked in Tartu county. The number of physicians per 10 000 population was 37, that of dentists, 9, which was the highest in Estonia. 70% of the region's dentists worked in Tartu county. Tartu county ranked first among Estonian counties by the number of physicians per 10 000 population (48) and second by the number of hospitals (13).

There were 30 museums in Lõuna-Eesti in 1997, of which 23 were situated in Tartu County. Visitors numbered 270 000, and there were 999 visits per 1 000 population.

#### Telephone services

	1997		1999	
	Lõuna-Eesti	Estonia	Lõuna-Eesti	Estonia
Lines per 1 000 population	254	300	305	345
% connected to digital network	33.5	26.7	47.4	47.8

## Explanatory notes

Sources: Statistical Office of Estonia (all data relating to Estonia)  
Eurostat database REGIO (all EU data)

### Notes on specific graphs and tables

#### Table: Main indicators

Reference year: 1997, except for population density (1998), population < 25 (1998), population  $\geq$  65 (1998), forested area (1998), agricultural area (1998), and GDP per capita (1996).

Population density: data on land area exclude the areas of Lake Peipsi, Lake Võrtsjärv, and Muuga Harbour.

Activity rate: labour force as a percentage of the population aged 15 and over.

Employment, unemployment: data from the Labour Force Survey (LFS).

#### Table: Demographic account

Births and deaths: the total number of births and the total number of deaths which took place in Estonia.

Migration: the statistical discrepancy due to the births and deaths of non-inhabitants is included in migration data.

#### Graph: Gross value added by sector - 1996 (%)

The gross value added by sector is based on gross value added at basic prices.

Definition of sectors:

Agriculture: agriculture, hunting and forestry, fishing (NACE Rev.1, codes A-B);

Energy: electricity, gas and water supply (NACE Rev.1, codes E);

Industry: mining and manufacturing (NACE Rev.1, codes C-D);

Building and construction (NACE Rev.1, codes F);

Market services: trade, transport, etc. (NACE Rev.1, codes G-K);

Non-market services: education, social protection, etc. (NACE Rev.1, codes L-P).

#### Table: Main enterprises

Source: Estonian Central Commercial Register

#### Graph: Agricultural land use in 1998 (%)

Data exclude household plots.

#### Table: Agriculture - 1998

Reference year: 1997 for persons working in agriculture and the share of crop products in total agricultural output (%); 1999 for private farms.

Private farm: household whose land use is registered in the Land Cadastre and whose property is at least 1 ha of agricultural or forested land.

Persons working in agriculture: data from LFS.

Agricultural area, share of crop products in total agricultural output (%), main crops: data of agricultural enterprises and private farms.

Household plots have been excluded.

#### Graph: Wages by sectors - 1997 (ECU)

Definition: gross monthly average wages and salaries.

Definition of sectors:

Agriculture - agriculture, hunting and forestry, fishing (NACE Rev.1, codes A-B);

Industry - mining and manufacturing (NACE Rev.1, codes C-D);

Market services - trade, transport, etc. (NACE Rev.1, codes G-K);

Non-market services - education, social protection, etc. (NACE Rev.1, codes L-P).

#### Table: Employment by age groups - 1997 (%)

Source: Labour Force Survey.

Definition: the data used concerned resident employment.

Resident employment means all employed residents of the region, whether employed in the region or outside the region.

#### Graph: Employment by sector (%)

Source: Labour Force Survey.

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: Unemployment (1000)**

Source: Labour Force Survey (ILO definition).

For Kesk-Eesti, Lääne-Eesti and Lõuna-Eesti, data are not available on women and on persons under 25 (unreliable due to the small size of the sample).

**Table: Environment - 1998**

Population connected to public water supply (%): data drawn from the Labour Force Survey. Data on sedimentation tanks have been included.

Population connected to public sewerage (%): these are estimates by the Ministry of Environment. Data on sedimentation tanks are excluded.

Sewerage subject to treatment (%): wastewater needing treatment as a proportion of total water discharged.

Consumption of water per capita (m<sup>3</sup>): water for human consumption, not overall water consumption.

**Table: Telephone services**

% connected to digital network: data supplied by Estonian Telephone Ltd.

**Table: Number of pupils - 1998**

Basic education is compulsory up to 16 years old (9 grades) and the division into stages is purely statistical. Basic schools are distinguished from other schools in that they offer teaching for the first 9 compulsory grades only, while secondary schools offer courses beyond grade 9. Primary schools on the other hand cover the first 4 or 6 grades. In rural areas, these primary schools are sometimes combined with kindergartens in order to reduce costs (they may be in separate buildings or in the same building but they share the same headmaster). In kindergarten-primary schools, however, there is a clear differentiation between pre-primary programmes and programmes for the first stages of basic education.

**Note on comparability**

The definitions and methods used by the Statistical Office of Estonia in certain fields of statistics do not always coincide with those used by the Member States of the European Union. Comparisons of Estonian regions with regions in the EU should therefore be made with caution.

**Text drafted by:**

Anne Herm, Ülle Pettai, Kaia Oras, Riina Süld, Katrin Toomel from Statistical Office of Estonia;  
Jaak Kliimask from Jõgeva County Government

**Edited by:**

Katrin Toomel, Maie Nogelainen

**Translated by:**

Riina Süld



# LATVIA



Latvia lies at the crossroads where east meets west on the shores of the Baltic Sea. At the beginning of 1999, the population of Latvia stood at just under two and a half million and its territory covered 64 589 km<sup>2</sup>.

Due to its geographical position Latvia often fell victim to the aggression of its more powerful neighbours. Beginning in the 13th century, parts of Latvia were administered by the Teutonic Knights before coming under Polish and Swedish rule. In the 18th century Russia acquired the whole territory of Latvia. In 1918, Latvia was proclaimed an independent state. As a result of USSR military aggression, Latvia was incorporated into the Soviet empire in 1940. Following the re-establishment of independence in 1991, Latvia regained its status as an independent democratic republic where the popularly elected Saeima (Parliament) exercises supreme power, elects the State President and confirms the Cabinet of Ministers.

During the 1990's Latvia made considerable progress in the stabilisation and restructuring of its economy. Although the transition to a market economy and severance of the tight economic ties with the USSR resulted in a dramatic drop in industrial output, gross domestic product started to increase in the mid-1990s. With the privatisation of companies in the country, the share of the private sector in gross domestic product grew and reached 65% in 1998. Furthermore, the relative importance of different sectors in the economy has also undergone a parallel re-structuring, so that the service sector, which contributed only 32% to the total value added in 1990, had more than doubled by 1998 to 66%. Prior to the restoration of independence there was practically no trade outside the Soviet Union, whereas by 1998 trade relations with the countries of the European Union constituted 57% and 55% of Latvia's imports and exports, respectively.

In the course of time administrative territorial divisions in Latvia have undergone

substantial changes. Before the loss of independence in 1940, Latvia was divided into 5 regions (Rīga, Vidzeme, Kurzeme, Zemgale and Latgale), which were further subdivided into 516 districts and 59 towns. At the beginning of 1999, there were 7 cities under state jurisdiction (the area of these cities is not included in the territory of the administrative districts), 26 districts comprising 70 towns and 483 pagasts (civil parishes). In 1998, the law on administrative territorial reform was adopted. Until the completion of this reform, the country's division into 5 regions (the region of Rīga including the cities of Rīga and Jūrmala and the district of Rīga, plus the regions of Vidzeme, Kurzeme, Zemgale and Latgale) remains in force. This division aligns best with the NUTS level 3 regional criteria that are accepted in the European Union and it is closely based on the administrative territorial division of Latvia during the first period of independence. Accordingly, these regions form the basis of the analysis in this publication.



# Rīga region

## Turbulent History

The territory of present day Riga region has been inhabited since the 3rd millennium BC. According to archaeological data, by the 2nd century AD there was already a merchant settlement at the western end of the Daugava trade route. Henrik's Livonian chronicle mentions the fact that Riga was being built in 1201. During the next 4-5 centuries the territory was under the domination of German bishops and masters of the Livonian Order. For a short time at the end of the 16th century the region came under Polish rule.

In the 17th century, the territory of Riga region was under Swedish rule but in 1710 it became part of the Russian Empire.

Due to the rapid growth of industry in the early 20th century Riga became the third largest industrial centre of the Tsarist Empire after Moscow and St. Petersburg.

In 1918, Latvia was proclaimed an independent state and Riga became its capital. Today all central public administration bodies are situated in Riga as they were during the first period of independence.

After World War II, during the incorporation of Latvia into the USSR, Riga and its suburbs were subject to swift industrialisation and population growth from internal and external emigration resulting in a large-scale construction of dwellings. New towns such as Olaine, Salaspils and Vangaži were built.

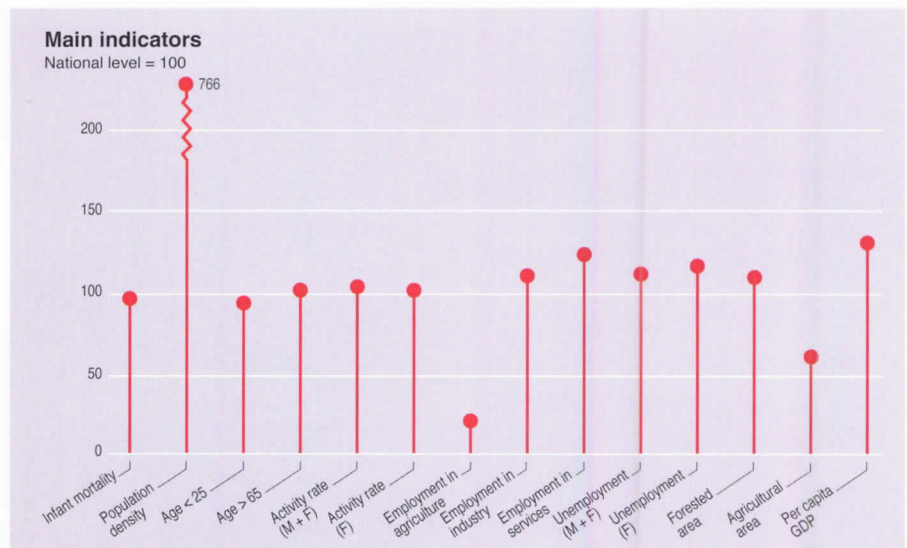
The region of Riga has a favourable geographical position at the centre of Latvia and the Baltic countries. It is a region of contrasts, abounding in natural landscapes and strongly urbanised territories. It is located at the edge of the Gulf of Riga on the Baltic Sea.

Latvian as the official state language is used in the region although Russian is also very widely used, especially in Riga.

The region of Rīga comprises Riga city, the city of Jūrmala and the district of Riga and, according to Latvian legislation, each of them represents a separate administrative territorial unit. In addition, there are 7 towns in the region: Baldone, Baloži, Olaine, Salaspils, Saulkrasti, Sigulda and Vangaži.



The towers and steeples of Rīga.



## UNESCO cultural treasure

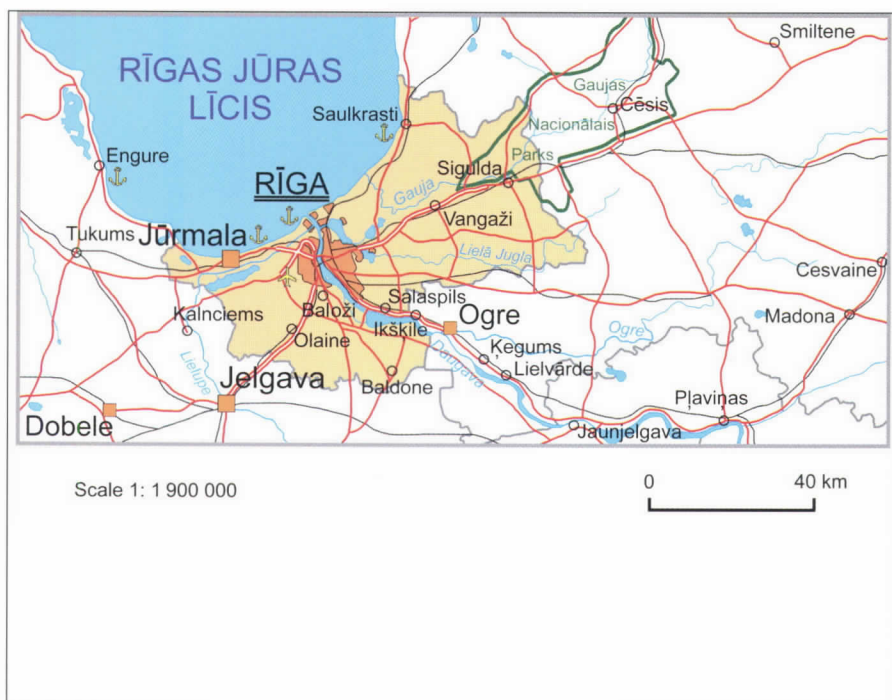
As an ancient merchant town and a member of the Hanseatic League, Riga can boast a unique cultural and historic heritage. The medieval town and the Jugendstil building complex are included in the UNESCO World List of Cultural Heritage, while the architecture of the wooden buildings in the city of Jūrmala is similarly striking. Tourists are also attracted to the region of Riga by its beautiful scenery.

The most educated and professional segment of Latvia's labour force is concentrated in Riga. From ancient times Riga was characterised by its international community and business environment. Riga region also enjoys most of the new

construction work and upgrading of the social infrastructure.

There is easy access from here to the rest of Latvia, to the other Baltic States and to the resource and consumer markets of Russia, other CIS countries and to Western European partners and investors. Ferry traffic provides links with Sweden and Germany. The network of roads and railway lines is evenly spread throughout the region and the motorway Via Baltica is an example of this. Latvia's main airport, serving the whole country, is also located here.

Nevertheless, the dominance of Riga City poses a threat to the environment and causes increasing transport problems. Riga is much larger than any other city in the region or the whole country. Jūrmala,



**Which regions are similar to Riga?**

**Area:**  
3 466 km<sup>2</sup>

- Drama (EL)
- Essex CC (UK)
- Yambol (BG)

**Age structure:**  
30% under 25

- Steiermark (A)
- Ionía Nisia (EL)
- Zasavska (SI)

**Employment structure:**  
68% services

- Antwerpen (B)
- Västsverige (S)
- Obalno-kraška (SI)

Ocean, associated with extensive cyclonic air flows, play an important role in Riga's climate. This activity explains the frequency of days with precipitation and without sunshine. Summers are comparatively cool. The period of frost usually begins in mid-December and lasts till the end of February. There are around 140 frost-free days in the easternmost part of Riga region and up to 170 days in the coastal area of the Gulf of Riga. The microclimate in the city of Riga is warmer than in its outskirts. In winter, this difference may reach even 8-10 C and more. The mean air temperature is 3-7 C in winter and around 17 C in summer; the average annual precipitation is 600-800 mm.

Riga region alone accounts for approximately half of the country's total consumption of electricity. The only power resource in the region is a hydroelectric power station on the Daugava river. The Riga HPS produces a quarter of the total electricity generated in the country. The Inčukalns underground gas storage facility is a natural formation with an active capacity of 2.2 billion cubic metres.

On the whole the region is well provided with the necessary raw materials for local building as well as with peat resources, mineral water resources and medicinal mud.

The region is rich in surface water resources, with in total 75.4 km<sup>2</sup> of lakes, including Lake Babīte, the largest in the region. The lower reaches of the Daugava, Lielupe and Gauja are also in the territory of Riga region. Part of the forests is used for recreation and protection against the possible expansion of sand dunes toward the populated area.

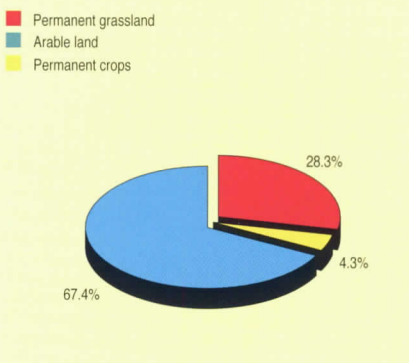
Forests cover 44% of the territory of Riga

**Agriculture 1998**

Number of holdings*	61 260
Persons working in agriculture	16 000
Total agricultural area (ha)	80 152
Total livestock	53 200
Cattle per 100 ha of total agricultural land	27.9
Pigs per 100 ha of total agricultural land	37.2
Share of crop products in total agricultural output %	:
Main crops (1 000 tonnes)	
Cereals	32.7
Sugar beet	34.3
Potatoes	65.5

\* See explanatory notes

**Agricultural land use in 1998 (%)**



**Impact of nearby Baltic Sea**

The total area of Riga region covers 3 466 km<sup>2</sup>. It is situated on the sandy plains of the Coastal Lowlands with vast areas of bogs and marshland, ancient dunes now overgrown with pines, coastal lakes and moraine hillocks. The relief is for the most part flat and low although its unevenness is due to the ancient seacoast and riverbeds. There are numerous shallow overgrown lakes in the vicinity of Riga which were originally part of the Baltic Sea. Ice-Age sediments cover sandstone, dolomite and limestone rocks that crop up at some places in the valleys of the rivers. In contrast, now and then the poor drainage causes an abundance of wetland.

Temperate air masses from the Atlantic

the second largest city in the region is nearly 14 times smaller than Riga. As Latvia's oldest industrial centre, this causes problems with outdated machinery and physically obsolete infrastructure. The housing stock is worn out and there is a growing need for dwellings, especially in the vicinity of Riga.





region followed by agricultural land (24%) and civil and engineering buildings (19%). Water covers 7%, swamps 3% and roads 2%.

### More than one third of Latvia's population

Currently the population in the region of Riga stands at 1 million (41% of the total population of the country). Since the beginning of the 1990s, this number has decreased by 124 000, or 10%. One third of the country's population live in the city of Riga.

Latvia in general and the region of Riga in particular are characterised by an ageing population. 24% of the region's population are of retirement age, 60% are of working age and only 16% are under working age. The working age for men (as of 1 January 1998) is 15-59 years, for women 15-55 years. The disproportion in age has been widening over the last decade since the number of 65 year olds and older has increased by 18% whereas the number of young people under 25 years decreased by 20%.

From a post-war peak in 1987, the birth rate is now 70% lower, the most dramatic fall compared to any other Latvian region. Only 6 500 babies (6.4 per 1 000 resident persons) were born in 1998. In recent years, infant mortality has been declining both in the country as a whole and in the region of Riga. The highest infant mortality was recorded in 1995 when the infant mortality rate was 19.8 (per 1 000 new-borns) but in 1997 the same indicator was 14.7, or 26% lower than in 1995.

In the beginning of 1998, the percentage of Latvians in the region was scarcely 43%. Russians make up 44%, followed by Belorussians (4%), Ukrainians (4%) and Poles (2%). Ethnic Latvians represent only 39% of the total population of Riga city. Because of emigration of a number of Latvia's ethnic minorities, Poles, Jews, and Germans, they make up a declining proportion of the city's population.

After the 2nd World War there was a large-scale immigration to Latvia from the former USSR republics, especially to Riga city and the region of Riga. After the re-establishment of independent statehood in Latvia, the migratory flows reversed dramatically with emigration exceeding immigration. Between 1990 and 1997, net migration was almost minus 75 thousand (54.5% of total net migration in Latvia).

The region's population is decreasing due to a higher death rate than birth rate and to

migratory factors. In the past 7 years the number of deaths has exceeded the number of births by 35%, with migration representing a 65% change. Calculations of the average life expectancy are made every year both for the country as a whole and separately for the urban and rural population. In 1997, life expectancy in the city of Riga was 65.5 years for men and 76.5 for women.

### Focus of trade and industry

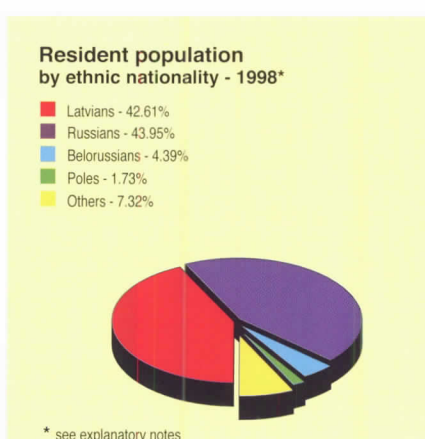
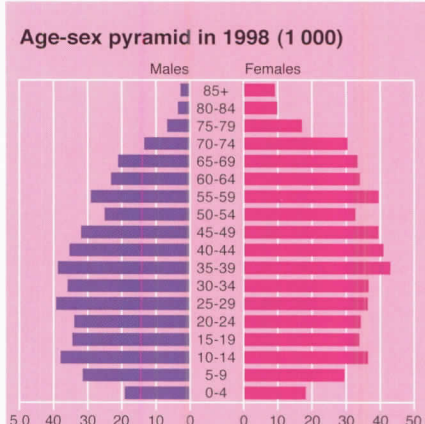
A number of factors have led to the stabilisation of the economic situation in Riga region. Among these are the strengthening of the macroeconomic situation, the promotion of the privatisation process, improvements in the investment climate during 1995-1997 and a satisfactory infrastructure. The region's contribution to the total value added of the country in 1996 was 54%, while per capita GDP exceeded the country's average by one third.

This is the largest industrial centre in Latvia both by the volume of production output and the number of employees. In 1998, the region accounted for 60.7% of the gross industrial output and 42.5% of the total employees of Latvia.

The most up-to-date technology has been introduced in the telecommunications sector (digital systems and mobile communication), in the manufacture of packing materials (corrugated cardboard) and in the production of beer.

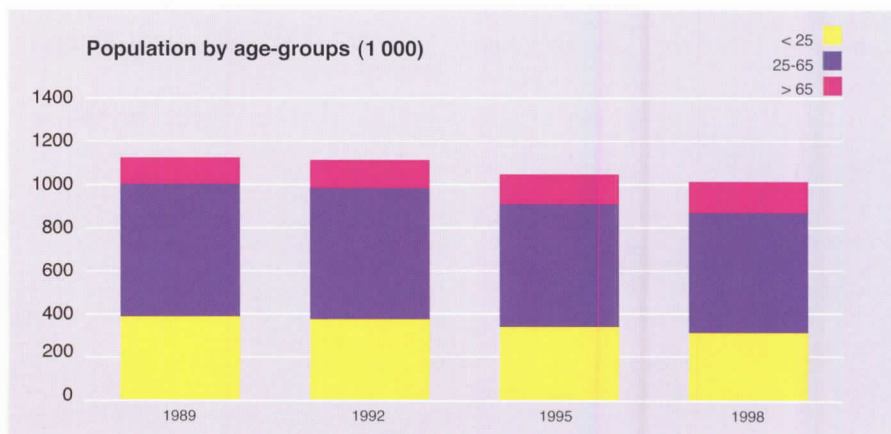
64 000, or two-thirds, of all Latvian enterprises are registered in the region of Riga, with the majority located in Riga city. There are 63 enterprises per 1 000 population registered in the region, which is 1.5 times higher than the average in Latvia.

While the food industry is the main industry here, the manufacture of textiles and clothing, publishing, energy production and the chemical and pharmaceutical



Population (01 01 90)	1124.7
Births	74.6
Deaths	114.4
Migration	-74.8
Population (01 01 98)	1010.2

\* see explanatory notes



industry also play an important role. Of the new industries, the assembly and production of computers have witnessed the most rapid development.

Agricultural production in the region of Riga differs essentially from farming in the other regions of the country. This can be explained first by the proximity to the capital Riga and the area of agricultural land, which constitutes only 3.4% of the total agricultural land of the country. Although various kinds of farming are developed in the region, the emphasis is laid on those industries which do not need vast land resources and are not directly dependent on the quality of the soil that varies strongly across the region. Farming products such as vegetables and flowers of all varieties, grown both in the open and under cover, can be marketed easily, therefore production is to a great extent concentrated around the major cities with better market possibilities.

In 1998, market service turnover in the region of Riga was about 80% of the total turnover in the country. The full spectrum of services is well-developed and recent years have seen a steady progress in such kinds of services as real estate, communication, banking, legal and advertising services.

The region of Riga offers the best developed infrastructure and a wide supply of products for the tourist industry. Of the total number of tourists arriving in Latvia, 90% visit the region of Riga. Jūrmala is also a popular tourist destination.

Due to liberal legislation and a strict monetary policy implemented throughout Latvia, the region of Riga has become an attractive place for foreign investment. Direct foreign investment increased between 1996 and 1997 and the majority of all registered limited liability companies with foreign capital participation are situated in Riga. In 1998, 58% of the total foreign investment capital was placed here. Inward investment in trade, transport, real estate, and manufacturing has come from Scandinavia, Germany, the UK, and Russia.

The region of Riga is quickly becoming one of the most important venues for international trade exhibitions in the Baltic, with various types of exhibitions being held in the International Exhibition Centre of Riga Technical University, in the Olympic SKONTO Hall and other venues. The number of visitors per year already exceeds one quarter of million and is still growing.

### Higher than average earnings

There has been little change to the historically established situation whereby enterprises are concentrated in Riga, the country's capital. The fact that these are primarily industrial enterprises paying comparatively better wages has a major influence on indicators in the field of labour remuneration.

Over the past years, wages in the construction industry and in the market services sector have gone up 5 times, whilst in non-market services, industry, agriculture and fishing they have increased by as much as 7 times

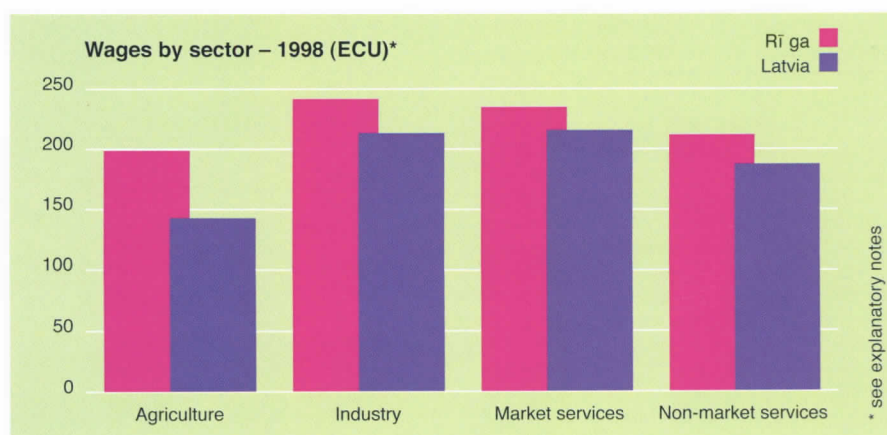
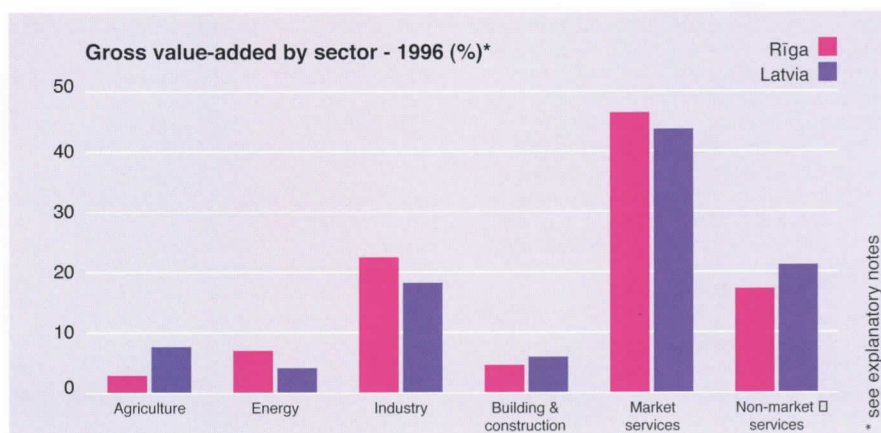
It is also worth mentioning that for almost all kinds of activity the salaries are above the national average. In the construction industry the average wage is 7% higher in Riga region than in the country as a whole, while it is 39% higher in agriculture and fishing. The average wage is nearly always the highest among the regions, with the main exception being enterprises providing market services, which are marginally higher in Kurzeme.

Comparing the distribution of employees by wage at the end of 1998 in the whole

### Main enterprises

Name	Activity
Latvijas Dzelzceļš	Rail transport
Latvijas Pasts	National postal services
Latvenergo	Electricity production
Lattelekom	Telecommunications
Tramvaju un Trolejbusu pārvalde	Transport company
Latvijas Gāze	Energy supplier
Latvijas Finieris	Wood products manufacturer
P.Stradiņa klīniskā universitātes slimnīca	Hospital
Rīgas Siltums	Energy supplier
Zepter International Baltic	Distributive trade company

country with the region of Riga, it becomes obvious that the region of Riga has a larger proportion of employees in the top remuneration groups. Thus, for example, there were fewer employees (46%) receiving a poor wage than in the country (52%) whereas the percentage of employees who receive a comparatively good wage was 8% (6% in the country as a whole).





## Domination of market services

With Riga region attracting most business activity, it is not surprising that the region employs a significant number of people, (slightly over 40% of the total employment in the country). Roughly half of the region's population is employed (over the past three years only insignificant fluctuations have been observed in this indicator) but at the same time the employment rate by gender differs (around 60% for men and more than 40% for women). The situation has not changed much over the last three years.

The assessment of employment structure in the region shows that more than 40% of the employed persons are employed in industries providing non-market services, every fifth employee works in an industrial enterprise but every fourth is related to providing market services.

A typical characteristic of the Riga region is that the historically established concentration of the enterprises of selected industries and employees in Riga has remained unchanged to this day. Thus, of Latvia's total employment by sector, 60% of the employees in the sector of market services, slightly more than half of the employed in construction and nearly half of the individuals employed in industrial enterprises work in the region of Riga.

There is a slight excess of men in the total number of employed persons and only in the industries providing market services are the majority of employees women.

The situation in the labour market is affected by the proximity of the capital Riga, providing better employment opportunities. Every day the inhabitants of the nearby towns commute to work in the city of Riga.

Labour Force Survey-based information on the rate of job seekers proves that since 1995 this indicator has been slightly above the average indicator in the country at the end of the year. One of the reasons might be the fact that the inhabitants of the rural areas of the region have comparatively fewer possibilities to be gainfully employed on family farms. The percentage of unemployed women is one of the highest in Latvia. Nevertheless, the number of unemployed women has dropped by one quarter over the past three years. Due to better job opportunities for young people in Riga, the share of young people among the unemployed is the lowest in the country. The number of long-term job seekers is also comparatively low.

The registered unemployment rate is lower than the Latvian average.

## Largest airport in the Baltic States

There is a sharp contrast between Riga region and other regions of the country in respect of the comparatively high population density, concentration of industrial enterprises, education and cultural establishments and the ensuing everyday mobility of the population within the borders of the region. The majority of foreign travellers also begin and finish their trip in Riga. For that reason, the situation regarding transport in the region has some specific features.

For more than 7 centuries the sea has been the main source of Riga's wealth and the port served as a gateway to the whole world. Even today one of the biggest Latvian ports is in Riga where transit cargo from Russia are reloaded. The main export cargoes are metals, wood and chemical goods.

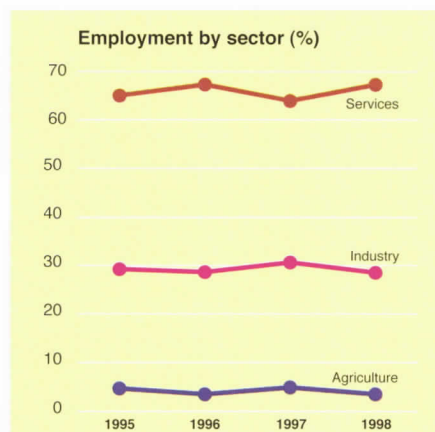
The passenger port of Riga has been growing intensely in recent years, and construction should soon begin on a new terminal capable of handling up to 2 000 passengers per hour. Lielupe, one of the minor Latvian ports, is situated at the mouth of the Lielupe River.

The international airport "Rīga" accounts for 99% of the passenger and freight transportation by air in Latvia. Since 1994,



the number of passengers has been steadily rising with direct flights to 21 cities in 15 countries. "Riga" airport is the largest in the Baltic countries. International agreements to open up Latvian air space should see substantial increases in passenger flows in the years to come.

The region of Riga is the only region in Latvia where acute problems in transport congestion persist, causing environment-related problems. 40% of all traffic accidents registered in the country are accounted for by the city of Riga. Approximately 40% of the country's population live in the region of Riga and more than 40% of the passenger cars are also registered in the region. The comparatively high intensity of public transport should also be taken into account: roughly half of the total passenger transportation by bus is carried out in Riga. Furthermore, there is also tram and trolley bus traffic in Riga and a large number of people working in Riga use railway transport. Approximately 80% of the railway lines in the region of Riga are electrified.



	15-24 years	25-54 years	≥ 55 years
Men	12	75	13
Women	10	78	12
Total	11	76	13

## Action to preserve the environment

The rich variety of nature in the region of Riga - wetlands, coastal areas, large tracts of forest and beautiful lakes - alternate with extensively developed areas. To avoid the pollution and impoverishment of the landscape, a protected nature reserve has been set up covering an area of 115 km<sup>2</sup>. In addition to the Ķemeri nature reserve, part of the Gauja National Park, 16 restricted areas, 13 parks and manmade forests, 24 sites of geological and geomorphologic interest are located in the region.

Urbanisation and industry have created environmental problems such as water and air pollution. Currently the waste-water treatment facilities in Riga have partly solved the problem of water quality. The quality of water in the Gulf of Riga has improved in recent years. Evidence of this is the "Blue Flag" water-purity certificate awarded in July 1999 to Majori, a part of Jūrmala city, indicating international testing had taken place and water purity was acceptable for public bathing.

The main cause of air pollution is the rapidly rising number of motor vehicles. The international motorway Via Baltica, which should be expanded in the future, crosses the region but nevertheless it should not cause much harm to the environment. Measures are also in place in Jūrmala, one of the most picturesque and popular tourism spots, to minimise the harmful environmental effects caused by transport.

The region of Riga has to solve the problem of waste disposal. Currently there are 64 garbage dumps with a total area of 172.2 ha.

A shift has been made in the city of Riga to digitise automatic telephone exchanges; while at the same time the analogue network was also modernised. There are 2 international digital exchanges in Riga, which provide international telephone connections to the entire country.

### Surfaced public roads - 1997

	Rīga	Latvia
Length in km per km <sup>2</sup>	0.31	0.29
Length in km per 1 000 population	1.1	7.6
Length in km per 1 000 private passenger cars	6.4	47.3
% private passenger cars in total number of vehicles	69	66
Number of accidental deaths per 1000 private passenger cars	1.1	1.3

### Environment - 1997

	Rīga	Latvia
Dwellings connected to public water supply (%)	98.0	93.0
Dwellings connected to public sewerage (%)	96.0	91.0
Sewerage subject to treatment (%)	79.2	69.6
Per capita consumption of water (m <sup>3</sup> )	139.1	119.6

### Number of pupils - 1998

	Total	Female %
Pre-school	26 690	47
Primary	49 235	48
Lower secondary	61 346	48
Higher secondary (vocational/general)	42 773	53
Tertiary (higher education)	64 480	60
Total	244 524	52

### Health care - 1998

	Rīga	Latvia
Number of hospitals	45	150
Number of doctors per 10 000 population	48.2	32.6
Number of hospital beds per 10 000 population	110.1	95.0

### Telephone services

	1995		1998	
	Rīga	Latvia	Rīga	Latvia
Lines per 1 000 population	343	284	369	302
% connected to digital network	25.6	13.4	54.8	37.1

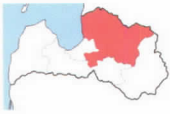
## Centre for R&D

Riga region is the most important educational and scientific research centre in Latvia. In 1998, there was a total of 245 000 children enrolled in education establishments. In the last few years, the number of students in higher education institutions has increased markedly. In 1998, 64 000 students, or 79% of the total number of students in the country, studied at the 27 higher education institutions of Riga region (33 in total in Latvia). 80% of the total research personnel work in the higher education and research institutions of Riga. The main centres of scientific research are the University of Latvia, the Technical University of Riga, the Institute of Organic Synthesis.

Riga is the major cultural centre of Latvia. One of the most beautiful events regularly organised in Riga is the Song and Dance Festival, which attracts around 30 000 participants and 200 000 spectators. The largest religious edifice in the Baltic countries is the Archbishop's cathedral, the Dome Church. Furthermore, the National Opera, 5 professional theatres, 9 cinemas, 63 libraries and 29 museums are to be found in the city. 6 TV and 9 radio broadcasting stations operate in the region of Riga and 141 newspapers are published.

In 1998, the most frequently visited museums in Riga were the Ethnographic Open Air Museum and the Nature Museum. The works of many prominent Latvian artists are displayed in the National Museum of Arts and in the numerous art galleries of Riga.

Throughout history, Riga and its region has been in the leading position regarding the resources and accessibility of health care facilities owing to the fact that Riga provides health care on all three levels - primary, secondary and tertiary. Highly qualified establishments (the P. Stradiņš Clinical Hospital of the Latvian Medical Academy, the Children's Hospital, the 7th Clinical Hospital and others) are situated in Riga. These facilities also provide health services to the inhabitants of other regions. The number of private health care institutions, especially those of private general practitioners and dentists, has increased in recent years.



## Vidzeme region

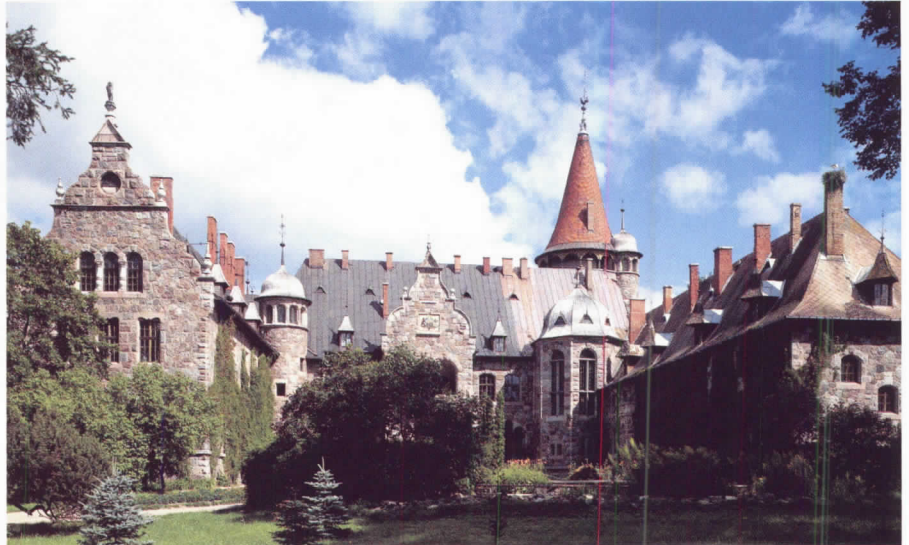
### Strategically important location

The Mesolithic and Neolithic settlements of ancient hunters and fishermen discovered in the region of Vidzeme date back to between the 5th and 2nd millenniums BC. In the early period of feudalism two different ethnic groups, the Latgallians of Baltic origin and the Livs descending from the Western Finns, inhabited this region. The first major settlements were established simultaneously with the building of Latvian wooden castles in the 10th century.

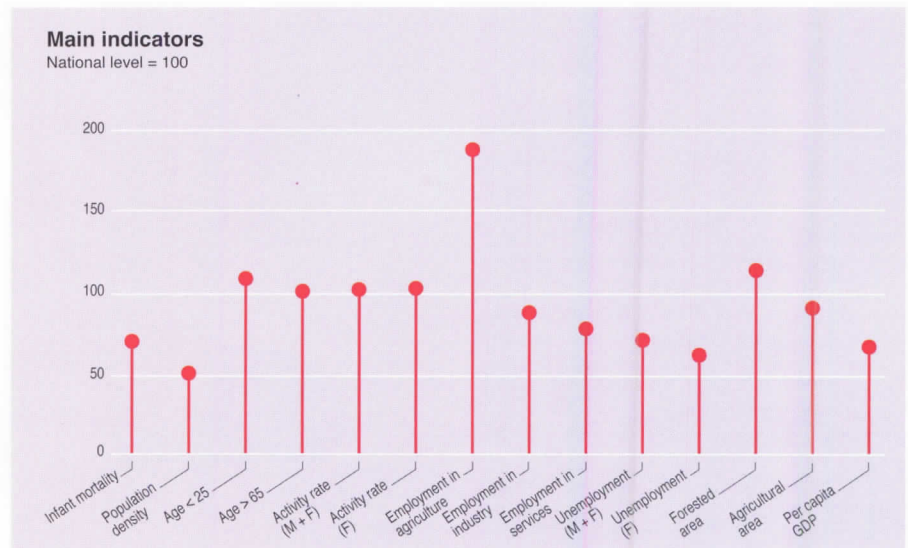
Following the introduction of Christianity, more permanent materials began to be used at the beginning of the 13th century with the construction of stone castles by the Germanic knights. During the period of late feudalism craftsmanship developed in these castles. In the 17th and 18th centuries, the whole territory of present-day Latvia, was drawn into the Northern War as a result of which Latvia was incorporated into the Russian Empire. Vidzeme and the southern part of Estonia formed one province and during this period stable economic and cultural ties were established between Estonians and Latvians. Fishing and shipbuilding were developed along the Vidzeme seacoast, leading to the founding of the first nautical school in Ainaži in 1864. After the First World War, when Latvia became an independent state, Vidzeme as an ancient Latvian cultural and historical region came under the jurisdiction of the state.

Vidzeme is situated in the northeastern part of Latvia. It borders Estonia to the North and the Russian Federation to the East. The western part of Vidzeme lies on the sea, running along the coast of the Gulf of Riga on the Baltic Sea. The south-western part of the region is more closely connected to the state capital Riga than to any other town in the region. With regard to North- and Central European markets, the region is strategically located and intersected by the internationally important transport corridor, the Via Baltica. There is also a dense network of local roads. There are 2 minor ports in operation and 1 historical port with a potential for growth. The Riga International Airport serves the region of Vidzeme.

The majority of the population speaks Latvian but Russian is also spoken in some of the region's towns. The Livian language is spoken in the coastal area around the Gulf of Riga.



*Cesvaine Palace. Built in the 19th century, this remarkable example of eclecticism is a national monument*



There are 8 administrative districts in the region of Vidzeme: the districts of Alūksne, Cēsis, Gulbene, Limbaži, Madona, Ogre, Valka and Valmiera.

### Entrepreneurs in cross-border trade

Vidzeme's principal shortcoming is its lack of large cities as the closeness of Riga city has hampered the development of a regional centre. Valmiera, the most industrialised town in the region, has the potential to become a regional centre in the future.

Inhabitants of the town and district of Ogre as well as those in the southern part of the

Limbaži district take advantage of Riga's proximity as these territories are within commuting distance and the population work in Riga and avail themselves of its market services.

Within Vidzeme, local government has traditionally worked with entrepreneurs and involved them in cross-border co-operation with Estonia and Russia. Historically, Valka (in Latvia) and Valga (in Estonia) is one town whose prosperity depends largely on the amount of control exercised at the border.

Towns that have historically been strong economically also provide services and employment to the inhabitants of the region's surrounding rural areas. Further development of these small towns will



Scale 1: 1 900 000



**Agriculture 1998**

Number of holdings*	83 070
Persons working in agriculture	53 800
Total agricultural area (ha)	687 717
Total livestock	214 000
Cattle per 100 ha of total agricultural land	18.4
Pigs per 100 ha of total agricultural land	11.4
Share of crop products in total agricultural output %	:
Main crops (1 000 tonnes)	
Cereals	160.6
Sugar beet	0.1
Potatoes	186.4

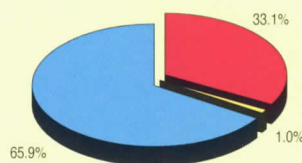
\* See explanatory notes

diversify the employment opportunities of the rural population.

The region has the advantage of having an economically active, adaptable and well-educated population. The relatively higher levels of education, and the cultural and historical traditions of the population, have created a situation where, even without big development centres, the unemployment

**Agricultural land use in 1998 (%)**

- Permanent grassland
- Arable land
- Permanent crops



rate is below average. The vast forest resources of the region may also be looked upon as a potential growth area. However, the lack of roads running in an east-west direction and along the state border hinders access between certain parts of the region.

**Extensive forests in Latvia's largest region**

Vidzeme is Latvia's largest region covering an area of 19 800 km<sup>2</sup>, or 30.6% of its total territory. Narrow coastal lowlands stretch along the coast of the Gulf of Riga, the seashore varying from sandy beaches and steep sandstone banks to coastal meadows near the border with Estonia. The rest of the territory is an elevated and undulat-

**Which regions are similar to Vidzeme?**

**Population density:**

- 19 inhabitants per km<sup>2</sup>
- Grevena (EL)
- Gotlands län (S)
- Lääne-Eesti (EE)

**Land use:**

- 51% forest
- Obalno-kraška (SI)
- Steiermark (A)
- Cantabria (E)

**Employment structure:**

- 23% industry
- Eastern Scotland (UK)
- Mellersta Norrland (S)
- Podkarpackie (PL)

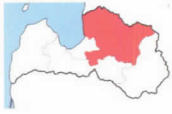
ing plain. Lakes and small bogs abound in the hilly Vidzeme Upland, the highest area in Latvia. The highest mountain, Gaiziņkalns, (312 m above sea level) is situated nearby. The Alūksne Upland is in the north-eastern corner and, while not large, it has a varied relief and many lakes.

The region is situated within the drainage basins of three rivers. The Daugava and its tributary, the Ogre, drain the southern part of the region whilst the basin of the Gauja occupies the central part. The basin of the Salaca, one of the purest and unpolluted Latvian rivers and the fourth biggest salmon spawning area in the Baltic, is situated in the northern part of Vidzeme. There are also many lakes in the region.

Vidzeme, especially in the uplands, is characterised by early frosts in autumn, comparatively longer winters, a late thaw in spring and large amounts of precipitation. The hilly relief causes considerable local climatic variation.

The Kegums HPS, one of the three hydroelectric power stations on the Daugava River, is situated in the region. Peat and firewood are important local energy resources. Furthermore, a stock of explored deposits and construction materials (clay, quartz sand, peat, gravel, sapropel, dolomite and curative mud) is found here.

More than one third of the forest resources of the country are located in Vidzeme, with wooded areas occupying nearly half of the region's territory. Although the varying growing conditions mean that almost all kinds of forests typical to Latvia are represented here, pine and spruce forests are the most extensive. Some 27.4% of the country's agricultural land is in Vidzeme and agricultural land constitutes 35% of



the total territory of the region, while bogs cover 5% and surface waters 3%.

Apart from 8 towns which are administrative centres, the following small towns can be found in Vidzeme: Ape, Līgatne, Ainaži, Aloja, Salacgrīva, Staicele, Lubāna, Varakļāni, Ikšķile, Ķegums, Lielvārde, Seda, Smiltene, Strenči, Mazsalaca and Rūjiena. No other region has such a large number of towns.

### Low infant mortality rate in ageing population

In 1999, the population of Vidzeme stood at 366 000; of this number 172 000, or 47%, are men, and the remaining 194 000 are women. Since the beginning of the 1990s, the total number of people in this region has fallen by 15 000 or 4%. Currently 15% of Latvia's population live in this region.

As in the rest of Latvia, Vidzeme region is characterised by a rather ageing population structure. 23% of the region's population are of retirement age, 55% are of working age and 22% are below working age.

During the last decade, the number of people aged 65 years and older has increased by 8% whereas the number of young people (under 24 years) has decreased by 8%. At the same time, the birth rate in the region has halved since 1990. In 1997, 3200 babies were born in the region, representing 8.8 births per 1 000 population, which is a slightly higher birth rate than in the country as a whole (7.6).

The region of Vidzeme has the highest proportion of people of Latvian nationality. At the beginning of 1998, 82% of the region's population were Latvians. The proportion of Russians was 13%, and other minorities included Belorussians, Ukrainians and Poles.

In line with other Latvian regions, Vidzeme experienced large-scale immigration from other former USSR countries after the 2nd World War. However, the re-establishment of independent statehood in Latvia saw a dramatic reversal as emigration exceeded immigration. In terms of migratory processes, Vidzeme was the least-affected of Latvia's region. Between 1990 and 1997, net migration in Vidzeme region reached minus 9 000 persons, or just over 6% of the total net migration in the country as a whole during this period.

The population of the region is decreasing both due to natural causes and migration. In the demographic account, the contribu-

tion from natural causes in the population decrease (number of deaths over births) in the last 7 years was 40% and that from migration 60%.

In recent years, infant mortality has been declining both in the country as a whole and in Vidzeme region. The highest infant mortality was recorded in 1995 when the infant mortality rate was 18.2 (per 1 000 new-borns). In 1997 this indicator was 10.6, down by 40% compared with 1995, and the lowest rate in Latvia.

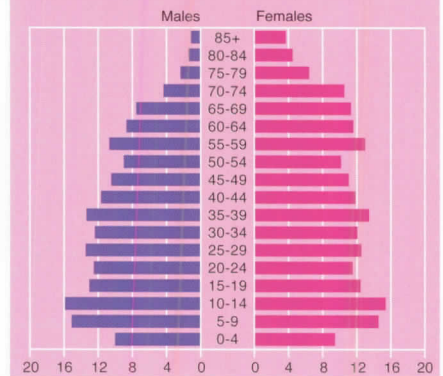
### Region's economy affected by nearby Rīga

At the end of 1998, 9 800 enterprises were registered in the region of Vidzeme representing 10% of the total number of enterprises registered in Latvia or 27 enterprises per 1 000 population; this is one third less than the average for the country. The contribution of Vidzeme region to the total value added in the country was only 10%, which is the lowest regional figure. To a certain extent, this can be explained by the closeness to the capital city as many inhabitants of the region find jobs in and around Riga.

Concerning the share of Vidzeme in the country's total value added, agriculture account for slightly less than 20%, mining and quarrying, manufacturing and energy slightly more than 20%. In terms of regional value added, manufacturing industries, including energy, account for 31% of the total value added, followed by market services with 29% and non-market services with slightly less than 20%. Construction accounts only for less than 3% of the total value added.

Conditions are favourable for the development of dairy farming. In 1998, the region raised 29.2% of the total number of cows in the country, and 28.1% of the total volume of milk in the country was produced in

Age-sex pyramid in 1998 (1 000)



Resident population by ethnic nationality - 1998\*

- Latvians - 81.89%
- Russians - 12.78%
- Belorussians - 1.78%
- Poles - 0.83%
- Others - 2.73%



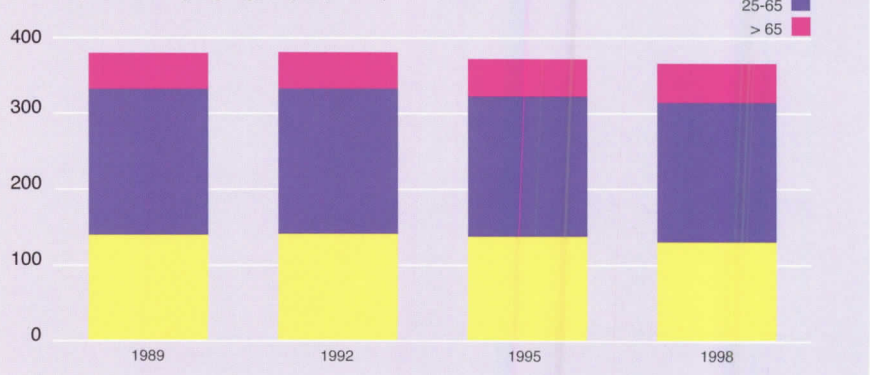
\* see explanatory notes

Demographic account (1 000)\*

Population (01 01 90)	380.4
Births	37.5
Deaths	43.3
Migration	-8.9
<b>Population (01 01 98)</b>	<b>365.7</b>

\* see explanatory notes

Population by age-groups (1 000)



the region of Vidzeme. One third of all Latvian dairy factories are in this region. Vidzeme is famous for its large quantity and variety of cheese produced from high quality milk. Cheese is produced in 10 dairy factories, which in 1998 accounted for half of the amount of cheese made in Latvia. These enterprises produce 19 kinds of cheese including such popular worldwide varieties as Roquefort and Camembert cheese. Great attention is paid to improving the health of animals and the breeding of pedigree beef cattle has just begun. The servicing of farm machinery is highly developed in the region and there are also many thriving wood-processing enterprises.

Despite some natural obstacles to land utilisation such as less fertile soil, soil erosion, a hilly relief and small fields, land resources are nevertheless quite sufficient.

Potatoes are the most important crop in the region of Vidzeme. In 1998, the region accounted for 26.9% of the total potato harvest in the country. The Priekuļi Station of Selection and Experimental Research focusses on the cultivation of high quality potato planting material. "Aloja Starkelsen Ltd", the only enterprise that produces potato starch in compliance with the requirements of the world market, is located in the region of Vidzeme.

There are high quality tourist facilities in the region as well as a tradition of providing tourist services.

### Relatively low wages across most sectors

In 1998, the gross monthly average wage in Vidzeme was 20% lower than in the country as a whole. However, for people employed in construction the average gross monthly wage was higher than the average wage paid in this sector in Latvia as a whole, and in fact it came very close to the average wage rate in the national economy. Furthermore, within the construction industry Vidzeme offered the second highest average salary after Riga region.

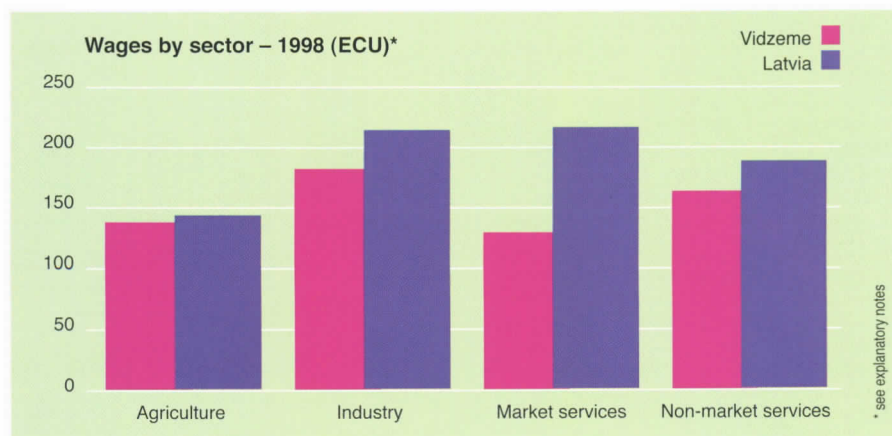
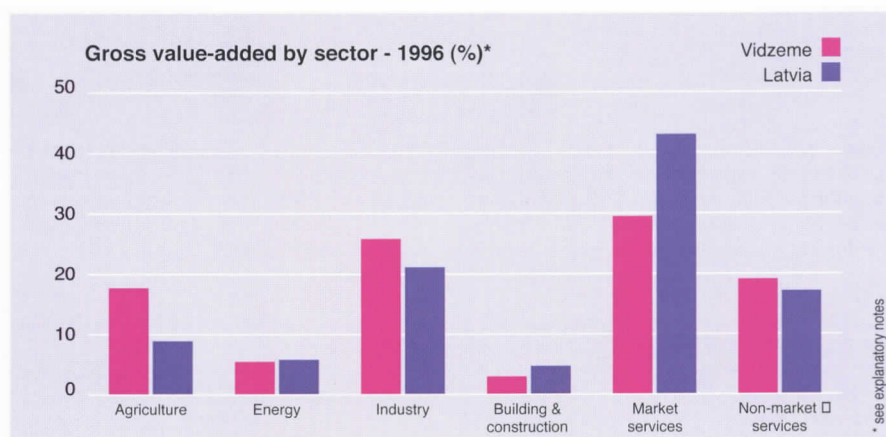
Turning now to those working in manufacturing enterprises, wages are on average 14% lower than those paid to construction workers in Vidzeme. Furthermore, this salary is 15% lower than the country's average in manufacturing enterprises. Labour remuneration in industries providing non-market services was 26% higher than in those providing market services. With regard to wages earned by people employed in agriculture, Vidzeme ranks third in the country.

In the region as a whole, for more than half of the employees (60%) at the end of 1998 the calculated wage for a fully worked month was under 151 ECU and only 1.6% of the employees receive more than 453 ECU per month.

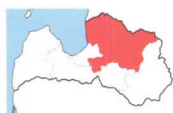
Concerning labour remuneration, the situation in Vidzeme is not homogeneous. In three districts the monthly wage did not reach 151 ECU but in five districts it was only slightly above this amount. The highest level was in the Limbaži district (193 ECU) whereas the lowest wage was calculated for the districts of Alūksne, Gulbene and Madona.

### Main enterprises

Name	Activity
Ogre	Textile weaving
Valmieras stikla šķiedra	Textile weaving
Brīvais vilnis	Fish products manufacturer
Vidzemes ceļi	Sewage company
Valmieras reģiona patērētāju biedrība	Food retailer
Staji	Wood production
CATA	Transport company
Salacgrīva 95	Fish products manufacturer
Valmieras rajona centrālā slimnīca	Hospital
Cēsu rajona centrālā slimnīca	Hospital







## Jobs in agriculture, low unemployment

According to the findings of the Labour Force Survey, the level of economic activity and employment in Vidzeme region has been comparatively high in past years. The employment structure in Vidzeme is influenced by the fact that there is a high percentage of agricultural land in the region. As a result, one third of the total number of employed individuals are involved in agriculture (both crop production and animal husbandry), a percentage which is the highest of all regions and nearly twice the average level in the country. Secure jobs in enterprises processing agricultural products (mainly milk) are thus available for part of the population. With only every fourth employee engaged in providing non-market services and almost every fifth employed in the field of market services, employment in the services sector is one of the lowest in the country.

During the last few years, the registered unemployment rate in the districts of the region has been rather low; the only exception to this is the district of Madona where the rate is higher than the national average.

The LFS demonstrates that Vidzeme has fewer job seekers than any other region. Nevertheless, the decrease in the total number is not as marked as in other regions. On other hand, the decrease both in the number of young job seekers under 25 years of age and women was faster than in other parts of the country. Furthermore, the share of the above-mentioned groups in the total number of unemployed people is the lowest in the country.

Over the last three years, the proportion who have not been able to find a job for a period longer than one year has fallen from two thirds to slightly more than a half. However, a comparatively large part (54%) of unemployed people have been trying to find a job for a long time; out of this number 3 000 persons admitted that this period has been 5 years and longer. Unfortunately, part of the region's population, almost 8 000 persons, had become economically inactive by the end of 1998 since they had become discouraged or, as in the case of more than 1 000 persons, did not know where and how to search for a job. As the majority of these people were women, one of the priorities in the development of the region might be the creation of new jobs specifically aimed at women.

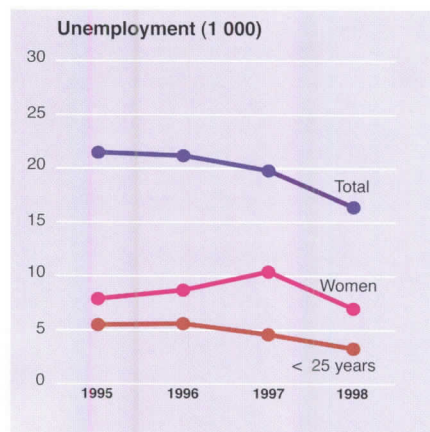
### Good road and rail networks

One of the factors promoting the development of interstate relations is a transport corridor. An international road, the Via Baltica, starts in Tallinn, intersects Estonia and runs along the seacoast in Vidzeme. It

then continues through the region of Riga, crosses Zemgale and runs through Lithuania and Poland to Warsaw. This is the so-called Crete Corridor No. 1, which after the Agreement of the European Countries on International Motorways (AGR) was signed in 1997 was also classed as an E-road (E67). It is also intended to classify as an E-road the second main road running from Pskov to Riga, which crosses Vidzeme and continues through Lithuania, Poland and Hungary to Budapest (E77). There is a good network of local and regional roads in the region of Vidzeme although their quality is not always satisfactory.

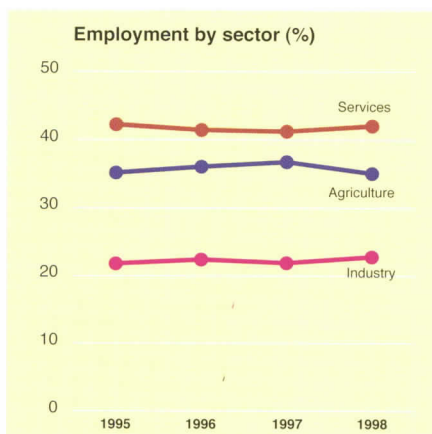
There is an extensive railway network in Vidzeme but it carries less freight than the railways in Kurzeme and Zemgale which lead to the major ports. As elsewhere in Latvia, it is more advantageous to use buses for passenger transportation. Due to the unsatisfactory quality of the rails in certain sections, passenger transportation on several routes has been closed, causing a reorganising of bus routes. The only narrow-gauge railway line in the country runs through the region connecting Gulbene with Alūksne. Although passenger transportation is not economically profitable it was decided to maintain and use this line in order to retain it for its historical value.

At the beginning of 1999 the number of persons per private car in the region was



the lowest in the country at 5.31 per car as against Latvia's 5.74. It is, therefore, not altogether surprising that Vidzeme region has the second highest number of registered private cars in Latvia.

Several minor operating ports such as Skulte and Salacgrīva are located on the coast of the Gulf of Riga, and there are also plans to develop Ainaži port.



### Employment by age group - 1998 (%)

	15-24 years	25-54 years	≥ 55 years
Men	13	74	14
Women	9	73	19
Total	11	73	16

## Tradition of nature protection

Almost two-thirds of the country's protected nature reserves (6796 km<sup>2</sup>) are in the region of Vidzeme. The majority of Gauja National Park, the oldest of its kind in Latvia, is situated in the region. The Northern Vidzeme Biosphere Reserve covers the three districts of Limbaži, Valmiera and Valka, and occupies the whole basin of the Salaca River. In addition, there is one reserve, 2 nature parks, 69 restricted areas, 3 protected landscape areas, 76 geological and geomorphologic objects, and 56 parks and tree plantations.

For wastewater treatment, 2 chemical, 213 biological and 139 mechanical wastewater treatment stations have been built and are operating in Vidzeme.

The coastal area of Vidzeme, intersected by the Via Baltica development zone, may in the future become an attractive area for tourism and recreation provided that the development of transit transport can be harmonised with other development priorities, including priority for environmental protection. The Vidzeme and Alūksne Uplands may develop into attractive places for tourism and winter sports.

Cēsis was the first town in the country to satisfactorily meet the population's requirements for telephone communications and it was also one of the first towns to install a digital exchange. As well as this, there is the state-wide telephone directory service centre in Cēsis, where all kinds of information may be obtained for Latvia's entire digital network. There is a good network of mobile communications, pager systems, and Internet services in Vidzeme.

### Surfaced public roads – 1997

	Vidzeme	Latvia
Length in km per km <sup>2</sup>	0.29	0.29
Length in km per 1 000 population	15.9	7.6
Length in km per 1 000 private passenger cars	93.8	47.3
% private passenger cars in total number of vehicles	64	66
Number of accidental deaths per 1000 private passenger cars	1.5	1.3

### Environment - 1997

	Vidzeme	Latvia
Dwellings connected to public water supply (%)	83.0	93.0
Dwellings connected to public sewerage (%)	81.0	91.0
Sewerage subject to treatment (%)	48.2	69.6
Per capita consumption of water (m <sup>3</sup> )	127.0	119.6

### Number of pupils - 1998

	Total	Female %
Pre-school	10 990	48
Primary	24 962	48
Lower secondary	27 348	49
Higher secondary (vocational/general)	13 403	52
Tertiary (higher education)	341	71
Total	77 044	49

### Health care - 1998

	Vidzeme	Latvia
Number of hospitals	31	150
Number of doctors per 10 000 population	22.0	32.6
Number of hospital beds per 10 000 population	90.6	95.0

### Telephone services

	1995		1998	
	Vidzeme	Latvia	Vidzeme	Latvia
Lines per 1 000 population	248	284	256	302
% connected to digital network	4.7	13.4	8.5	37.1

## Open air opera

In 1998, enrolment in Vidzeme's educational establishments was 77 000, Latvia's only recorded increase since 1990. In 1996, on the initiative of local government and in collaboration with the Norwegian government and the Lillehammer School of Higher Education, the Vidzeme College of Higher Education was opened in Valmiera, offering courses in business administration, social and political sciences, public administration and tourism. Of the 341 students in 1998, 60% had graduated from local schools. Established to secure intellectual potential for the region and to promote its economic, political and social growth, Vidzeme College should be instrumental in creating new jobs.

Cēsis, one of the most picturesque Latvian towns and for three centuries the residence of the Master of the Livonian Order, was first mentioned as early as 1206. Various annual festivals (open-air performances by the National Opera, the music festival "Imantdienas", a beer festival and the festival of the knights of Cēsis Castle) make Cēsis the region's cultural centre. Its Museum of History and Art is the most popular regional museum (42 000 visitors in 1998). Minhauzen's Museum in the Limbaži district and the Madona Museum of Regional Studies and Art are also popular. Apart from the highest number of libraries in Latvia (249), Vidzeme's cultural attractions include 8 cinemas and a professional theatre company.

Regional mass media is well developed with 6 television stations, 4 radio broadcasting stations and 28 newspapers.

There are 31 hospitals, employing 802 doctors and 1947 medical assistants with professional secondary education. There were 90 hospital beds per 10 000 population in 1998 (94 on average in the country). The number of doctors per 10 000 population was 22.8 (34.8 in the country as a whole).



# Kurzeme region

## Glorious maritime tradition

As early as the 2nd millennium BC, the ancestors of the Balts settled in this territory and by merging with the Baltic Finns and Scandinavian Vikings formed the Livian and Couronian tribes, the ancient residents of Kurzeme.

In the 13th century, German feudal knights invaded Kurzeme and the Bishopric of Kurzeme was subsequently established in the part of the region under the dominion of the Livonian Order. In 1559, this tiny state was sold to Denmark before coming under Polish rule in 1585.

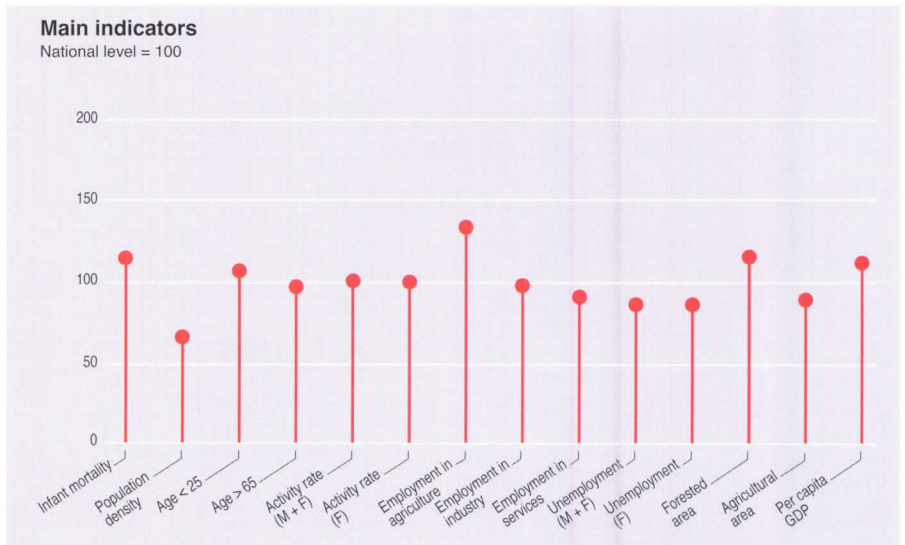
In 1561, the Duchy of Kurzeme was established, covering much of Kurzeme and the lands of the former Livonian Order in Zemgale. The Duchy developed rapidly and even established its own colonies in Africa (Gambia) and in the Caribbean (Trinidad and Tobago). The town of Ventspils traded with a number of countries and its ships regularly sailed to the colonies of the Duchy as well as to the Duchy's possessions in Norway. The Duke of Kurzeme was a vassal of the Polish king and during the Northern War in the 18th century the Duchy was destroyed and ravaged. After the collapse of the Polish State, it was incorporated into Russia as one of its provinces. The territory of Kurzeme suffered severe damage in both the first and second world wars.

Nearly all of Kurzeme region is located in the Kurzeme Peninsula in western Latvia, bordered by the Baltic Sea to the West and by the Gulf of Riga to the East. More than half of Latvia's total coastline lies in Kurzeme region. No part of Kurzeme is more than 100 km from the sea and a strong maritime influence is evident throughout the region. The two big ports of Liepāja and Ventspils guarantee good access to and from foreign countries. The infrastructure for maritime and overland transport is well developed. Transport axes connect Liepāja and Ventspils with the capital city and there is also an extensive network of local roads. The emphasis placed on the two major cities has resulted in the northern coastal area, the frontier region with Lithuania and some central parts of the region becoming somewhat marginalised.

Latvian, and in some places its dialects, predominate strongly in the region. In the larger cities, there are comparatively more Russian speakers than in the region as a whole. The Livian language is spoken in the northern part of the region



The fishing port of Roja



Liepāja, the country's third biggest city by population size, and Ventspils, the sixth, are situated in the region of Kurzeme. The region is divided into the five administrative districts of Talsi, Ventspils, Kuldīga, Saldus and Liepāja.

## Considerable potential despite unbalanced development

The region has benefited through the centuries from its well-established international trading tradition. As early as the 17th century, Ventspils was an economically important port and a centre for shipbuilding and craftsmanship whilst Kuldīga was a centre of industrial production and manufacturing. Today the major cities of the

region also enjoy successful economic cooperation with their trading partners in other countries. The region's coastal location helps to promote the development of the fishing and tourist industries.

The region's extensive areas of forest could provide further potential for economic development in the future in the wood-processing industry, as could the development of wind power along the coast to satisfy future energy demands.

However, there is little homogeneity in the development and the level of restructuring of selected areas within Kurzeme. The region is without a clearly defined centre, although in recent years Liepāja has begun to regain its position in the Latvian economy. Both the largest cities are located on



Scale 1: 1 900 000



**Which regions are similar to Kurzeme?**

**Population:**  
334 000 inhabitants  
Somogy (HU)  
Salzburg und Umgebung (A)  
Yonne (F)

**Population density:**  
25 inhabitants per km<sup>2</sup>  
West (IE)  
Etelä-Karjala (FIN)  
Lõuna-Eesti (EE)

**Land use:**  
34% agriculture  
Noord-Holland (NL)  
Kärnten (A)  
Podravska (SI)

The Coastal Lowlands stretch along the coastal zone of the region while the plains of the Kursa Lowland (the Ugāle Plain, the Venta Valley Plain) are located inland. These plains are virtually flat or gently undulating, with sandy and swampy soils of low fertility, overgrown with forests and rather sparsely populated. There are three uplands in the region intersected by plains and lake and river valleys.

Most of Kurzeme's rivers have flat valleys; the width of the Venta valley reaches 2 km and the primeval valley of its largest tributary, the Abava, is up to 1.5 km wide. The most well known Latvian waterfalls are in Kurzeme – the waterfall on the Venta called Ventas Rumba (at a width of 110m it is the widest waterfall in Europe) and Abavas Rumba. Lakes are concentrated in the Usma area, and Lake Usma itself is the largest in the region (38.9 km<sup>2</sup>). There are several lagoon-type lakes along the seashore that are popular migratory destinations for waterfowl.

In Kurzeme the stock of explored deposits (dolomite, sand, gravel, etc.) is comparatively small. Furthermore, the region has no energy resources of its own so the rising demand for energy is satisfied by using resources imported either from abroad or from other regions.

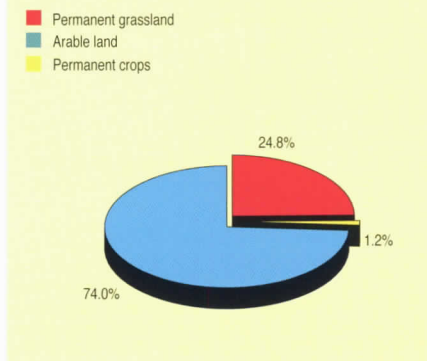
Apart from the larger cities of Liepāja and Ventspils, there are the following towns in the region: the administrative district centres of Kuldīga, Saldus and Talsi and the minor towns of Skrunda, Aizpute, Durbe, Pāvilosta, Priekule, Brocēni, Sable, Stende, Valdemārpils, Kandava and Piltene.

**Agriculture 1998**

Number of holdings*	49 920
Persons working in agriculture	33 800
Total agricultural area (ha)	465 228
Total livestock	238 200
Cattle per 100 ha of total agricultural land	17.5
Pigs per 100 ha of total agricultural land	32.1
Share of crop products in total agricultural output (%)	:
Main crops (1 000 tonnes)	
Cereals	212.7
Sugar beet	12.2
Potatoes	154.3

\* See explanatory notes

**Agricultural land use in 1998 (%)**



Skrunda Early Warning Antimissile Radar Base, of great strategic importance to the Russian military, was blown up. However, the after-effects of the pollution it caused are still felt. For the most part, however, the ecological situation in the region is good.

**Large forests, few minerals**

Kurzeme region covers 13 600 km<sup>2</sup>, or 21% of the country's total area. Forests occupy more than half of the region's territory. The northern part is characterised by pine stands while spruce and birch trees tend to predominate in the South. While just over one third of the region is given over to agricultural cultivation, in relation to the total agricultural area of Latvia this represents less than one fifth.

the western edge of the region, leaving the small towns, rich in ancient cultural and historic heritage, attempting to find their niche in the current economic climate.

There are rather many abandoned ex-Soviet military bases in Kurzeme, which at the moment have no practical utility. It was only in 1995, four years after the re-establishment of independence, that the



## Major migration flows

Currently the population of Kurzeme region stands at 334 000, with the percentage of women (53%) exceeding that of men. This is Latvia's smallest region accounting for 14% of the total population of the country. Since the beginning of the 1990s, the region's population has decreased by 33 000 or 9%. This is the second biggest fall in the population size in the country. One third of the total population of the region live in the region's major cities, Liepāja and Ventspils.

The region of Kurzeme is characterised by a rather ageing population. The percentage of the population aged over 65 years in the region is roughly the same (13.7%) as in the country as a whole (14.3%). 22% of the region's population is of retirement age, 57% are of working age and 21% are below working age. During the last decade, the number of 65-year olds and older has increased by 6% whereas the number of young people (under 25 years) has decreased by 13%.

Since 1990 the birth rate in the region has halved. In 1997, 2 900 babies were born in the region of Kurzeme (8.7 per 1 000 population) and that is more than on average in the country (7.6). Unfortunately, infant mortality is also higher than the average – 17.4 against 15.3 per 1 000 births in Latvia.

At the beginning of 1998, Latvians also dominated the national structure of the population in Kurzeme region (69.7%) followed by Russians (19%), with Ukrainians, Lithuanians and Belorussians also present. The proportion of Gypsies found here is the highest in Latvia. However, in the city of Liepāja the percentage of Latvians living there is, at 45%, less than half the total population.

As elsewhere in Latvia, there was extensive post-war immigration from other former USSR countries, especially to Liepāja, Ventspils and Skrunda, but this was abruptly reversed after the re-establishment of Latvian independence, to the extent that emigration exceeded immigration. In 1990-1997, net migration totalled almost minus 27 000, which was 19% of Latvia's total net migration in that period.

As in other Latvian regions, the population in the region is on a downward trend both due to natural movement and to migration. In the demographic account, natural movement in the population (excess of deaths over births) over the past 7 years has accounted for 18% of the decrease whereas migration, at 82%, had the greater effect.

## Maritime activities key to strong economy

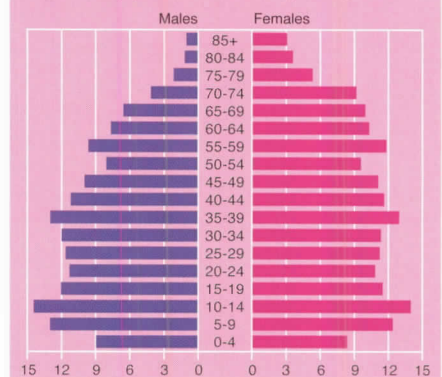
The region's contribution to national gross domestic product in 1996 was 15%. With Kurzeme's economic development directed mainly towards port activities and transportation, the most important sectors in terms of value added are market services (54%) where transport and communication (38% of total GVA in the region), and trade (11%) play the main role as well as manufacturing (15%).

The Liepāja special economic zone and the Ventspils Free Port were established in Kurzeme region with the main objectives of promoting business activities, upgrading the existing infrastructure and creating the necessary environment to attract inward investment and new businesses. In 1998, non-financial investment (i.e. in buildings, machinery, land and software) in Kurzeme was higher than the average indicator in the country, that is, 598 EUR per inhabitant and represented 16.2% of total investment in the country. In terms of foreign investment, Kurzeme occupied 3rd place among the other regions in 1998 and, if Riga region is excluded from the calculation, then just under a half of the rest of the country's foreign investment capital is held here, concentrated mainly in the larger cities of the region.

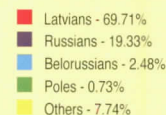
At the end of 1998, 11 000 enterprises, or 11% of the total number of enterprises in Latvia, were registered in the region of Kurzeme, representing 33 enterprises per 1 000. Furthermore, in recent years industrial output has begun to stabilise, and is running at just over 10% of Latvia's total output. JSC "Brocēni" is Latvia's largest manufacturer of construction materials, producing cement and asbestos from local raw materials.

Production for the dairy industry is also well developed, and the region accounts for 70% of the total dried milk production in the country.

Age-sex pyramid in 1998 (1 000)



Resident population by ethnic nationality - 1998\*



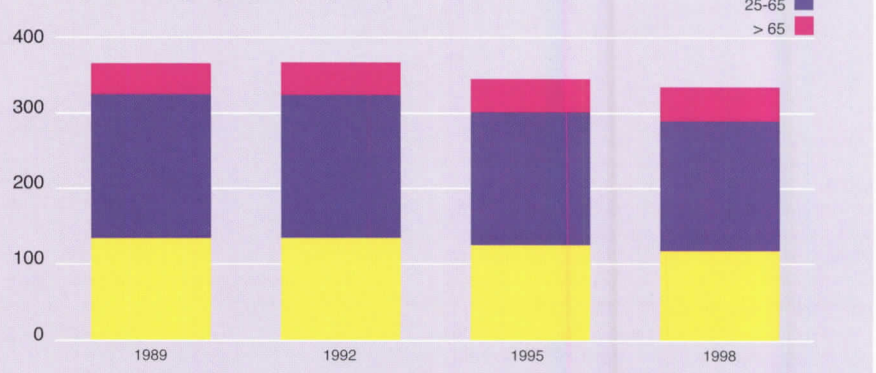
\* see explanatory notes

Demographic account (1 000)\*

Population (01 01 90)	366.7
Births	33.2
Deaths	39.0
Migration	-26.8
Population (01 01 98)	334.0

\* see explanatory notes

Population by age-groups (1 000)



While cultivation takes place on the hillier parts of the region, more fertile soil is found in the valley of the Venta River with its typical floodplain meadows and pastures. Crop farming and livestock breeding, the traditional agricultural industries, are equally well developed in the region. Sabile, a small town in Kurzeme region, is registered in the Guinness Book of World Records as the northernmost spot where vines are grown in the open although the area under cultivation is not economically significant.

One of the main sources of income for the population living in the coastal area is fishing. Apart from the two biggest ports, there are also three other fishing ports of note, namely Pāvilosta, Roja and Mērsrags. Fish processing is also important to the region and almost half of the fresh fish products for food (fish fillet, cooled fish and frozen fish) as well as one fifth of the canned fish of the total output of the country are produced in Kurzeme.

The particular charm of Kurzeme, with its historic and cultural heritage provides a good basis for the development of tourism. The region's small towns such as Kuldīga, Talsi, Sabile and the valleys of the Venta and Abava Rivers offer promising potential for the development of the tourist industry, as do its extensive sea shore including the steep bank at Jūrkalne and the Cape of Kolka in the North. The minor ports could develop into yachting ports in the future.

### High wages for urban workers

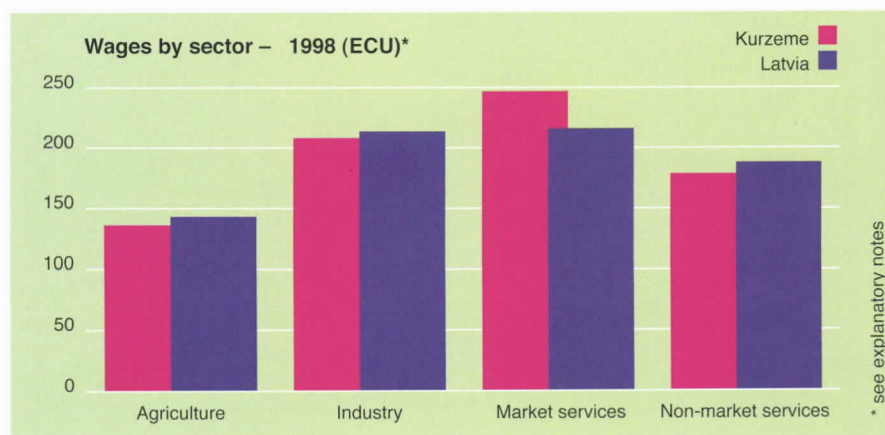
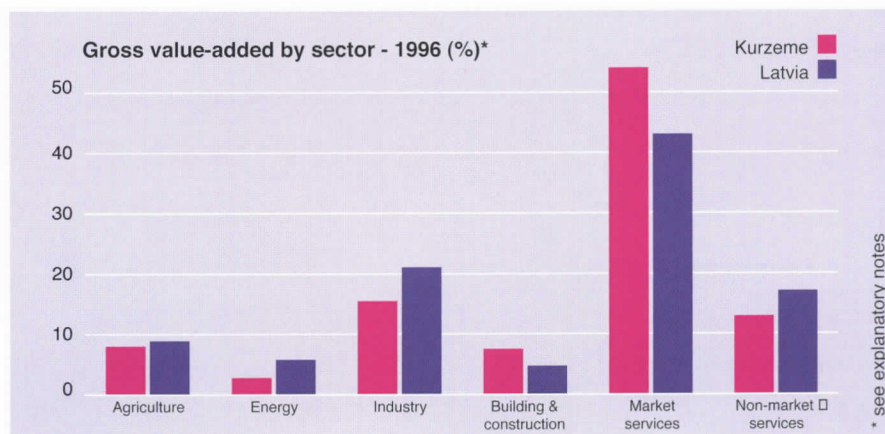
Labour remuneration in Kurzeme is noteworthy for its comparatively high level, which is the second highest in Latvia after Riga region. This can be explained by the region's overall high level of development, the successful operation of enterprises working in the transportation and transit sector and its advantageous geographical position. Because of that, the level of labour remuneration in industries providing market services, especially in the transport industry, is considerably higher than the average indicator of the country. In addition, the growth rates are also amongst the highest in the country, outpacing the overall growth rates countrywide.

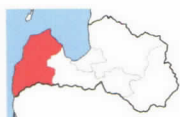
Economic progress, and as a result labour remuneration, are not the same across all the districts of the region. This distinction is particularly marked between the the city of Ventspils as opposed to the district of the same name. Gross wages of employees working in the city exceeded the country's average by 62%, while the wages paid to those working in the district of Ventspils as a whole were less than half of those paid in the city of Ventspils.

#### Main enterprises

Name	Activity
Liepājas metalurģs	Manufacture of iron products
Lauma	Textiles manufacturer
Ventspils tirdzniecības osta	Cargo handling
Ventspils nafta	Cargo handling
Liepājas cukurfabrika	Sugar manufacturer
Ventamonjaks	Cargo handling
Būvtehnika	Construction company
Tosmare	Building and repairing of ships
Vulkāns	Wood production
Ventspils pilsētas slimnīca	Hospital

While approximately the same proportion of employees in the region as in the whole country received wages higher than 453 €, in the town of Ventspils the number of highly remunerated employees was 3 times higher. The best-paid employees here worked primarily in the fishing and transportation sectors.





## Buoyant construction sector

Only slightly more than half of the population of Kurzeme is employed and, as in other regions, the employment rate for men is higher.

Half of all employed individuals work in the services sector and one quarter is employed in agriculture and fishing. It is worth mentioning that the percentage of persons employed in the construction industry is the second highest in the country, and this number tends to be growing faster than in the other regions of Latvia. To a great extent this is linked to the region's favourable location for the development of transit business, and together with earnings from port activities this results in more opportunities for investment activity. At the same time, the number of employees in manufacturing has dropped by one quarter in recent years and their share in the overall employment structure of the region has fallen by 6 percentage points.

The overall level of unemployment in Kurzeme is slightly lower than in the country as a whole. The district of Saldus is noteworthy with its second lowest level of unemployment after the city of Riga. The unemployment levels in the districts of Kuldīga and Tukums are also below the average in the country.

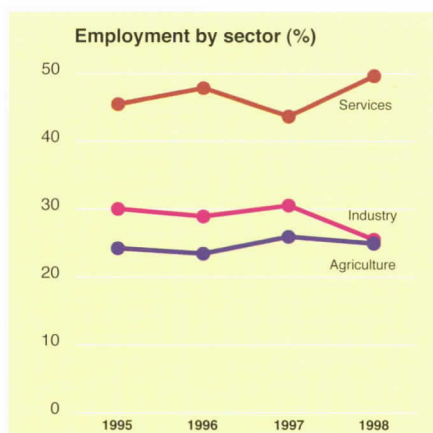
The results of the labour force survey show that in Kurzeme the share of job seekers in the working-age population (11.7% in 1998) is below the national average. In the last 3 years the number of unemployed people has decreased by almost one third. The number of unemployed women has decreased at a faster pace than in other regions. The number of young people seeking a job only slightly exceeds the corresponding national average. Kurzeme is, however, noted for the highest rate of long-term unemployment (unemployed for a period longer than 1 year): in 1998 this rate was 56%.

## Major ice-free ports cater for transit trade

The region of Kurzeme is a peninsula with its western and northeastern coasts washed by the Baltic Sea. This ensures good access to and from foreign countries, in particular through the two big ports of Liepāja and Ventspils which are located in geographically very advantageous places. Furthermore, both ports are ice-free in winter. While Ventspils has for a long time been one of the main exporting ports of crude oil and oil products at the eastern shore of the Baltic Sea, Liepāja was a naval port during the Soviet era. It was only after the re-establishment of national independence in 1991 that it began to grow as a commercial port.

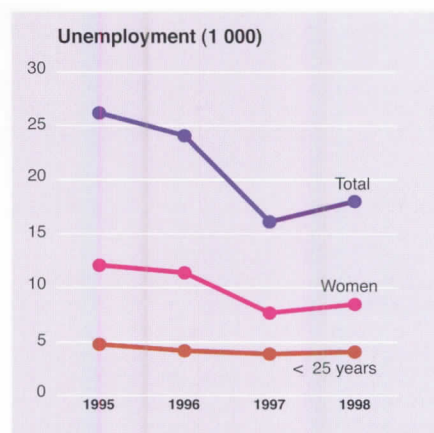
In the 17th century Ventspils was already the leading port in the Duchy of Kurzeme, and at the end of the 19th century a railway line was built in the Russian Tsarist Empire connecting the ports of Ventspils and Liepāja with the railway network of Russia.

With regard to cargo turnover, the Ventspils Free Port is currently the leading port on the Baltic Sea and is included in the list of the 15 most important European ports. The terminals handling crude oil, oil products and liquid chemical products operating in the Ventspils port are the largest in the Baltic Sea region, while the terminal handling potassium salt is the second largest of its kind in the world.



### Employment by age group - 1998 (%)

	15-24 years	25-54 years	≥ 55 years
Men	12	72	16
Women	7	77	16
Total	9	74	16



95% of the cargo handled in the port is transit cargo from Russia, but it is intended in the future to expand the volumes of imported cargo. This is quite feasible since the handling capacity of the port is higher than the current cargo turnover. The canal for sea-going vessels was reconstructed in 1998 to enable the Aframax class vessels with a tonnage of up to 120 000 tonnes to enter the port. The crude oil and oil products pipelines from Russia and Belarus terminate in the port of Ventspils.

The second biggest port in the region is located in Liepāja where for the most part export cargo such as wood and metals is loaded. Ferries from Germany, Denmark and Sweden enter the port of Liepāja several times a week carrying mainly roll-on roll-off cargo.

The country's second biggest airport is situated in Liepāja although it currently services only chartered flights and no regular passenger flights. An airfield is currently being rebuilt in Ventspils.

The railway network in Kurzeme was originally developed to service the needs of the ports, as a result of which the traffic intensity on other railway lines used mainly for passenger transportation (Liepāja-Ventspils, Liepāja-Vaiņode) is not particularly high.

## Environmental clean up and communications renewal

The quality of the environment in the region is on the whole good, except in areas where the impact of pollution left by Soviet troops is still present. The southern part of Kurzeme around Rucava and Nigrande is comparatively more polluted, and in part this is due to cross-border pollution coming from the Mažeikiai Oil Refinery in Lithuania.

The protected nature reserves in Kurzeme cover an area of 946 km<sup>2</sup>; among these there are 3 reserves, 5 nature parks, 42 restricted areas, 40 geological and geomorphologic objects, 63 parks and planted forest-type parks with local and exotic trees. Griņi, Slitere and Moricsala, the oldest nature reserves in Latvia, are famous for their biological diversity.

To ensure the purification of sewage, 3 chemical, 237 biological and 92 mechanical sewage treatment facilities have been installed and are operating in Kurzeme. This has succeeded in cleaning up the region's beaches, as a consequence of which international recognition was gained in the form of the award of the "Blue Flag" to Ventspils and the "Blue Flag" certificate to Liepāja.

There are 98 garbage dumps in the region, covering a total area of 146.6 ha. The largest of these are situated in the district of Liepāja and in the district of Ventspils.

It was decided at the beginning of the 1990s that reforms in the field of telecommunications (such as the introduction of optical cables and digital exchanges) should start from the western part of the country, in the region of Kurzeme. As a result of this, digital exchanges are now up and running in Ventspils and Liepāja. There is also a telephone operators' centre in Liepāja that receives notifications of defects in the telephone network throughout the whole country. A pilot project is currently under way in the region of Kuldīga, whose objective is to shift the whole town and its entire rural territory to the digital network by September 1999. After the completion of this project, the Lattelekom subscribers will be able to use all the services of the digital network including the integrated service digital network and data transmission. Transition to digital exchanges should be completed by the year 2002.

#### Surfaced public roads – 1997

	Kurzeme	Latvia
Length in km per km <sup>2</sup>	0.28	0.29
Length in km per 1 000 population	11.6	7.6
Length in km per 1 000 private passenger cars	67.7	47.3
% private passenger cars in total number of vehicles	68	66
Number of accidental deaths per 1000 private passenger cars	1.3	1.3

#### Environment - 1997

	Kurzeme	Latvia
Dwellings connected to public water supply (%)	89.0	93.0
Dwellings connected to public sewerage (%)	88.0	91.0
Sewerage subject to treatment (%)	70.8	69.6
Per capita consumption of water (m <sup>3</sup> )	124.1	119.6

#### Number of pupils - 1998

	Total	Female %
Pre-school	9 407	48
Primary	20 635	48
Lower secondary	23 589	49
Higher secondary (vocational/general)	12 350	53
Tertiary (higher education)	3 909	71
Total	69 890	51

#### Health care - 1998

	Kurzeme	Latvia
Number of hospitals	18	150
Number of doctors per 10 000 population	19.8	32.6
Number of hospital beds per 10 000 population	58.3	95.0

#### Telephone services

	1995		1998	
	Kurzeme	Latvia	Kurzeme	Latvia
Lines per 1 000 population	259	284	280	302
% connected to digital network	0.1	13.4	33.6	37.1

#### Growth in education

In 1998, enrolment in education establishments was 70 000. Ten years ago there was only one higher education institution in the region of Kurzeme, the Liepāja Pedagogical Higher School. In 1997, the Ventspils College was opened, offering study programmes in philology and business administration. Currently enrolment in the higher education institutions in the region is 3909, up by 47% compared with 1990.

Liepāja is the traditional centre of cultural activities in the region with many exhibitions of artwork, festivals and other events. There is a professional theatre company and a symphony orchestra performing in Liepāja. Since 1998, performances of the Summer Opera Festival are also staged in Kuldīga. Modern sports halls have been built both in Liepāja and Ventspils. Small towns such as Kuldīga and Talsi have long-established cultural and craft traditions.

Wooden buildings dating from the 18th and 19th centuries are still preserved in Kuldīga, one of the most picturesque Latvian towns. The Town Museum was built on the remains of a Livonian castle dating from 1245. The Liepāja St. Trinity Lutheran church is famed for its organ, until 1912 the world's largest and still the biggest in Europe. The Ventspils Museum of History and Regional Studies is also popular, offering a fascinating open-air exhibition dedicated to sea fishing.

There were 18 hospitals in the Kurzeme region at the end of 1998. The quality and variety of health services provided have been rising in recent years. Nevertheless, the number of patients per doctor in the region is the highest in the country. At the same time, however, many inhabitants of the region avail themselves of specialised and high-quality health care in Riga's institutions.

Five TV stations and six radio broadcasting stations are operating in the region and 21 newspapers are published.





# Zemgale region

## Close to the capital

Zemgale is situated in central Latvia, its southern border being also the state border with Lithuania.

Evidence that the region of Zemgale was inhabited dates back to between the 1st and 7th centuries AD. A territory inhabited by the Semigallian Baltic tribe is mentioned in 9th century Scandinavian historical sources. Fertile soils stimulated rapid economic growth. In the 13th century the ancient population of Zemgale fought against German feudal invaders longer than any other Baltic tribe, despite simultaneous attacks from Lithuanian warriors.

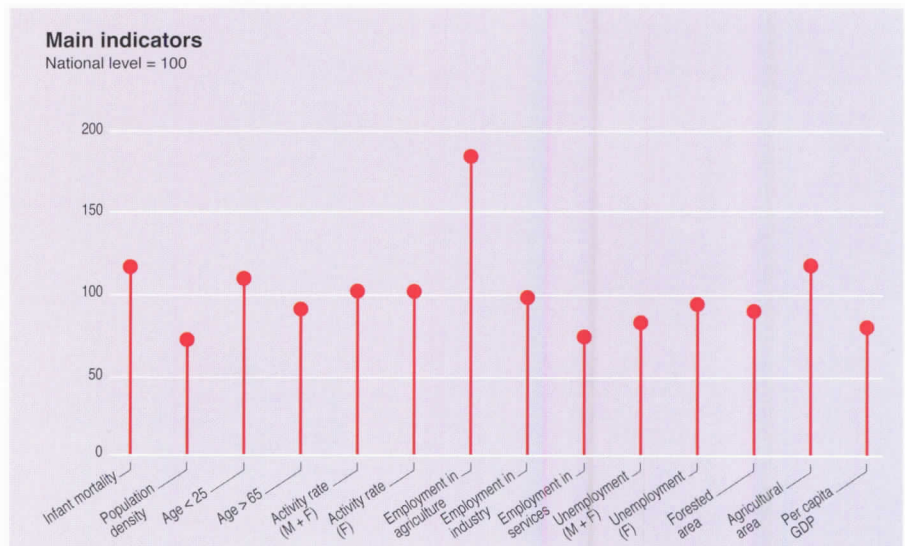
Jelgava, the centre of Zemgale, became the capital of the Duchy of Kurzeme in the 16th century but its flourishing economy experienced misery and devastation during the Polish-Swedish wars and the Northern War. In 1795 the region was incorporated into the Russian Empire. Zemgale suffered greatly in both World Wars and Jelgava, almost completely destroyed in World War II, was built anew in the post war years. In the 1940s, the region of Zemgale underwent forced collectivisation and the deportation of farmers to Siberia because in the 1930s the most up-to-date and affluent Latvian farms were to be found in this region. During the Soviet land reclamation activities in the 1960-1980s, a large number of farm buildings were destroyed.

Due to the closeness of Riga and Jelgava, access throughout the region is good. Traffic in the districts of Jēkabpils and Aizkraukle is hampered because in each of the districts there is only one bridge crossing the Daugava River. Several international roads (Via Baltica, Via Hansa and the Riga – Moscow road) intersect the region. Although the network of local roads is dense, there is a lack of high quality roads that would ensure better connections in an east-west direction along the Lithuanian-Latvian border, thus linking the farthestmost points of the region. Being sufficiently close to the capital, the region is serviced by Riga airport.

The region of Zemgale comprises the city of Jelgava and six administrative districts (the districts of Aizkraukle, Bauska, Dobele, Jēkabpils, Jelgava and Tukums). For the most part, the population of the region speaks Latvian but Russian is also spoken in Jelgava, Dobele, Jēkabpils and Aizkraukle. Approaching the Lithuanian border, the number of Lithuanian speakers also increases.



Cornfields in the Zemgale Plain



## Dominance of Jelgava

The region's historically strong economy is reflected in its rich cultural heritage, good quality transport infrastructure and traditionally higher level of education.

The city of Jelgava, a significant centre of development, dominates the region. However, during the Soviet period Jēkabpils grew into an important industrial centre. While large industrial areas and an underused infrastructure are typical of these towns, they represent good potential for attracting investment in the future. Industrial production and the processing of farm produce have also been traditional activities in the smaller towns such as Dobele, Bauska, Tukums, Auce and Iecava which have largely been able to adapt to

the market economy. Aizkraukle's growth is linked with the operation of the Pļaviņas HPS, the largest hydroelectric power station in the Baltic States with a capacity of 855 MW.

Jelgava and Jēkabpils are important transport hubs. The region also benefits from its close location to several international traffic routes, promoting the development of services in these territories.

The region has deep-rooted traditions in the manufacture of agricultural and industrial products. The rural population lives for the most part in farmsteads. Owing to their location on the Zemgale Plain, the number of collective Soviet state farms was quite high. As a result, villages here have undertaken not only agricultural production but



Scale 1: 2 300 000

0 40 km

**Which regions are similar to Zemgale?**

**Population density:**

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

- Cantal (F)
- Fokida (EL)
- Utena (LT)

**Age structure:**

13% over 65

- Gorenjska (SI)
- Berkshire, Buckinghamshire and Oxfordshire (UK)
- Salzburg (A)

**Population:**

354 000 inhabitants

- Salamanca (E)
- Saarbrücken, Stadtverband (D)
- Blagoevgrad (BG)

Lielupe rivers. There are not many lakes in the region and the largest, Lake Engure near the coast, is only partly located in this region.

The district of Tukums is located in the hilly Eastern Kurzeme Upland of the Kurzeme Peninsula. The districts of Aizkraukle and Jekabpils are part of the undulating Middle Latvian Lowland with its typical hillocks and thin quaternary cover, which is in places in the Daugava valley less than 10 metres thick. There are outcrops of bedrock, especially of dolomite, in the valleys of several rivers. In its eastern part, the Seliija Bank, an oblong, slightly elevated ridge, intersects the Lowland, and in some places the relative height of its hillocks exceeds 50 metres. The Seliija Bank is characterised by good water discharge from the surface and by its fertile soil; this forms a sharp contrast with the sandy woodland and areas of bog.

Zemgale has the lowest precipitation in Latvia at under 550 mm and little winter snow. The mean winter temperature is - 6.5°C. Summers are relatively warm with a mean air temperature of 17.5°C, giving the longest plant-growth period in Latvia. The Pļaviņas HPS, the largest hydroelectric power station in the Baltic countries, with a capacity of 855 MW, is situated in the region, and generates half of Latvia's total hydroelectric power.

There is a stock of explored deposits (dolomite, gypsum, limestone, sand, gravel and peat) in the region of Zemgale. There are also sulphuric water springs in the region. In the southern part of the region, there are thermal underground waters that could provide a useful natural resource.

Jelgava, the fourth largest city of the country, is situated in the region as are the

**Agriculture 1998**

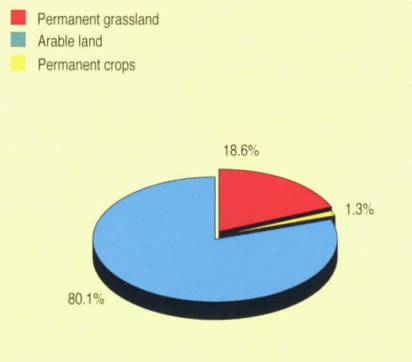
Number of holdings*	59 360
Persons working in agriculture	50 600
Total agricultural area (ha)	599 909
Total livestock	190 300
Cattle per 100 ha of total agricultural land	16.6
Pigs per 100 ha of total agricultural land	12.8
Share of crop products in total agricultural output (%) *	:
Main crops (1 000 tonnes)	
Cereals	404.9
Sugar beet	550.0
Potatoes	176.5

\* data from 1997

also the processing of farm produce and other kinds of entrepreneurial activities.

There are many deserted and polluted areas where the Soviet military personnel used to be based; for the time being, these areas are not fully utilised.

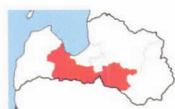
**Agricultural land use in 1998 (%)**



**Land given over to agriculture**

Zemgale region covers 13 200 km<sup>2</sup>, or 20.4% of Latvia's total territory, but contains 24% of the country's agricultural land. Agriculture (45.4%) dominates land use, followed by pine and spruce stands and broad-leaved forests (39.5%) and built-up areas (6.3%). The rest of the region's territory is covered in approximately equal parts by bogs, water, roads and brushwood.

The western part of the region is located in the flat and fertile Zemgale Plain with generally well-drained loamy soils. Localised poor drainage, where slopes are too shallow, results in the formation of bogs and a dense network of rivers. Floods are frequent in the valleys of the Daugava and



administrative district centres of Aizkraukle, Bauska, Dobele, Jēkabpils and Tukums, as well as a string of smaller towns - Auce, Kalnciems, Akniste, Viesīte, Jaunjelgava, Pļaviņas and Kandava.

### High infant mortality

Currently the population of Zemgale region stands at 354 000, some 14% of the total population of the country. It is the second smallest region. Since the beginning of the 1990s, the population in Zemgale has decreased by 25 000 or 6.5%. Numbering 188 000, women exceed men by 13%.

The age composition of the population in Zemgale region shows the same trends as in the rest of Latvia. Over the last eight years the number of people aged 65 years and over has increased by 3.5% representing 13% of the total population in the region, whereas the number of young people (under 25 years) has decreased by 12%. 21% of the region's population are of retirement age, 57% of the population are of working age and 22% are under the working age.

The birth rate in the region has decreased by more than half compared with 1990. In 1997, 3 200 babies were born in the region of Zemgale (8.9 per 1 000 population), and this is more than the average for the country. Unfortunately, the region of Zemgale is an exception with respect to the decreasing trend in infant mortality observed in Latvia during the past years. In comparison with 1995, infant mortality in 1997 increased by 15% and the infant mortality rate per 1 000 new-borns was 17.8.

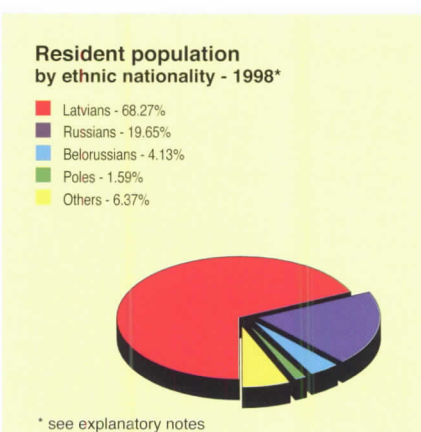
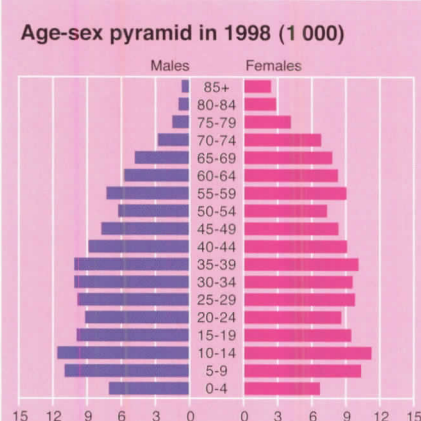
At the beginning of 1998, the share of Latvians in the total number of people in Zemgale region was 68%, the third highest figure for this indicator among the country's five regions. One fifth of the region's population are Russian, and there are

small minorities of Belorussians, Lithuanians, Ukrainians and Poles. The percentage of Lithuanians in this region is much higher than on average in the country, due to the proximity of the Lithuanian border.

The industrialisation of Zemgale implemented after the 2nd World War was accompanied by a great influx of immigrants. Several large industrial enterprises that primarily used an immigrant labour force were built in Jelgava, Jēkabpils and other towns.

After the re-establishment of independence in Latvia the migration flows reversed sharply with emigration exceeding immigration. In the period between 1990 and 1997, net emigration totalled 19 000.

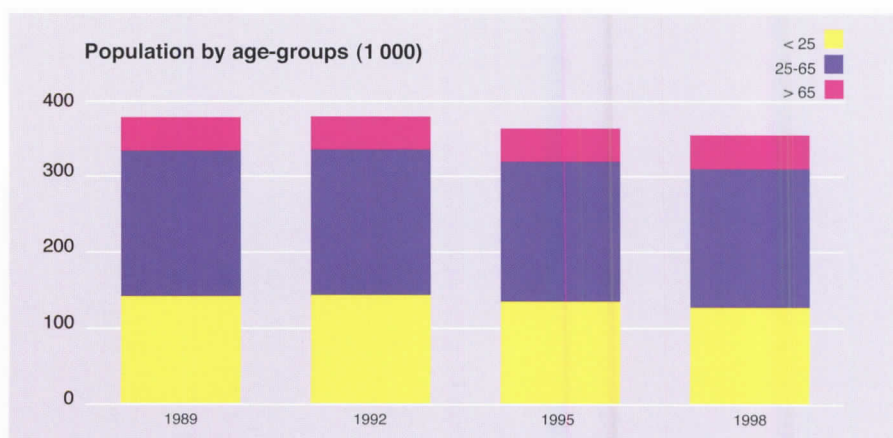
The population in the region is decreasing both due to natural decline and migration. In the demographic account, the ratio of natural decline in the population decrease (excess of deaths over births) in the last 7 years was 24% and that of migration 76%.



**Demographic account (1 000)\***

Population (01 01 90)	379.2
Births	36.3
Deaths	41.8
Migration	-19.2
Population (01 01 98)	354.5

\* see explanatory notes



### Latvia's granary

At the end of 1998, there were 9 200 enterprises registered in the region of Zemgale representing 9% of the total number of enterprises registered in Latvia; of these, 2 400 were in Jelgava. There are 26 enterprises registered per 1 000 population in Zemgale, a figure which is substantially less than the national average.

The contribution of the region to the gross domestic product of Latvia was slightly over 11% in 1996. Agriculture and forestry account for one third of the value added created in the region and this corresponds to 43% of the total volume in the country. The second most important industry in the region is manufacturing (14.7%), followed by trade (13.5%).

Zemgale region also accounts for one third of the national value added generated by mining and quarrying. The two largest peat extraction enterprises are located in this region, accounting for 40% of the total output of peat in the country. The country's largest stone chip enterprise, which alone produces more than 60% of the total volume in the country, is also situated here. There are highly developed processing enterprises of agricultural products such as flax, milk, sugar beet, cereals, fruit and vegetables. Industrial output in the region has slightly decreased over the last years and in 1998 made up only 8% of the total output in the country.

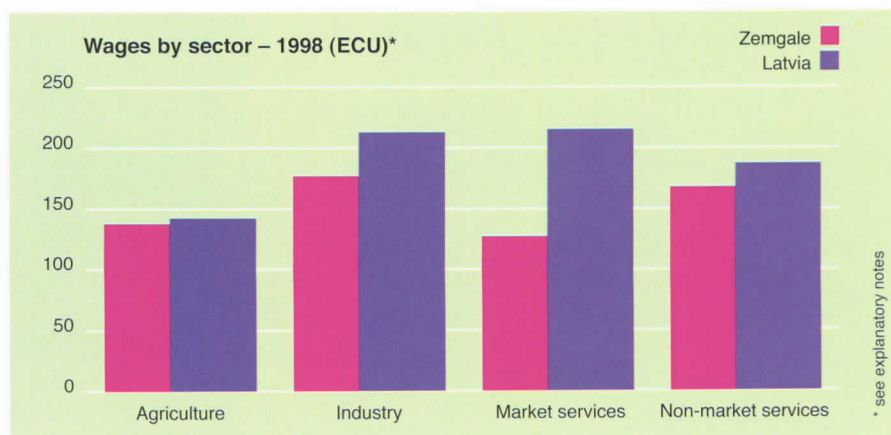
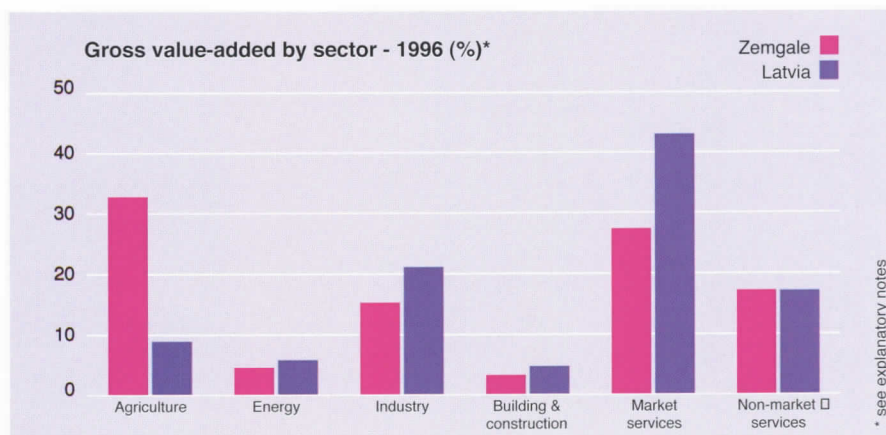
Due to the fertile carbonate humus soil and favourable agro-climatic conditions, the region has become the largest producer of grain and is named the "granary of Latvia". The soil and climatic conditions are most suitable for winter rye varieties. In 1998, sown areas under winter rye occupied 76.4% of all sown winter crop areas in the region. Approximately half of the spring wheat crops are grown in Zemgale. In 1998, the region accounted for almost half of the cereal crops in the country.

Sugar beet is the second-most popular crop cultivated in the region. In 1998, the region of Zemgale accounted for more than 90% of the total production of sugar beet in the country. Since 1993, the output volumes have doubled and Latvia is self-sufficient in sugar. Sugar refining is also highly developed in the region, and two of the three Latvian sugar refineries are situated in Jelgava and Jēkabpils.

JSC "Balticovo", widely known throughout the Baltic countries as a major egg producer, is situated in Zemgale region, where more than half of the total egg production in the country takes place. Conditions are also favourable for the development of other kinds of animal husbandry. New productive varieties of apple trees and strawberries are grown in the Pūre Station of Selection and Experimental Research.

#### Main enterprises

Name	Activity
Jelgavas cukurfabrika	Sugar manufacturer
Jēkabpils rajona centrālā slimnīca	Hospital
Ģintermuiža	Hospital
Lārelīni	Textile weaving
Jelgavas pilsētas slimnīca	Hospital
Balticovo	Poultry farming
Agrofirma Tērvete	Agriculture
Bauskas rajona patērētāju biedrība	Food retailer
Lumat	Outerwear manufacturer
Redtex	Outerwear manufacturer





## Below average earnings

Wages are comparatively low in the region of Zemgale and in 1998 did not reach the average level for this indicator in the country. In fact, the gross monthly wage of employees in this region was 21% lower than the average wage in the country.

Employees in manufacturing enterprises received the highest wage in Zemgale, whereas the lowest wages were paid to those working in industries providing market services.

With regard to the wages of employees involved in agriculture, one of the dominating activities of the region, Zemgale ranks second in the country, very close to the national average. In recent years average agricultural wages have been rising at a faster pace than for the Latvian average.

For more than half (61%) of the employees the calculated wage was not higher than 151 ECU and only for 1.7% was it over 453 ECU.

## Comparatively high number employed in agriculture

The number of economically active people in Zemgale region is 165 100, which represents 14% of Latvia's economically active population and 59% of Zemgale's total population. In line with other areas, there was an excess of men over women in the total number of employed persons in 1998.

As in the whole economy, agriculture dominates Zemgale's employment structure. More than one third of the employees in the region are linked to this sector (less than 20% in the country as a whole). It is worth mentioning that the share of employment in agriculture has risen in recent years. This process was affected by the restitution of land as private property after the collapse of the big collective farms.

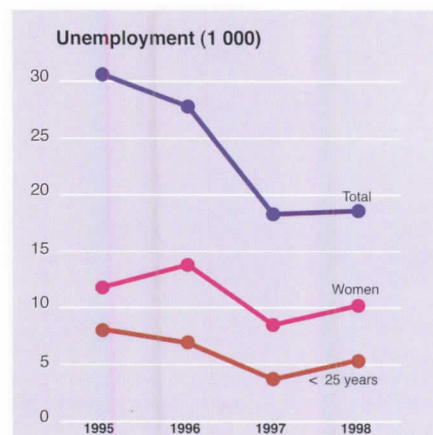
One fifth of the employed population in the region work in enterprises related to quarrying, manufacturing or energy generation. An interesting fact emerges that comparing the employment statistics over the past four years an increase in the number of employed persons can be observed, despite an adverse trend in the rest of Latvia. However, in comparison with other regions, the number of employees engaged in providing market services is the lowest.

Labour Force Survey results show the rate of job seekers in the total number of those economically active in the region does not exceed the average rate in the country.

However, it is worth mentioning that Zemgale has the highest rate of female job seekers (55%) to the total number of job seekers, and furthermore in the last 3 years this rate showed signs of increasing. Although the number of young job seekers has dropped by one third in comparison with 1995, this proportion (29% in 1998) shows a growing trend compared to the total number of unemployed people and is the highest of all regions.

A sign of improvement is in the fall in the number of long-term unemployed, which was less than half of the total number of jobs seekers at the end of 1998, whereas more than 50% in the country as a whole were long-term unemployed.

In almost all districts of the region the officially registered unemployment rate is above the country's average.



## An important transit corridor

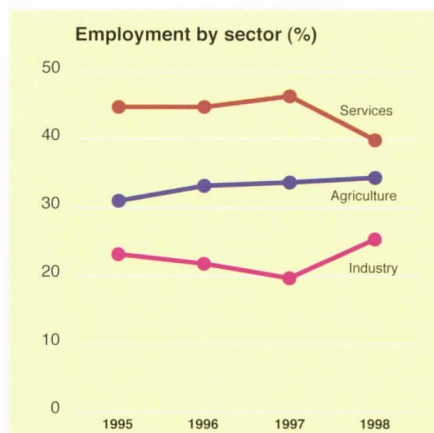
Freight traffic in Zemgale is very intense. The region is intersected by railways both in a north-south direction (connecting with Riga) and east west (from Latgale to the ports in Kurzeme). The key railway hubs are in Jelgava and Jēkabpils.

The region is intersected by significant road transport corridors. The Via Baltica (E-road E67) passes through Zemgale in a north-south direction, and the east-west corridor in the eastern part of the region is important for transport links with Russia and other CIS countries. It is intended to categorise the road that passes through Jelgava as E-road E77, running from Pskov in Russia through Riga, Jelgava and further on down through Lithuania, Poland and Hungary all the way to Budapest. There are good traffic links with Riga as Zemgale "embraces" the region of Riga from the western and southwestern sides.

Crude-oil and oil-product pipelines stretching from Belarus through Latgale, Zemgale and Kurzeme regions to the port of Ventspils intersect the region. Engure, one of Latvia's minor ports, is situated on the coast on the Gulf of Riga.

As in other regions, the use of private passenger cars is growing. The number of persons per private car is lower than the average in the country (5.56 and 5.74 persons per car, respectively).

Despite the fact that the Lielupe River is navigable from its mouth as far as to Jelgava, river transport has not been developed to date.



	15-24 years	25-54 years	≥ 55 years
Men	13	67	20
Women	8	78	14
Total	11	72	17

## Biological diversity hit by intensity of farming

Due to intensive farming, the central part of Zemgale region does not display a great deal of biological diversity whereas the less utilised southeastern part has preserved considerable natural wealth. In order to protect the region's natural heritage, 3 nature parks were established - those of Sauka, Tērvete and part of the Abava valley nature park. In addition there are 41 nature reserves, 20 geological and geomorphologic objects, 40 parks and tree plantations with a total area of 6 863 km<sup>2</sup>. Part of the Ķemeri National Park, the newest of its kind in Latvia (established in 1997) is also located in the region.

A storage facility for dangerous waste "Gardene" has been established in one of the former Soviet military bases in the district of Dobeļe.

232 biological wastewater treatment plants and 172 mechanical wastewater treatment plants are operating in the region.

Concerning progress in the area of telecommunication, the analogue network in the region has been modernised and a digital exchange has been installed in Jelgava. It is intended to shift the whole region to a digital network by the year 2003.

### Surfaced public roads - 1997

	Zemgale	Latvia
Length in km per km <sup>2</sup>	0.30	0.29
Length in km per 1 000 population	11.1	7.6
Length in km per 1 000 private passenger cars	67.1	47.3
% private passenger cars in total number of vehicles	63	66
Number of accidental deaths per 1000 private passenger cars	1.8	1.3

### Environment - 1997

	Zemgale	Latvia
Dwellings connected to public water supply (%)	86.0	93.0
Dwellings connected to public sewerage (%)	85.0	91.0
Sewerage subject to treatment (%)	90.3	69.6
Per capita consumption of water (m <sup>3</sup> )	72.0	119.6

### Number of pupils - 1998

	Total	Female %
Pre-school	9 558	48
Primary	23 639	48
Lower secondary	26 069	49
Higher secondary (vocational/general)	12 692	55
Tertiary (higher education)	6 976	54
Total	78 934	50

### Health care - 1998

	Zemgale	Latvia
Number of hospitals	28	150
Number of doctors per 10 000 population	21.5	32.6
Number of hospital beds per 10 000 population	98.7	95.0

### Telephone services

	1995		1998	
	Zemgale	Latvia	Zemgale	Latvia
Lines per 1 000 population	230	284	242	302
% connected to digital network	0.1	13.4	18.2	37.1

## Long academic tradition

As early as the 16th century, Jelgava, the centre of Zemgale, had grown into one of the Baltic's educational and cultural centres. Schools for German and Latvian children were established and in 1775 the Academia Petrina, the first higher education institution in Latvia, was opened. The Latvian Agricultural Academy has been operating in Jelgava since 1939. Today this Academy is the national centre for agricultural science and education as more than one third of the region's secondary school graduates continue studies at this institute for higher education. In 1998, there were 79 000 children enrolled in Zemgale's educational establishments.

There are 28 hospitals in the region of Zemgale. In 1998, there were 21 doctors, 52 medical assistants with secondary education and 98 hospital beds per 10 000 population. At the end of 1998, the number of patients per doctor was 468.

There are no institutions of visual or performing arts actually based in the region but festivals of professional art are organised and amateur art groups are also active. Three TV stations and two radio broadcasting stations are operating and 19 newspaper titles are published.

The region is famous for its wealth of cultural heritage, having a relatively high number of architectural monuments that are concentrated within a rather small territory which attract tourists. The Rundāle Palace is the most perfect baroque ensemble in Latvia constructed by the architect B. F. Rastrelli in the first half of the 18th century. The Bauska Castle, the Palaces of Mežotne, Kaucminde and Bornsminde as well as the cliffs and parks of Jumpravmuiža are also worth seeing. A potential for the development of tourism is also the coastal area in the Tukums district as well as the region's natural scenic beauty with its marvellously varied landscape.



## Latgale region

### Turbulent past: international orientation

The oldest human settlements discovered in Latgale date back to the 3rd and 2nd millennium BC. In the 13th century AD this territory was inhabited by the ancient Latvian tribe, Latgallians, named in Henrik's Livonian chronicle as Letthi or Letthigalli. The name of the Latvian State originates from the name of this tribe. In Livonian times (14th -16th centuries) Latgale was administratively linked to Vidzeme. Following the Armistice of Altmark in 1629, a special region Inflantia Polska was created which was ceded to the United Kingdom of Poland and Lithuania. As a result of the first division of the Polish State in 1772, this territory was incorporated into Russia. The First World War, the 1917 Russian Revolution and the Latvian struggle for independence in 1918-1920 presented the opportunity to unite Latgale with the other regions of Latvia. This union was completed in 1920 by the conclusion of a peace treaty with Russia.

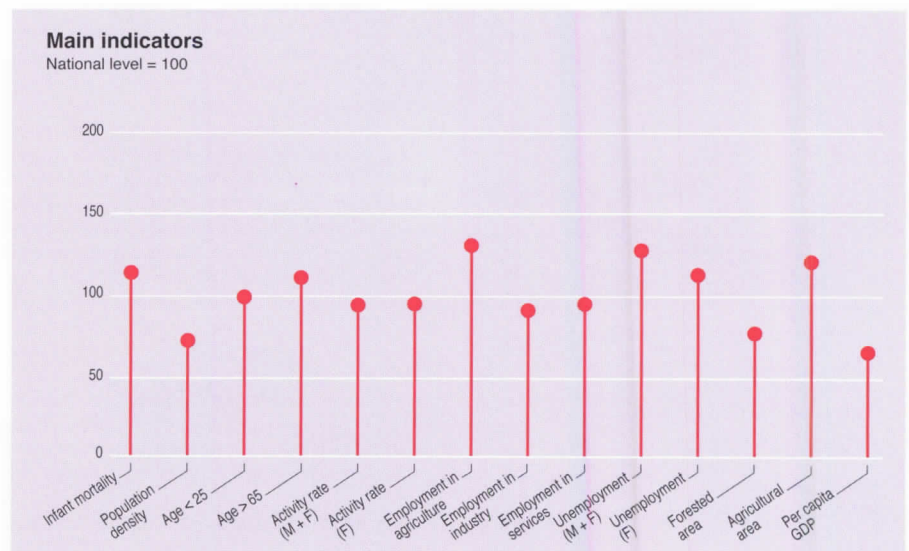
The Region of Latgale is situated in the eastern part of Latvia, and has a long external border with Russia, Belarus and Lithuania. The location of the region is strategically significant in relation to the Russian and Central European markets. Internationally important transport routes, which provide access to neighbouring countries, intersect the region. All of the region lies within 200 - 300 km of the capital, and there is an extensive network of local roads. The Daugava development axis that connects Latgale with the capital makes the southwestern part of Latgale easily accessible. However, frontier areas are not so accessible due to the less developed infrastructure of public transport in these areas.

The language used for everyday communication by half of the resident population of the Latgale region is Latvian or its Latgallian dialect. Russian, Polish and Belorussian are widespread, as for centuries historical events have been conducive to the immigration of non-nationals into Latgale.

The Region of Latgale encompasses 2 cities under state jurisdiction (Daugavpils and Rēzekne) and 6 administrative districts (the districts of Balvi, Daugavpils, Krāslava, Ludza, Preiļi and Rēzekne).



The upper reaches of Latvia's longest river, the Daugava



### Agriculture and industry both weak

Latgale Region has an evenly spread population density and two big regional centres. Co-operation between the regional centres is good and in the future this might provide the impetus for the overall growth of the region.

Latgale is characterised by its heterogeneous ethnic composition and by the peaceful coexistence of various religious denominations (Roman Catholic, Orthodox, Lutheran, Old Believer and Judaist). In comparison with other regions, the percentage of Russian-speakers in this region is the highest in Latvia. Far from being an impediment to regional development, this ethnic and religious diversity

provides an impetus for co-operation with other countries, even those with which Latgale has no common border (for example, Poland).

Its unpolluted environment, beautiful landscapes and numerous lakes distinguish Latgale from other regions of Latvia. The opportunities to fish and hunt here could lead to the development of tourism, especially rural tourism.

The region's infrastructure is rather underdeveloped in terms of social provisions and services. Furthermore, the region's relief and poor soil hinder the development of agricultural production. During the Soviet era, a strong industrial infrastructure was created in the region's towns, with large enterprises and huge production



Scale 1: 1 900 000

0 40 km

**Agriculture 1998**

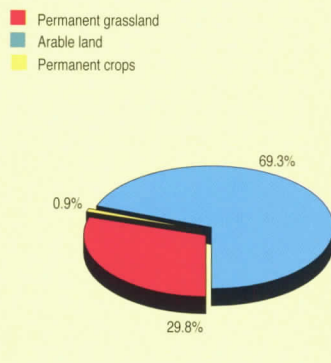
Number of holdings*	97 680
Persons working in agriculture	35 000
Total agricultural area (ha)	675 269
Total livestock	199 700
Cattle per 100 ha of total agricultural land	15.6
Pigs per 100 ha of total agricultural land	12.8
Share of crop products in total agricultural output (%) *	:
Main crops (1 000 tonnes)	
Cereals	148.0
Sugar beet	0.4
Potatoes	111.4

\* See explanatory notes

areas that are not adequately utilised nowadays. Some of the enterprises have restructured production or have found new markets for their products in both the East and the West.

Due to slow growth rates within the region, Latgale suffers from an exodus of its educated population to Riga and other regions of Latvia. Furthermore, the working-age

**Agricultural land use in 1998 (%)**



population of the region finds it hard to compete successfully on the market for qualified labour because it lacks the necessary professional qualifications. The recent creation of new educational institutions in the region should improve the professional structure of the population, as well as help to keep the young people in the region.

**Latvia's lake district**

The region of Latgale covers an area of 14 500 km<sup>2</sup> or 22% of the total territory of the country. It has 27% of the country's agricultural land, which constitutes 46% of the overall territory of the region. 34% of the region is covered by forest, mainly pine and spruce forest, although broad-leaved

**Which regions are similar to Latgale?**

- Land use:**  
46% agriculture  
Toscana (I)  
Franche-Comté (F)  
Pomurska (SI)
- Age structure:**  
16% over 65  
Derbyshire and Nottinghamshire (UK)  
Trentino-Alto Adige (I)  
Goriška (SI)
- Area:**  
14 500 km<sup>2</sup>  
Etelä-Savo (FIN)  
Burgos (E)  
Lubuskie (PL)

trees are also widespread. Bogs and swamps occupy 5% of the region, and about one third of the country's water bodies are located here.

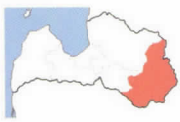
The Lubāna Plain, a rather flat, secluded, loamy lowland with few hillocks and vast areas of swamp is located in the northern part of the region. The particularly undulating Latgale Upland, with its average elevation of roughly 200m, is in the centre of the region and the Augšzeme Upland (average elevation 165m) is located in the south-western part. The region has the highest concentration of lakes in Latvia and the Latgale Upland, with its more than 800 lakes that are larger than 1 ha, belongs to the East European lake zone. Lake Rāzna (82 km<sup>2</sup>) and Lake Lubāns (57.6 km<sup>2</sup>), the two largest and most important lakes in Latvia for the fishing industry are situated in Latgale. Lake Lubāns is also well-known as a migration destination for European birds and for its good hunting. The Daugava, Latvia's longest river, flows through Latgale.

The Latgale region consumes 15% of the total consumption of electricity of the country. Having no important energy sources of its own, nearly all energy resources are imported from other regions. Only a few small rivers with 4 small operating hydroelectric power stations, a number of millponds and waterworks regulating the flow of water are worth mentioning as local energy resources.

The main mineral deposits situated in the region are dolomite, sand and gravel, sapropel and peat.

Daugavpils, Latvia's second largest city by population, and Rēzekne, the seventh, are situated in Latgale. Other towns in the region are the district centres Balvi,





Krāslava, Ludza and Preiļi, and the minor towns of Viļaka, Ilūkste, Subate, Dagda, Kārsava, Zilupe, Livāni and Viļāni.

### Rapid ageing and few ethnic Latvians

Currently the population of Latgale region stands at 394 000, of which 53% are women. This is the country's second largest region, after Rīga, accounting for 16% of the total population of the country. Since the beginning of the 1990s, the population of the region has decreased by 28 000 or by almost 7%. Of the total population of the region, 158 000 or 40% live in two cities – Daugavpils and Rēzekne.

Just as other regions of Latvia are having to cope with an ageing population, so too is Latgale. In fact, the percentage of the population over 65 years of age is the highest in the country (16% or 2% higher than in the country as a whole). 57% of the population of the region is of working age and only 19% are under working age. This disproportion has been widening over the last decade: the number of 65-year olds and older has increased by 5.4% whereas the number of young people (under 25 years) has decreased by 12%.

The birth rate in the region has almost halved since 1990. In 1997, 2 988 babies were born, which represents 7.5 births per 1 000 population.

Latgale faces the unusual situation of its ethnic Latvian citizens being in the minority in the region. At the beginning of 1998, 41% of the population of the region were Latvians, 43% were Russians, 6.4% Poles and 5.9% Belorussians. The percentage of Poles and Belorussians is the highest in the country.

As in other parts of Latvia, the major immigration after World War II from other former USSR countries was replaced after Latvia regained independence by an excess of emigration over immigration. Between 1990 and 1997, net migration was almost minus eight thousand (5.8% of total net migration in Latvia, and the lowest percentage in the country).

The region's population is decreasing both due to natural movement and to migration. In the demographic account, natural movement in the population (excess of deaths over births) over the last 7 years has accounted for 71% of this decrease and migration 29%. This differs from Latvia's other regions where migratory flows had the greatest influence on the decreasing population.

As is the case in the country as a whole, infant mortality in Latgale is decreasing. The highest infant mortality rate in Latgale was recorded in 1995 when it was 22.1 (per 1 000 new-borns) whereas in 1997 this rate was 17.4 or 21% down on 1995 figures.

### Dairy boosts depressed economy

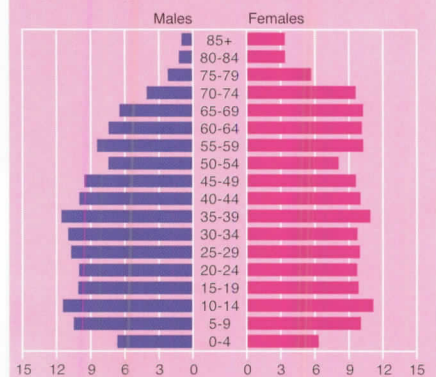
At the end of 1998, there were 8 300 enterprises registered in the region of Latgale, representing 8% of the total number of enterprises registered in Latvia. Of these, 3 200 were in Daugavpils and 1 200 in Rēzekne. The number of operating enterprises per 1 000 population in Latgale was half the Latvian average.

The region's contribution to gross domestic product in 1996 was slightly over 10%. Concerning value added, the most significant industrial sectors were manufacturing (24%), within it the food industry prevailing, followed by the wood industry, and the manufacture of electric appliances, then the transport and communications sector (19%) and trade (15%). In 1998, non-financial investment in the region represented 5.6% of the country's total or 175 ECU per capita, this is approximately one third of the national average. At the end of 1998, only 8% of all foreign capital invested in Latvia went to enterprises based here.

Due to the slow restructuring of manufacturing in the region, industrial output in recent years has continued to fall. It was 11.2% of the total industrial output of the country in 1996 and 9% in 1998. Furthermore, the region's products lack the competitive edge needed for penetration into the world market.

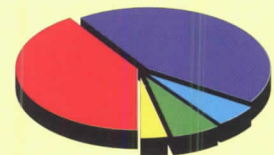
Rēzekne, strategically located at the crossroads of international road and rail ways and in close proximity to the country's eastern border, has been designated

Age-sex pyramid in 1998 (1 000)



Resident population by ethnic nationality - 1998\*

- Latvians - 40.67%
- Russians - 43.41%
- Belorussians - 5.91%
- Poles - 6.43%
- Others - 3.59%



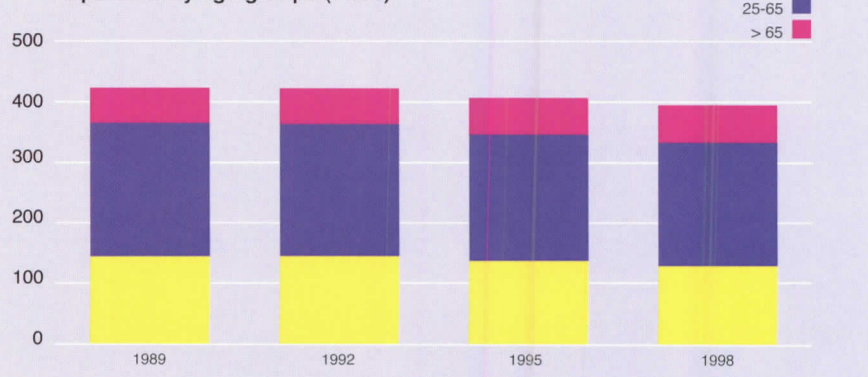
\* see explanatory notes

Demographic account (1 000)\*

Population (01 01 90)	422.4
Births	33.7
Deaths	54.1
Migration	-7.9
Population (01 01 98)	394.1

\* see explanatory notes

Population by age-groups (1 000)



as a special economic zone and should offer potential for economic growth in the region.

Although the area given over to agricultural land in Latgale is higher than in other regions, farming conditions are likely to be among the worst since the soil in the eastern part of Latvia is relatively poor and stony. There are also traces of soil erosion in the region.

Latgale region has the highest number of farms and family holdings, 97 700 or 27.8% of the total number of the country, but their size is rather small (7 ha on average).

Flax growing has been a traditional industry in the region of Latgale for centuries, and more than 90% of the total output of flax fibre in Latvia is produced in this region. The Vijāni Station of Selection and Experimental Research is engaged in the selection of flax.

The majority of farmers in the region are engaged in dairy farming: in 1998 almost one quarter of the total number of cows in Latvia were raised in Latgale and milk production was 24.7% of the national total. As a result, there are many dairy factories in the region. The JSC "Preiļu siers" is one of the nine Latvian enterprises exporting dairy products that are certified by the EU Commission. This enterprise is the only one in the Baltic region that produces Cheddar cheese. The country's only tinned milk production enterprise also operates successfully here.

Latgale's potential for the development of tourism is outstanding and rural tourism has already developed around the lakes, where at the end of 1998, there were 11 hotels with 949 beds and 21 recreational establishments with 813 beds.

**Wages strikingly low**

One of the characteristics of Latgale region is that traditionally its employees earn very low wages, indeed some of the lowest in Latvia. At the end of 1998, two thirds of the employees in the region earned less than 151 ECU. With regards to wage increase rates, the region is also below the average level of the country.

In 1998, the average gross wage in Latgale was 74% of the national average, and it was only in the larger cities in the region such as Daugavpils and Rēzekne that wages were above the 151 ECU level. In the district of Rēzekne, where labour remuneration was the lowest in the country, it represented only 60% of the Latvian average.

Over the past years, wages in the construction industry in the Latgale region have been fluctuating around 85% of the average level in the country. Wages in quarrying and manufacturing have also dropped, by around 16 percentage points, due to the general slowdown in production and represent only 74% of the average level in Latvia. However, the most critical situation is in branches of the services sector such as trade, public catering, hotel services and business services where labour remuneration is the lowest, and is only 60% of the national average for these branches.

**Lowest activity rate**

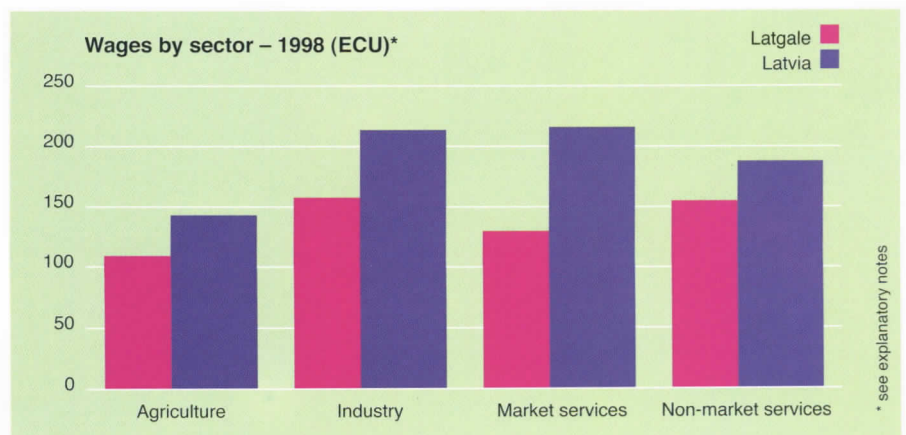
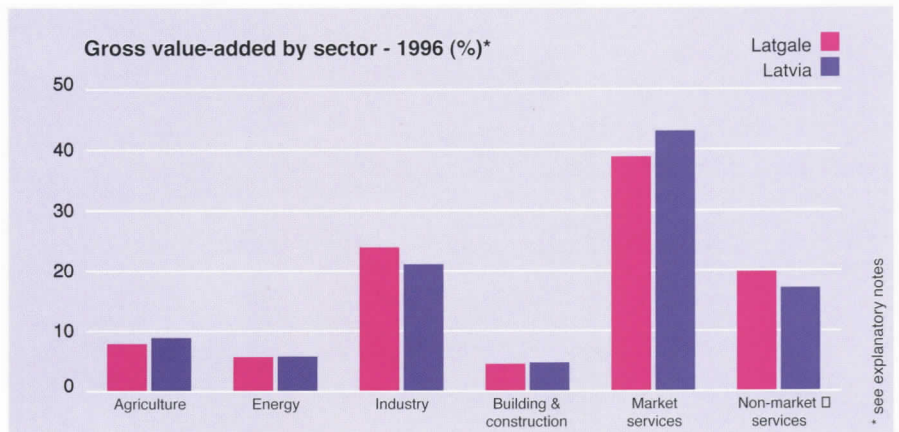
Latgale is distinctive from other areas of the country as regards the low economic activity of its population, which is the lowest in Latvia. Only slightly more than half of the population are in fact economically active.

The overall employment rate marginally exceeds 40%, although for men this indicator is slightly higher than for women.

Over the past years the breakdown by industries of the employed population of

Main enterprises	
Name	Activity
Tolaram Fibers	Manufacture of man-made fibres
Lokomotive	Rolling stock manufacturer
Daugavpils Pievadķēžu Rūpnīca	Component manufacturer
Rēzeknes piena konservu kombināts	Dairy producer
Daugavpils pilsētas centrālā slimnīca	Hospital activities
Rebir	Machine-tools manufacturer
Daugavpils vietējās pašpārvaldes siltumtīklu uzņēmums	Energy supplier
Daugavpils municipālais dzīvokļu saimniecības uzņēmums	Real estate management
Daugavpils psihoneiroloģiskā slimnīca	Hospital activities
Daugavpils autobusu parks	Transport company

Latgale has changed. With industrial production going down, the number of employees in all manufacturing industries has decreased substantially (by 20-25% in





manufacturing, energy and construction). More than two thirds of the employed population of Latgale now work in the services and agriculture sector, where the rise in employment is mainly accounted for by people whose only source of livelihood is work on their own farm. These trends are apparent in the whole country but in Latgale they are more pronounced. The percentage of employees working in construction is the lowest in the country, with only 8% of the total number of employees in this industry living in Latgale.

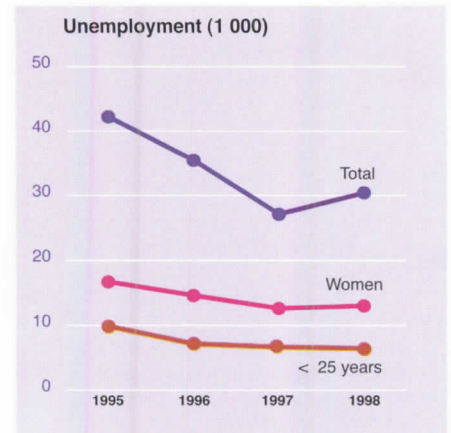
A large number of people in the region lost their jobs due to the changes in the country's economic system, and the ensuing collapse of collective farming in agriculture, the weakening of economic links with the main trading outlets in the East and the subsequent closure of large enterprises. Since no foundations have yet been laid in the region for the creation of new jobs, this part of the country still has the highest registered unemployment rate, exceeding the country's average rate 2-3 times.

Since the possibility of finding a job is slim, the period of job seeking is rather long. A quarter (more than 7 000 persons) of the total number of job seekers in Latgale have been seeking a job for 1-2 years, while a third (9 000) have been doing so for 3 years or more. The time women spend on seeking a job is 1.3 times longer than that of men. The findings of the Labour Force Survey show that the highest rate of job seekers is in Latgale (17.5% in 1998 as opposed to the national average of 13.8%). Nevertheless, the region is noted for having one of the lowest proportions of women in the total number of job seekers and this trend has stabilised in the last 3 years.

## Landlocked yet international

Latgale is the only Latvian region without direct access to the sea. Latgale has a common border with Russia and Belarus, therefore transit cargo by rail and road that enter the region are further transported through Zemgale, Kurzeme and Rīga region to the seaports of Latvia.

Rēzekne and Daugavpils are important railway and road transport hubs located at the crossroads of the transport corridors. A transport corridor running from St. Petersburg through Latvia and Lithuania to Warsaw intersects Latgale in a north-south direction. Other transport corridors from Russia and Belarus go through Latgale and then through other Latvian regions to the Latvian seaports of Ventspils and Liepāja on the Kurzeme seacoast and also to Rīga. The railway stations in Rēzekne and Daugavpils service domestic and international passenger trains and goods trains. Bypasses have been built around Rēzekne and Daugavpils to divert transit traffic away from the streets of the cities. There are airfields in both of the cities, which at present are not widely used, and although Latgale is comparatively far from the state capital, it is convenient to use public transport (train, bus) for getting to Rīga. The local bus network has been restructured in recent years. Since several railway lines have been closed due to the small number of passengers, the inhabi-



tants are provided with a bus service, which is economically more viable in sparsely populated areas.

The number of private cars in Latgale has increased by 53% in recent years. This has occasioned a dramatic drop in the indicator of the average number of persons per private car, which has fallen by 4.7 persons in Latgale in comparison with a decrease of 4.1 persons in the country as a whole. However, the number of persons per car remains the highest in the country, at 7.14.

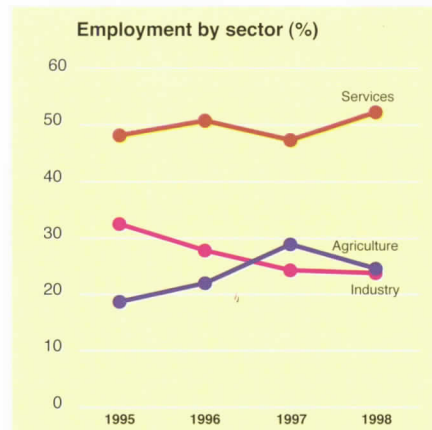
## Extensive nature reserves, slow modernisation

The environmental situation in the region is generally good and the network of protected territories ensures the conservation of natural resources, especially the region's biological diversity. Latgale's 1 886.2 km<sup>2</sup> of reserves include part of the Teiči reserve and numerous other areas of outstanding interest.

Pollution is most serious in and around major cities and where there is incoming cross-border pollution from Lithuania and Belarus. An early warning system for radioactive accidents has been set up and great importance is attached to the performance of this system due to the proximity of the Ignalina nuclear power station in Lithuania (only 30 km from Daugavpils). The detectors are placed in Daugavpils, Rēzekne, Balvi and other localities.

Some 80% of air pollutants come from mobile sources. Emissions from stationary sources in the region are approximately the same as the national average and do not exceed legal limits.

Although there are large deposits of underground drinking water in Latgale, its quality is reduced in some places by an



### Employment by age group - 1998 (%)

	15-24 years	25-54 years	≥ 55 years
Men	9	81	11
Women	8	83	9
Total	9	82	10

increased iron content, low fluoride content and, quite frequently, excessive hardness. Some 61 mechanical and 182 biological sewerage treatment facilities operate in the region.

A high priority in the region is waste disposal, as large amounts of garbage are a heavy load on the environment, especially in the vicinity of the large cities. There are 137 garbage dumps with a total area of 173.1 ha.

As elsewhere in Latvia, Latgale's main telecommunications priority is the digitalisation of all subscribers' lines and the installation of lines to new subscribers. Current poor service levels can be explained by the fact that the up-grading of telecommunications in Latvia started in the western part of the country, in the Kurzeme region. A digital exchange has now been installed in Daugavpils but the transition to digital exchanges in the whole region will not be completed until the year 2003.

#### Surfaced public roads – 1997

	Latgale	Latvia
Length in km per km <sup>2</sup>	0.28	0.29
Length in km per 1 000 population	10.3	7.6
Length in km per 1 000 private passenger cars	80.1	47.3
% private passenger cars in total number of vehicles	63	66
Number of accidental deaths per 1000 private passenger cars	1.5	1.3

#### Environment - 1997

	Latgale	Latvia
Dwellings connected to public water supply (%)	91.0	93.0
Dwellings connected to public sewerage (%)	91.0	91.0
Sewerage subject to treatment (%)	45.3	69.6
Per capita consumption of water (m <sup>3</sup> )	101.4	119.6

#### Number of pupils - 1998

	Total	Female %
Pre-school	9 498	48
Primary	22 937	49
Lower secondary	25 503	49
Higher secondary (vocational/general)	16 089	52
Tertiary (higher education)	6 336	80
Total	80 363	52

#### Health care - 1998

	Latgale	Latvia
Number of hospitals	28	150
Number of doctors per 10 000 population	23.5	32.6
Number of hospital beds per 10 000 population	87.9	95.0

#### Telephone services

	1995		1998	
	Latgale	Latvia	Latgale	Latvia
Lines per 1 000 population	239	284	246	302
% connected to digital network	0.0	13.4	17.0	37.1

#### Expanding options for young people

In 1998, enrolment in Latgales's educational establishments was 80 000. In 1990, there was only one higher education institution in the region of Latgale – the Daugavpils Pedagogical University, from which 400 certified teachers graduated every year. The majority of secondary school graduates in the region continued studies at the higher education institutions of Riga and after graduation did not come back. To attract young people to the Latgale region, the Rēzekne Higher School was opened in 1996. Currently the enrolment in both higher education institutions is more than 6 000 students, coming mainly from the schools of Latgale; this number is double that of the students in 1990.

One of the most noteworthy cultural monuments in the region is the Basilica of Aglona with its monastery buildings, which is the spiritual centre of Catholicism in Latvia. On 15 August each year thousands of people from the whole of Latvia and even from other countries make a pilgrimage to Aglona to celebrate the Ascension Day of the Virgin Mary.

The region's only professional theatre company performs in Daugavpils, but amateur theatre companies are also very active in the region. Over recent years, due to falling population numbers and increasing activities of the local media, the number of cultural institutions has also declined. The most frequently visited museums are the Rēzekne Museum of Cultural History of Latgale and the Daugavpils Museum of Regional Studies and Art.

Seven regional TV stations and three radio broadcasting stations operate in the region and 17 newspapers are published.

In 1998, there were 28 hospitals with 3 426 beds in Latgale, and of these 9 major hospitals (or 63% of the total number of beds) are in Daugavpils and Rēzekne. More than half of the region's doctors (58%) and paramedical staff (55%) work in these cities.

## Explanatory notes

Sources: Latvian Central Statistical Office (all data relating to Latvia).  
Eurostat database REGIO (all EU data)

### Notes on specific graphs and tables

#### Table: Main indicators

Reference year: 1998 except for infant mortality (1997), activity rates (1997), and GDP per capita (1996).  
Infant mortality: infant deaths refer to those that occur within the first year of life. Since 1991, data on infant mortality are shown according to the WHO (World Health Organisation) methodology.  
Unemployment: source: Labour Force Survey.

#### Table: Agriculture - 1998

Reference year: 1997 for the number of holdings.  
Source (livestock, agricultural output, main crops): for state farms and statutory companies: statistical reports; for private farms: sample survey.

#### Table: Demographic account (1 000)

All population data come from the Demographic Statistics Database.  
The initial information on demographic statistics is obtained from the Civil Status Act Registers, which are completed in the Registry offices under the Ministry of Justice, from migration statistical coupons filled in the local government institutions, from death certificates, including infant deaths, issued by physicians and from other sources. The above mentioned papers are presented to the local offices of the Central Statistical Bureau every month.  
Long-term migration implies movements across administrative boundary to change the permanent place of residence. Migration is divided into external (from one country to another country) and internal (within the boundaries of Latvia) migration. Data on migration of the population in cities and districts include internal migration between different administrative territorial units, and migration between urban and rural localities within the boundaries of one administrative district.

#### Table: Employment by age groups - 1998 (%)

Source: Labour Force Survey (ILO definition).

#### Graph: Employment by sector (%)

Source: Labour Force Survey (ILO definition).  
Definition: in 1995, the total number of employed population comprises persons on paid temporary community and social work and unpaid community and social work.

#### Table: Environment - 1997

Sewerage subject to treatment (%): includes the volume of wastewater (both industrial and communal), except nominally clean water in accordance with standards.  
Per capita consumption of water (m<sup>3</sup>): consumption of water refers to the amount of water abstracted from various sources and used for various industrial and communal needs. The consumption of recycled water, reuse of wastewater and the use of water from collectors and drainage systems are not included.

#### Graph - Resident population by ethnic nationality - 1998

Source: Demographic Statistics Database.  
Definition: resident population refers to all inhabitants whose legal place of residence is the corresponding administrative territory, including those who were temporarily absent at the moment of the population census or survey.

#### Graph: Gross value added by sector - 1996 (%)

The gross value added by sector is based on gross value added at basic prices.

#### Graph: Population by age groups (1 000)

The breakdown into age groups is not available for the years 1970, 1980, and 1985.

#### Table: Surfaced public roads - 1997

Definitions come from the "Glossary for transport statistics" prepared by the Inter-secretariat Working Group on Transport Statistics Eurostat, ECMT and UN/ECE in 1997, except for:

- public roads (roads that belong to Latvia Republic property and connected Latvian Republic road network with ones of other countries, and capital of Latvia with administrative centres of regions, and interconnected region centres, and other roads which have this public roads status defined by the Cabinet of ministers),
- deaths by road accident (persons killed outright or who died within 7 days as a result of the accident),
- private cars (road motor vehicle intended for the carriage of passengers and designed to seat not more than nine person, including the driver) and which belongs to private person),
- total number of vehicles: includes all kinds of road vehicles running on wheels and intended for use on roads (excluding mopeds, trolley buses, and trams).

**Graph: Unemployment (1000)**

Source: Labour Force Survey.

**Graph: Wages by sectors - 1998 (ECU)**

Source: surveys of institutions and enterprises.

Definition: gross monthly average wages and salaries.

**Notes on comparability**

The definitions and methods used by the Latvian Central Statistical Office do not always coincide with those used by the Member States of the European Union. Comparisons of Latvian regions with regions in the EU should therefore be made with caution.

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**Names of all those who prepared text:****From the Central Statistical Bureau of Latvia:**

Aija Žigure

Dace Tomase

Jolanta Supe

Ilzīte Gramberga

Uldis Ušackis

Zaiga Priede

Maranda Behmane

Raitis Nadziņš

**Translator:**

Zane Ozola

**From Ministry of Transport:**

Inta Rozenšteine

**From Ministry of Environmental Protection and Regional Development:**

Laila Kūle

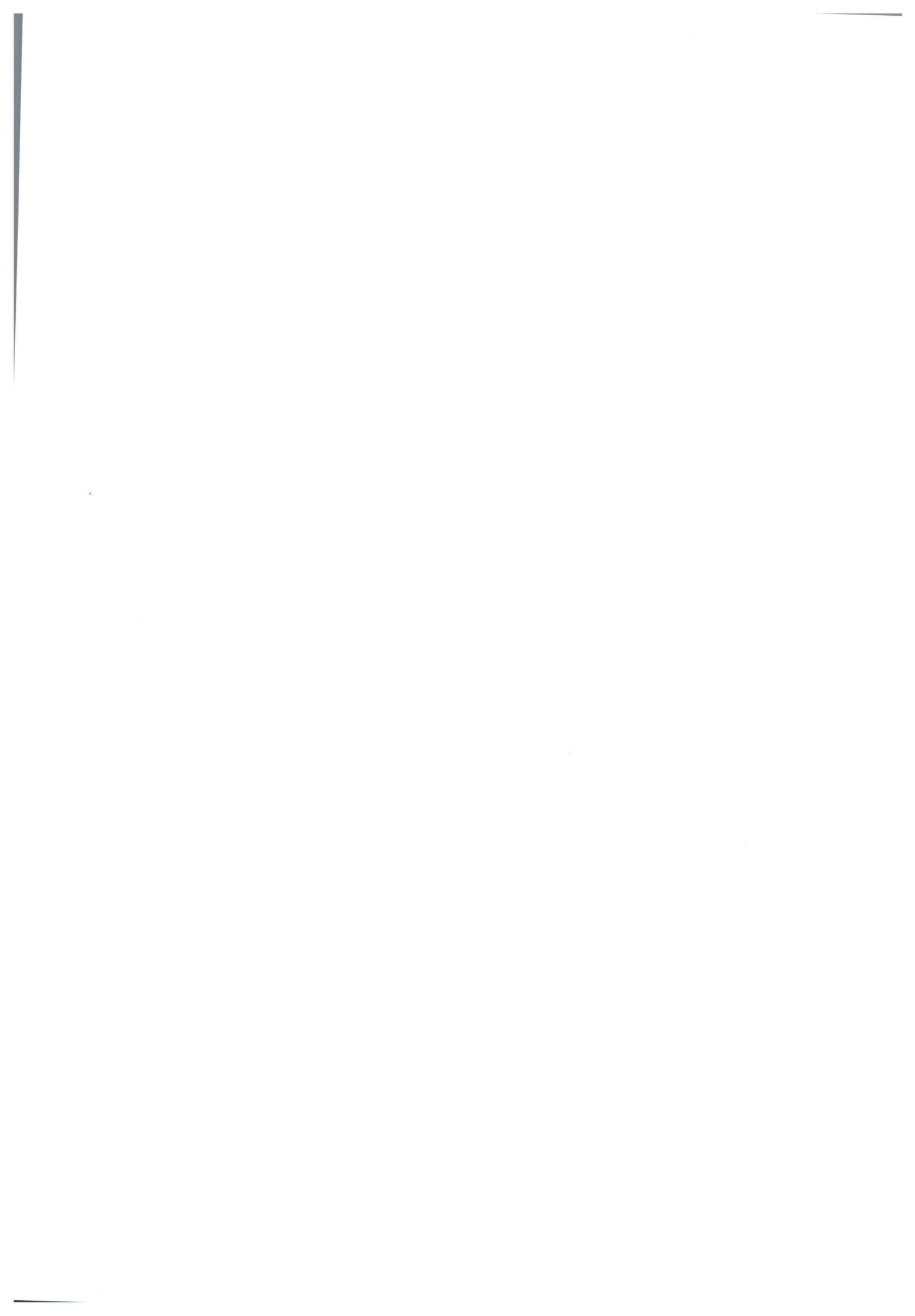
Alla Kudiņa

**From Ministry of Agriculture:**

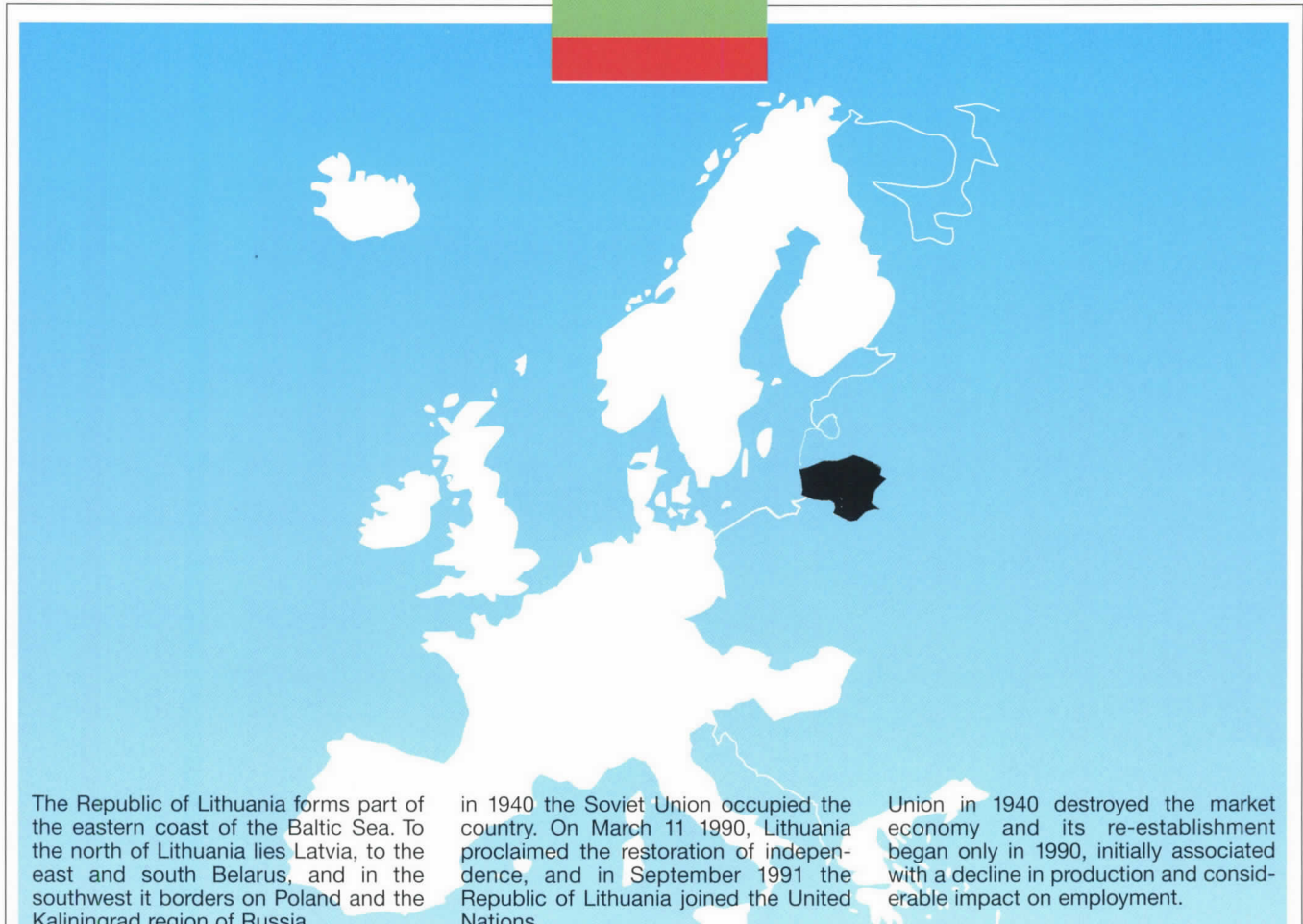
Anita Ūbele

**Photos:**

Andris Eglītis



# LITHUANIA



The Republic of Lithuania forms part of the eastern coast of the Baltic Sea. To the north of Lithuania lies Latvia, to the east and south Belarus, and in the southwest it borders on Poland and the Kaliningrad region of Russia.

The land area of Lithuania, which covers 65 300 km<sup>2</sup>, is larger than that of Belgium, Denmark and the Netherlands and in it lies the exact geographical centre of Europe, Purnuškis, which is 27 km north of Lithuania's capital, Vilnius.

The country was first consolidated into a unified state from a number of dukedoms by Grand Duke Mindaugas around 1235 AD. By the 15th century, Lithuania was one of the most powerful states in Eastern Europe and around 1410 its army blocked the Mongols and, fighting shoulder to shoulder with Poland, totally defeated the Teutonic Knights in the battle of Tannenberg. Lithuanian-Polish cooperation developed into a federation in 1569 with the Lublin Union, forming a Commonwealth of the two nations, a Rzeczpospolita. This Commonwealth lasted until Lithuania was incorporated into Russia in 1795.

After more than a century of Tsarist rule, Lithuania in 1918 declared its independence, which lasted for only 22 years, as

in 1940 the Soviet Union occupied the country. On March 11 1990, Lithuania proclaimed the restoration of independence, and in September 1991 the Republic of Lithuania joined the United Nations.

The Baltic tribes, which originally settled in the territory of Lithuania in the 7th to the 2nd century BC, are the Lithuanians of today. The Lithuanian language is the oldest Indo-European language still in everyday use. Ethnically and culturally distinct from the other Baltic States, Lithuanians form 81% of the population, with Russians forming the second largest ethnic group at 9%, while Poles amount to 7%.

Overall, the total population, some 3.7 million, is similar in size to that of Ireland or Norway. Women outnumber men by 11 per cent in Lithuania, reflecting the losses incurred during World War II and the resistance to Soviet occupation. Now some 2.9 million Lithuanians live outside their homeland, more than one million in Argentina, Australia, Brazil, Britain, Canada, Germany and the USA.

Before World War II, Lithuania was an independent state closely integrated into the world's economy. However, the annexation of Lithuania by the Soviet

Union in 1940 destroyed the market economy and its re-establishment began only in 1990, initially associated with a decline in production and considerable impact on employment.

Programmes have been launched to implement a market economy. Production has been reoriented towards goods that meet market needs and the introduction of a national currency, the Litas, has helped to overcome the crisis and to stabilise the economy.

Since July 1994 the Seimas (Parliament) of the Republic of Lithuania has initiated reform of the territorial administrative units which has resulted in the emergence of 10 counties (Alytus, Kaunas, Klaipėda, Marijampolė, Panevėžys, Šiauliai, Tauragė, Telšiai, Utena and Vilnius). This division corresponds to the NUTS level 3 of the EU regional classification. Counties were further subdivided into 56 municipalities and 446 neighbourhoods. Lithuanian counties participate in the activities of international organisations and various development programmes. Given the existence of major transit flows across Lithuania from West to East and from North to South, the geopolitical location of the country should be significant for the future development of Lithuania.





# Alytus county

## The capital of the Dzūkija ethnic region

Alytus county lies in the most southerly corner of Lithuania, and covers the entire ethnic region of Dzūkija, stretching out on either side of the Nemunas river. There have been settlements along the river for centuries, and the Merkinė, Liškiava, and Punia castles on its banks were an arena for many heroic battles with different enemies from the 14th century on when hunting manors belonging to knights were built in these places. Vytautas the Great, a duke of Lithuania, settled Tartars not far from Alytus.

Today, the county of Alytus includes the districts of Alytus, Varėna, Lazdijai and the resort town of Druskininkai. The majority of the county's population speaks Lithuanian, with Russian and other languages in use. The local dialect is called 'Dzūkai'.

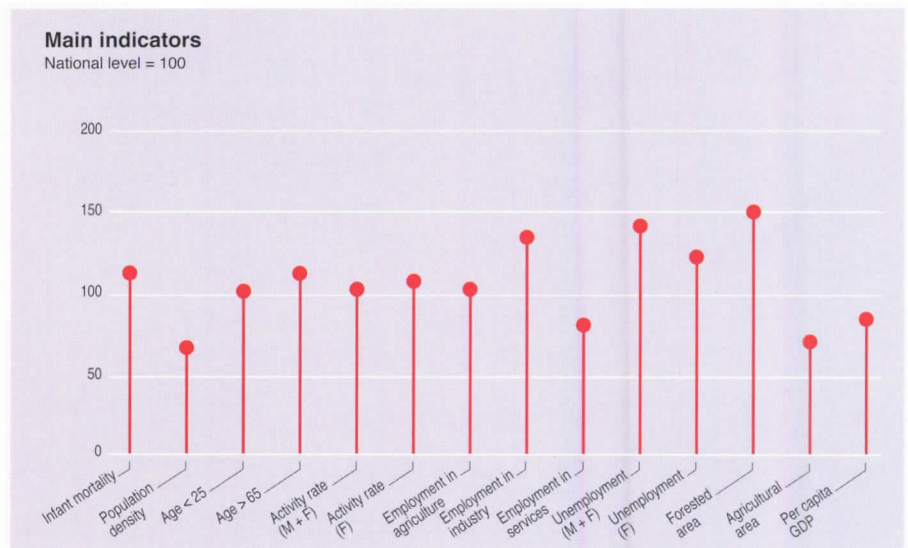
Alytus town is the centre of the county, unofficially called the capital of Dzūkija. It was first mentioned in written manuscripts in 1387. The major part of Alytus, its centre and most significant industrial enterprises, are on the left bank of the Nemunas river, whereas the right bank is a residential area.

The county is served by good rail connections, has a stretch of highway running to the east as well as other highways constructed on both sides of the Nemunas in a north-south direction.

Furthermore, the county has a rich history, and many cultural monuments. The most prominent of these are the churches of Merkinė (15th - 17th century), Simnas (16th - 18th century), and Rudamina (16th - 18th century). Liudvikas Zamenhofas (1869 - 1917), a doctor in Veisiejai, was the founder of the international Esperanto language. A prominent Lithuanian painter and composer M. K. Čiurlionis (1875 - 1911) was also born in Varėna. During the Second World War a squadron of French pilots were based on the Nemunas river in the village of Rylišķiai.



Druskininkai Health Resort  
(Photo: Kraštovtarka UAB, 1999)



## Innovative farmers

The county's farmers are remarkable for their initiative and innovativeness; for example, a number of them have started new business in the field of agrotourism. They have also tried non-traditional types of farming such as the growing of buckwheat, which appears to be profitable as the market for it both in Lithuania and abroad seems to have a good future.

Just as in other counties, farmers supplying goods to agricultural manufacturers encounter problems with late payment. For this reason, farmers lack money to acquire new equipment and machinery for their activities and to pay their taxes in due time. Furthermore, the situation in the labour market is of great concern due to rising

unemployment in the county, which was mainly influenced by the economic crisis in Russia in the middle of 1998.

Another very important problem which the county faces is the funding of the reconstruction and maintenance of its network of local roads. Positive steps to solve this problem would facilitate the development of an efficient transport network in the county, which in turn could only be beneficial to the development of agrotourism.

Alytus county is an unusual region, with good prospects for the development of ethnic, eco tourism and recreation. The county has a very diverse and rich nature, covering the largest areas of forest, lakes and rivers in Lithuania, which make it most attractive for tourism. The Dzūkija National



## Low fertility level

Alytus county is one of the smallest in the Republic, its population numbering 202 200 or 5.5% of the total population in Lithuania. 123 000 or 61% live in urban areas, with two thirds living in the town of Alytus. Rural inhabitants reside in 1 140 rural settlements. Druskininkai is the largest resort town in Lithuania, its population numbering 21 700. The population density is 37 per km<sup>2</sup>. Women account for 53% of the population.

While the natural change in the population during the last five years has been negative, the overall population in the county did not decrease due to a positive migratory balance. However, if the population is considered in the longer term, over the last 10 years, the demographic account in fact shows an increasing population here.

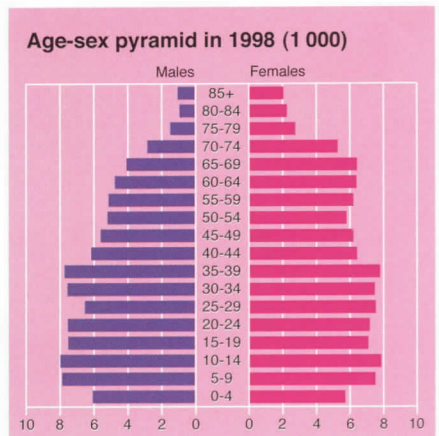
The birth rate is currently low, and has been declining in recent years, particularly between 1992 and 1995. In 1998, with a birth rate of 10.2 births per 1 000 inhabitants, it was 33% lower than in 1991. The birth rate in rural areas at 28 births per 1 000 women aged between 15 and 49 years is the lowest if compared to other counties. The decrease in marriages has had a significant influence on this low birth rate, as since 1990 the number of marriages decreased by 40%. The divorce rate is also low, at 2.6 divorces per 1 000 inhabitants. Children born out of marriage account for 11.4%, the lowest figure among the counties.

As in the whole country, the mortality rate has been increasing for several years and reached a peak during the period of 1993-1994, when it was 12.7 per 1 000 inhabitants. However, the mortality rate has now reached the same level as it was in the last decade and equals the average of the Republic (11.0). Infant mortality in recent years equalled the average rate nationally.

At the beginning of 1999, 14.6% of the county's population was aged 65 years and over. 56.0% of the population was of working age (defined as up to 60 years and 8 months for men and 56 years and 4 months for women at the beginning of 1999). Just over one fifth were of retirement age.

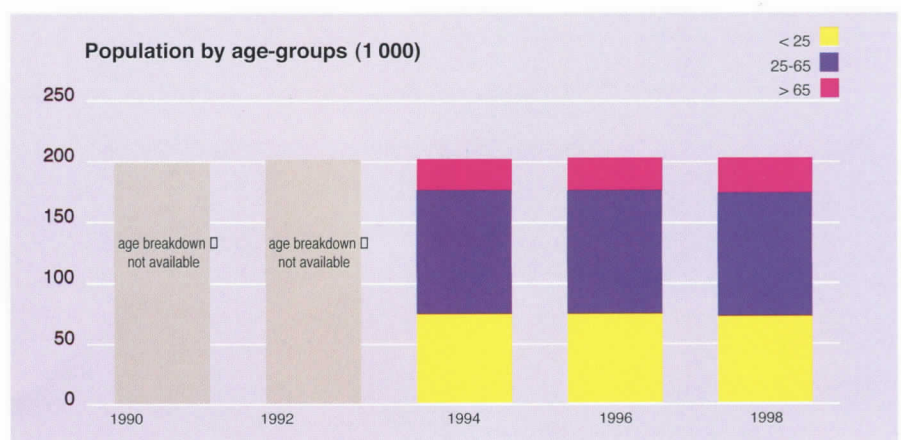
The county is experiencing a rapid increase in the age of its population, moving to a position where the number of old people exceeds the number of children. Due to this, the economic burden placed on the population of working age has increased, so that in 1998 there were 785 dependants per 1 000 working-age inhabitants, of whom half were of pensionable age.

At 77.5 years for women and 66.2 years for men, average life expectancy here is higher than the national average.



**Demographic account (1 000)**

Population (01 01 90)	198.0
Births	22.8
Deaths	21.4
Migration	2.8
<b>Population (01 01 99)</b>	<b>202.2</b>





Scale 1:1 500 000

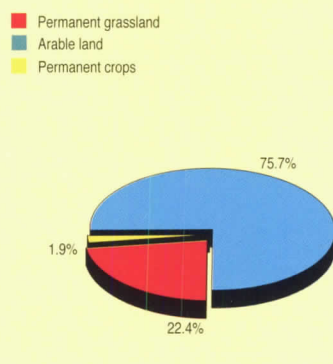
0 40 km

**Agriculture 1998**

Number of private farms all types *	35 076
Persons working in agriculture	18 000
Total agricultural area (ha)	204 025
Total livestock	120 422
Cattle per 100 ha of total agricultural land	33.0
Pigs per 100 ha of total agricultural land	52.0
Share of crop products in total agricultural output (%)	52.0
Main crops (1 000 tonnes)	
Cereals	119.7
Vegetables	21.8
Potatoes	177.7
Sugar beet	9.2

\* see explanatory notes

Park, the Žuvintas and the Čepkeliai nature reserves and the Veisėjai regional park, teeming with flora and fauna, are all situated here. The town of Druskininkai is situated at the mouth of the river Ratnyčia, and is surrounded by forests, mostly dry pine woods. Druskininkai is a well known spa town, famous for its mineral water and curative mud.

**Agricultural land use in 1998 (%)****A land of lakes, forests and mushrooms**

The total area of the county is 5 425 km<sup>2</sup> or 8.3% of Lithuania's total area. It is the southernmost county of Lithuania, and borders on Poland and Belarus.

Alytus county is situated within the Dainava plain, which is surrounded by the Sūduva and Dzūkų hills in the north, and the Eišiškių plateau in the south. The relief has a great influence on the climate of the region, and considerable variation in temperature is typical for the winter months. The average July temperature is slightly higher than in the country as a whole and this is particularly true for around the Nemunas river, where the average July temperature is the highest in Lithuania

**Which regions are similar to Alytus?**

**Land use:**  
45% forest

Aquitaine (F)  
Lõuna-Eesti (EE)  
Trentino-Alto Adige (I)

**Population:**

202 200 inhabitants  
Cuxhaven (D)  
Conwy and Denbighshire (UK)  
Kurdjali (BG)

**Employment structure:**

37% industry  
Bucuresti (RO)  
Koblenz (D)  
Pais Vasco (E)

(over 17.5 C). Precipitation amounts to 600 - 650 mm per year.

While sand and iron ore resources can be found in and around Varėna, the most important resource which the county possesses is the Druskininkai spa.

The biggest river, the Nemunas, meanders through the county making large loops and sharp turns. The Merkys river, as well as thousands of small rivulets and streams, flow into the Nemunas. The county's landscape is adorned by lakes, of which there are 400. Lazdijai district has the most lakes (207), the Dusia and Metelys being the largest.

Dzūkija is a region of forests, covering 45.6% of the county's area, and is the biggest area of woodland in Lithuania. The largest wood is found in the district of Varėna in Dainava, which covers more than half (60%) of the region. The Kapčiamiestis wood stretches on the other side of the Nemunas. Large quantities of mushrooms are found in the forests here.

Soil in the county is not fertile. The district of Varėna, being the most densely wooded, has the smallest area of arable land within the whole country, while slightly larger arable areas are found in the district of Alytus.

## Value added from industry, agriculture and non-market services

Industry, construction, and market services are very important sectors within the structure of Alytus county's economy. The share of value added from market services slightly decreased (from 31.6% to 29.2%) as compared to other counties in the period between 1996 and 1997. The share of value added from industry and construction remained the same. An interesting feature here is that the share of value added from non-market services is very big. On the basis of this indicator, Alytus county, which slightly lagged behind the capital of the country in 1996, moved into first place in 1997, with value added from non-market services accounting for 17.7%.

Agricultural land covers just over one third of the territory, three quarters of which is arable land. The arable land is mainly given over to growing crops, with cereals covering 46% of the crop area, and potatoes 8%, the latter figure the highest percentage of all the counties. While livestock productivity in the county equals the national average, the yield from the land is below average.

The county produces approximately 6% of the total output of the country. The main industrial products are refrigerators and freezers (produced by joint stock company "Snaigė"), cotton fabrics and yarn (joint stock company "Alytus tekstilė"), sparkling and still wines (joint stock company "Alita"), fodder, meat and milk products. "Snaigė" and "Alita" produce high quality goods, using the most modern production methods. "Alita" ranks 47th and "Snaigė" 57th on the list of the largest enterprises in the Baltic States.

Between 1994 and 1998 the volume of retail trade turnover in the county increased 2.3 times (as against 4 times in the country as a whole), with per capita retail trade turnover also increasing. However, the latter indicator has not yet reached the average growth rate of the country.

Since 1994 the amount of charged services provided per capita has doubled, but in comparison to the national average it was still 25% lower.

In the period from 1992 to 1997 the total level of investment in Alytus county increased almost 4 times, with direct foreign investment more than doubling between 1995 and 1997. However, the level of investment lagged well behind the general situation in the country, as both overall per capita investment and direct foreign investment were below average.

## Below average earnings not catching up with national wages

With 5% of the country's employees working here, the overall gross average monthly wage paid to them in 1997 was 10% below average. Earnings in the agricultural and fishing sectors as well as in the hotel and restaurant trade were the lowest, coming close to only half the national average in these areas.

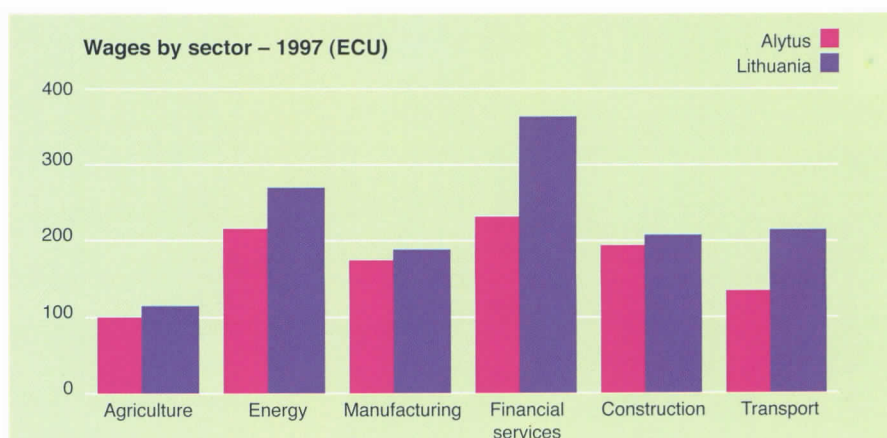
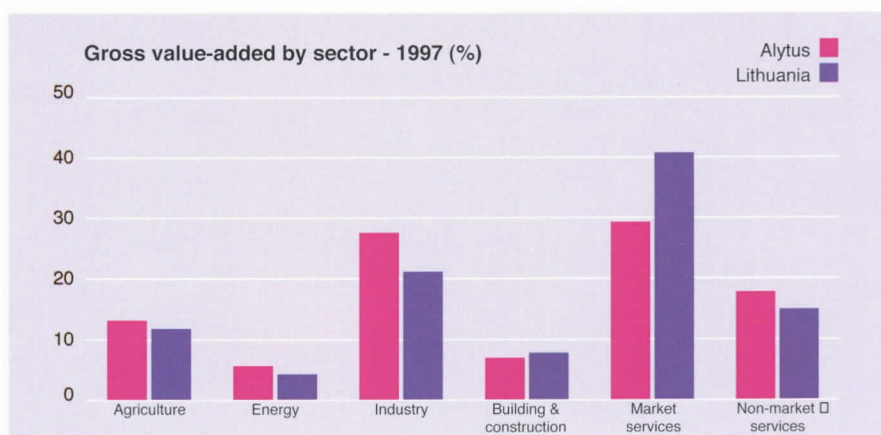
Those working in the financial, energy and construction sectors enjoyed earnings which were above the county's average wage, although in each case they were still below the national average for each sector.

## Main enterprises

Name	Activity
Alytaus tekstilė	Textile weaving
Snaigė	Electrical goods manufacturer
Dainava	Clothing manufacturer
S. Kudirkos ligoninė	Hospital activities
Alytaus šilumos tinklai	Energy supplier
Alytaus poliklinika	Hospital activities
Alytaus elektros tinklai	Electricity distribution
Alita	Wine producer

One third of the working population in the county is employed in manufacturing industries, where the average monthly wage paid was almost equal to the national average.

While average earnings in the county increased between 1995 to 1997, they did not rise as rapidly as in the economy as a whole. During this period earnings increased most rapidly in agriculture, and in the hotel and restaurant trade, but there was the greatest scope for improvement here as earnings were very low in these sectors.





## Highest unemployment in Lithuania

Alytus county suffered as did most of Lithuania from decreasing employment in the period from 1992 to 1995. Since then, the situation has started to improve, and employment is rising, although it has not yet reached the 1992 level. On the one hand this was influenced by difficulties in Alytus town, the administrative centre of the county, where the decrease in employment was influenced by the restructuring of the economy. Then, in the town of Druskininkai, it was influenced by the decreased health-care demand and the associated financial constraints on sanatoria and treatment facilities.

While employment decreased by 14% overall in the county between 1992 and 1998, as against 11% in Lithuania, the district of Alytus was worst hit as here it decreased by 38.4%. In contrast, employment actually rose in the Varėna district.

Between 1995 and 1998 the number of people employed in agriculture decreased by 19.4% as against 9% in Lithuania. This decrease was partly offset by the sharpest rise in employment in industry (19.7%) experienced in the country, and by an above average rise in service-sector employment (16.5% as against 8% nationally). This has resulted in a quite different sectoral distribution of employment from the national picture, as in 1998 Alytus county had the highest percentage employed in industry at 37%, whereas service sector employment was 10% below average and one of the lowest figures in Lithuania.

According to Labour Force Survey data, the employment rate in 1998 was 51.4% (down from 54.5% in 1997). This was influenced by the decrease in male employment from 61.5% in 1997 to 52.8% in 1998, which is one of the lowest figures of all counties.

Between 1994 and 1997, 2729 graduates were retrained to improve their qualifications, and 4797 people received initial training to prepare them for entry into the labour market.

According to Labour Exchange data, unemployment in the county reached a critical level in 1996, when it was one of the highest in the country. In particular, female unemployment rose sharply and almost

doubled between 1993 and 1998. Youth unemployment was not severely affected and increased only slightly during the same period. While the vast majority of the unemployed have been without work for more than one year, the situation here is actually less worrying than in other counties.

Labour Force Survey data from 1998 reveals that the county has the highest level of unemployment in Lithuania at 18.8%, with male unemployment well above 20%.

## Important railways, good roads

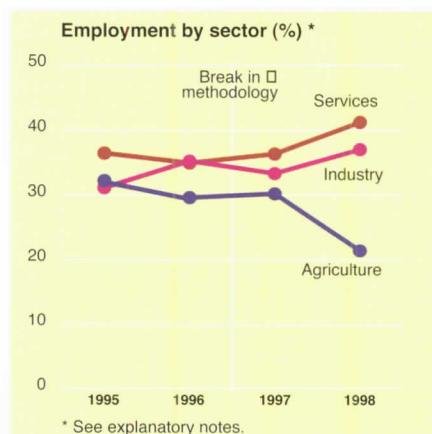
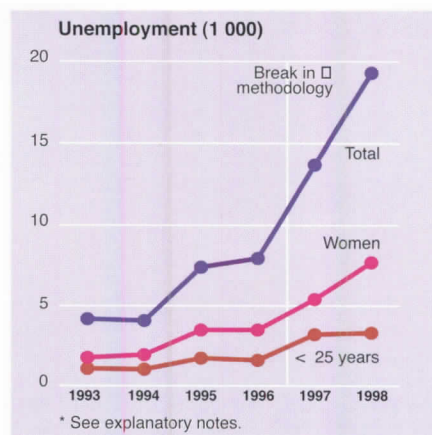
Several important railway routes cross the county. Among these are part of the St. Petersburg to Warsaw railway which runs down the eastern part of the county. The only length of track in the country built to European standards has been constructed from the border with Poland to the Šeštokai railway station. From the town of Alytus another railway line, which splits into the Marijampolė and Suvalkai (Poland) lines, runs westwards.

In terms of major roads, the Alytus - Gardinas (Belarus) highway stretches towards the east. The network of roads in the county is good and evenly distributed, with two thirds of all state roads having had their surface improved. 50 100 private passenger cars are registered here.

In the district of Lazdijai, at the border with Poland there is an important border crossing featuring major east-west flows of both passengers and cargo. Another border crossing with Belarus is situated near the town of Druskininkai.

The number of phones in the county continues to increase. At the beginning of 1998 there were 52 276 phones, of which 84% were installed in flats. At 217 telephones per 1 000 inhabitants, the county is below the Lithuanian average of 232, although it was noted that rural areas in the district of Varėna have a higher level of telephone penetration than the rest of the county.

There is no airport in the county, and the part of the Nemunas river which crosses the county is not navigable.



## Employment by age group - 1998 (%)

	< 25 years	25-54 years	> 54 years
Men	16	73	11
Women	11	78	11
Total	14	75	11

## Home to Lithuania's largest nature reserve

Emissions of pollutants into the air from stationary sources in 1997 consisted on average of 62 kg of solids and 819 kg of gaseous and liquid substances per 1 km<sup>2</sup>.

The sewerage network in the county is less developed than in any other county. The amount of discharged effluent is also below average. However, it is noteworthy that the sewerage treatment plants are of high quality, and 82% of all effluents receive full biological treatment. Similarly, the water supply network is not very well developed here, with inhabitants using natural water extraction sources such as deep wells.

Penetration of the gas network per 1 000 population is well below average, and the tendency is for the population to use liquid gas, the consumption of which is double the national average.

Čepkeliai is the largest nature reserve in Lithuania. It covers an area of 10 500 ha, comprising mainly marshes and forests. 33 kinds of mammals, 182 species of birds, 11 kinds of fish, 709 variety of plants are protected in the reserve. Žuvintas is the third largest nature reserve in the country, established around the lake of the same name. 40 kinds of mammals, 256 species of birds, 21 kind of fish and 601 varieties of plants are protected within the reserve.

The Dzūkija national park is the largest national park in Lithuania (55 900 ha), and also offers protection to a wide variety of mammals, birds, fish, and plants. Within the park, a 43 700 ha area is covered by forest. The park was established in 1991 with a number of key objectives: to protect a valuable natural and cultural heritage, to bring an ecological balance to the river

### Surfaced public roads – 1997

	Alytus Lithuania	
Length in km per km <sup>2</sup> *	0.18	0.17
Length in km per 1 000 population *	4.8	3.0
Length in km per 1 000 private passenger cars (1998) *	19.4	12.0
% private passenger cars in total number of vehicles (1998)	85	84
Number of accidental deaths per 1000 private passenger cars (1998)	1.0	0.9

\* See explanatory notes.

### Environment - 1997

	Alytus Lithuania	
Towns connected to public water supply	7	107
Towns connected to public sewerage	7	105
Sewerage subject to treatment (%)*	99	76
Per capita consumption of water (m <sup>3</sup> )*	35.2	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	5 145
Primary	12 360
Secondary comprehensive	19 761
Secondary vocational	3 805
Tertiary (higher education)*	907
Total	41 978

\* See explanatory notes.

### Health care - 1997

	Alytus Lithuania	
Number of hospitals	8	187
Number of doctors per 10 000 population	24.9	39.8*
Number of hospital beds per 10 000 population	81.9	98.4*

\* See explanatory notes.

### Telephone services

	1995		1997	
	Alytus Lithuania		Alytus Lithuania	
Lines per 1 000 population	199	204	217	232
% connected to digital network	:	:	:	:

basins of the Nemunas and Merkys confluence, to foster cultural traditions in the Dzūkija region and to create favourable conditions for the development of tourism in the area.

## More children in education

Since 1994, the number of children receiving pre-school education has been increasing. In 1997, 46% of all children in the county aged between 3 and 6 years attended pre-school. In the period from 1992 to 1997 the number of pupils in comprehensive schools increased by 3 000 and in vocational schools by 900. Only one technical school is located in the county, and the number of students in this school increased by over 300 between 1992 and 1997. Every year, 6% of the county's secondary school graduates enter higher institutions elsewhere in the country.

The number of physicians per 10 000 population in the county decreased marginally (from 26.1 to 24.9) in the period from 1994 to 1997. This is influenced by a drop in the number of physicians in Druskininkai town, which is the largest resort town in the county. At 81.9 hospital beds per 10 000 inhabitants, the number in 1997 dropped down below the national average. The number of visits to out-patient clinics has remained stable.

While the stock of books held by libraries has a tendency to decrease in the Republic, in Alytus county it increased. Ethnic museums located in the county do not attract a large number of visitors.

The local drama theatre continues its activities, and in 1998 it arranged 55 performances, which were attended by 10 000 spectators.



# Kaunas county

## Rich history and architecture

Kaunas county is situated in the middle of Lithuania, at the confluence of two major rivers, the Nemunas and the Neris. It borders the ethnic regions of Žemaitija, Aukštaitija, Dzūkija, and Suvalkija. It is surrounded by 6 administrative units of Lithuania, namely the counties of Alytus, Marijampolė, Panevėžys, Šiauliai, Tauragė, and Vilnius.

The Nemunas river, which meanders across the county, has been inhabited since neolithic times and is considered to be one of the oldest inhabited places in Lithuania. Many burial mounds from the 8th to 12th centuries, old fortresses and their remnants have been discovered in the county.

The centre of the county is the city of Kaunas, which was founded in 1140, and was granted city status in 1408. The city prospered between the 15th and 16th centuries. It grew further in the period from 1919 to 1940, when Lithuania was an independent state and the city became the temporary capital of the country and the main administrative, cultural, educational, health care, industrial and trade centre.

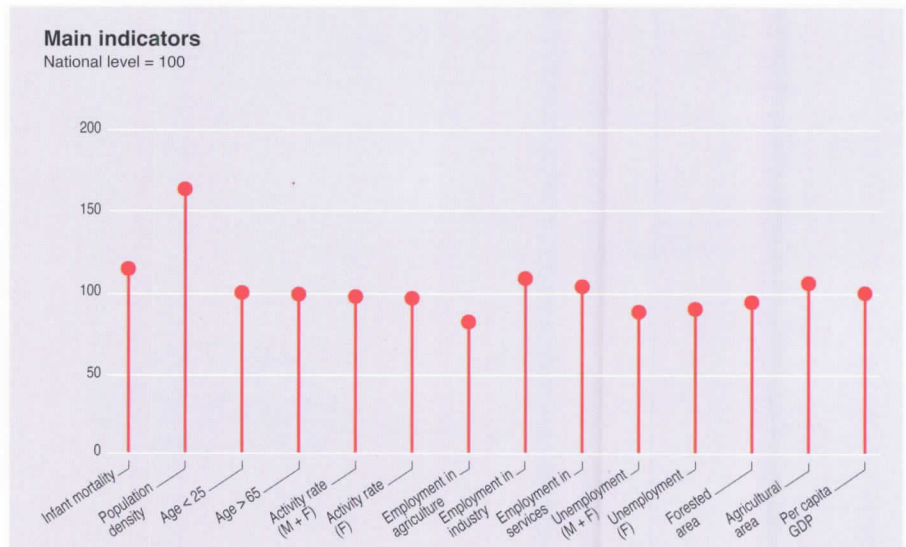
Kaunas county includes the districts of Jonava, Kaunas, Kaišiadorys, Kėdainiai, Prienai, and Raseiniai, and Kaunas city. The majority of its population speaks Lithuanian, with Russian, and Polish also in use.

The county is known for its architectural monuments. The Pažaislis monastery (17th-18th century), the Raudondvaris palace and castle (17th century) were built in the Renaissance style. Kaunas cathedral (15th – 17th century, the largest church of Gothic design in Lithuania, and Zapyškis church (16th century), in late Gothic style, are of great importance for the architectural heritage of the county.

One of the founding fathers of Lithuanian literature, Mikalojus Daukša (1527-1613), was born in Kėdainiai district. He is said to be the author of the first Lithuanian language book published in Lithuania.



Vilnius Street in Kaunas  
(Photo: Kraštotvarka UAB, 1999)



## Strong academic tradition

Kaunas county is noted for its strong academic tradition. It has eight institutes of higher education, and the Kaunas University of Technology is the largest university in the Baltic States, with 10 faculties and 15 institutions. 9 scientific research institutes have also been established in Kaunas city and county. Of these, some are the only ones in Lithuania to undertake research in their field, such as the Lithuanian Energy Institute, the Transport and Road Research Institute, and the Lithuanian Food Institute.

As a member of the European Regional Assembly, Kaunas county is very active in international cooperation. It is a member of three working groups for the cooperation

and organisation of the Baltic States' sub-region, namely Social Care and Welfare, Economic Development and Cooperation, and Nature and Environmental Protection. Furthermore, cooperation agreements have been signed with Kroneberg (Sweden), Frederiksborg (Denmark), Pajjat-Hame (Finland) and Kaliningrad (Russia), and Komi (Russia). The county is also active in the implementation of international projects funded by the Interreg IIC and PHARE CBC programmes such as the 'Via Baltica: Zone of spatial development'.

Plans to establish a free economic zone in Kaunas, covering an area of 1053 ha, should spur further regional development. Karmėlava airport, being a part of the zone, will effectively be used for the development of a communications network,



### Agriculture 1998

Number of private farms all types *	86 520
Persons working in agriculture	55 100
Total agricultural area (ha)	460 075
Total livestock	302 625
Cattle per 100 ha of total agricultural land	28.0
Pigs per 100 ha of total agricultural land	48.0
Share of crop products in total agricultural output (%)	61.0
Main crops (1 000 tonnes)	
Cereals	459.5
Vegetables	100.4
Potatoes	327.8
Sugar beet	239.4

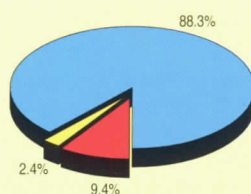
\* see explanatory notes

comprising of water, air, rail and road, to handle transit transportation between North, Mid, West and East European countries.

Currently the county suffers from a shortage of investment funds, and lags behind other areas in terms of per capita investment. Its economic and intellectual potential is also not fully exploited.

### Agricultural land use in 1998 (%)

■ Permanent grassland  
■ Arable land  
■ Permanent crops



### Largest lake, many rivers

The total area of the county of Kaunas is 8 170 km<sup>2</sup> or 12.5% of Lithuania's total area. It is situated in the central part of Lithuania and is the only county without an external border. While the "Middle Lowland" covers the major part of Kaunas, there is a hillier area in the southern part of the county (up to 200 m).

The average January temperature (- 5.0° C) is close to the country's average. In summer the warmest weather is in the central part of the county (the average July temperature is 17.5° C). Average annual rainfall varies in different parts of the county, ranging from 550 mm in the north to 700 mm in the southwest and south east of the county.

### Which regions are similar to Kaunas?

#### Area:

8 170 km<sup>2</sup>

Alto Trás-os-Montes (P)  
Marne (F)  
Bács-Kiskun (HU)

#### Land use:

28% forest

Schwaben (D)  
Auvergne (F)  
Pomurska (SI)

#### Employment structure:

17% agriculture

Lääne-Eesti (EE)  
Extremadura (E)  
Voreio Aigaio (EL)

Although the county cannot be described as rich in natural resources, some gravel, clay, and anhydrite sources have been exploited here.

The network of rivers is dense here, with four rivers traversing the county, namely the Nemunas, the Neris, the Nevežis, and the Dubysa. Furthermore, a regional park has been established on part of the Nemunas river.

Birštonas is a spa town situated on the right bank of the Nemunas, and its medicinal springs and mud therapy were exploited as early as the 14th century. Today, its mineral waters are used for the treatment of respiratory and joint-related diseases.

While there are only 100 lakes in the county, it has many artificial reservoirs. Of these, the largest is Kaunas reservoir, which was constructed by damming up the Nemunas river and building the Kaunas hydropower station there. Today, Kaunas reservoir is the largest body of fresh water in Lithuania.

Agricultural land covers more than half of the total area and forests cover 28.1% of the county's total area. In the Jonava district more than one third of its total area is taken up by the Gaižiūnų forest.





## Highest average life expectancy

The county of Kaunas is one of the largest in the country in terms of the size of its population, which numbers 754 000 or 20.4% of the total population in Lithuania. With a population density of 92.3 people per km<sup>2</sup>, it is second only to Vilnius county in terms of density. Three quarters of its population live in towns, with the majority of them residing in Kaunas city, the second town by size in Lithuania.

Due to a decrease of 25 000 people in the city of Kaunas between 1992 and 1998 the population in the county as a whole also dropped slightly in this period. Internal migration saw the number of rural inhabitants increase however. While net migration was positive in 1998, the natural change in the population has been negative since 1994 as the number of deaths have outweighed the number of births. In Kaunas county women outnumber men, with 1154 women per 1 000 men.

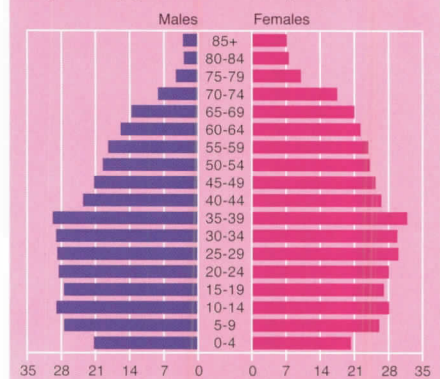
Though the number of births has been continuously decreasing since 1992, the overall situation is more positive now than at the start of the 1990s. In 1990 the birth rate here was lower than the national average, whereas by 1998, due to the young age structure of the population, it was the same as the national level. The decline in the number of marriages influences the decrease in the birth rate as between 1990 and 1998 the number of marriages halved. Meanwhile, the number of divorces, after having increased at the beginning of the decade, has fallen back again. With 16 % of children born out of marriage, this is on a par with the national average.

The mortality rate in the county was slightly below average in 1998. The highest mortality level was reached in 1994, whereas by 1998 it had returned to its 1990 level. Female mortality from malignant neoplasm is the highest in the country. Infant mortality rates tend to be on average with slight deviations in some years.

Average life expectancy, at 66.7 years for men and 77.1 years for women, is higher here than in any other county.

The county suffers less from an ageing population than other parts of Lithuania. At the beginning of 1999, the population aged 65 and over accounted for 12.8% of the county's population, a figure which is below the national average and only less in Klaipėda, Vilnius and Telšiai counties. The county also has the second highest percentage of working age population (59.1%) after Vilnius county. Due to its young age structure, the working age population had the lowest number of dependants on it in 1998, with 691 dependants per 1 000 of working age, half of whom were of pensionable age.

Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

Population (01 01 90)	763.6
Births	83.0
Deaths	77.9
Migration	-14.7
Population (01 01 99)	754.0

Population by age-groups (1 000)



## Thriving industry and market services

Industry and market services are of great importance in the county's economic structure. Value added from industry at 24.2% in 1997 was higher than average, while just under 40% of the county's value added was produced by the market services sector.

Agricultural land covers 56.5% of the county's total area, with the main part of it being arable land. Grains and fodder crops dominate the crop structure. The soil is fertile here and the yield of the grain crops is above average. Although the amount of land given over to potato growing is not extensive, the potatoes yield is nevertheless the highest in the country. Livestock productivity, by contrast, is slightly below average.

Basic industrial goods produced in the county include mineral fertilisers (produced by joint stock companies 'Achema' in Jonava and 'Lifosa' in Kėdainiai), chemical fibres and yarns (produced by joint stock company 'Dirbtinis pluoštas' in Kaunas), textiles (produced by joint stock company 'Kauno audiniai', and confectionery products (produced by 'Kraft Jakobs Suchard Lietuva'). Companies producing construction materials are also expanding in the county.

Some of these companies rank quite high in the list of top companies in the Baltic States, with 'Achema' in 24th place, 'Kraft Jacobs Suchard Lietuva' in 30th place and 'Lifosa' in 35th place.

The volume of retail trade turnover increased 4.9 times in the county in the period from 1992 to 1997, with the per capita turnover of retail trade also increasing, so that in 1997 it exceeded the national average by 12% (886.8 ECU in Lithuania as against 995.7 ECU here).

Per capita GDP is an effective measure of economic performance, and per capita GDP in Kaunas county puts it in 4th place in Lithuania and very close to the national average in 1997.

In the initial stage of privatisation almost three quarters of the state capital has been privatised. Furthermore, investment has been increasing rapidly in the county, and between 1992 and 1997 the total amount invested here increased 5.4 times. While foreign investment more than doubled between 1995 to 1997, it was still well below the national average in 1997. Foreign companies bought into a number of local enterprises, with US investment going into joint stock companies 'Kraft Jakobs Suchard Lietuva', and 'Sanitex', and Luxembourg companies investing in 'Aviabaltika', and 'Ave-Matrox'.

## Kaunas residents enjoy higher than average disposable income

One fifth of the country's employees work in Kaunas county, and their average monthly earnings were very close to the national average, running at 95% of Lithuania's average wage in 1997. Those working in hotels and restaurants earned the lowest wages, whereas those in the financial sector were the highest earners, with the difference between these sectors almost 3 fold. In comparison to the national average for specific branches of the economy, wages were below average in the energy, financial services and transport sectors.

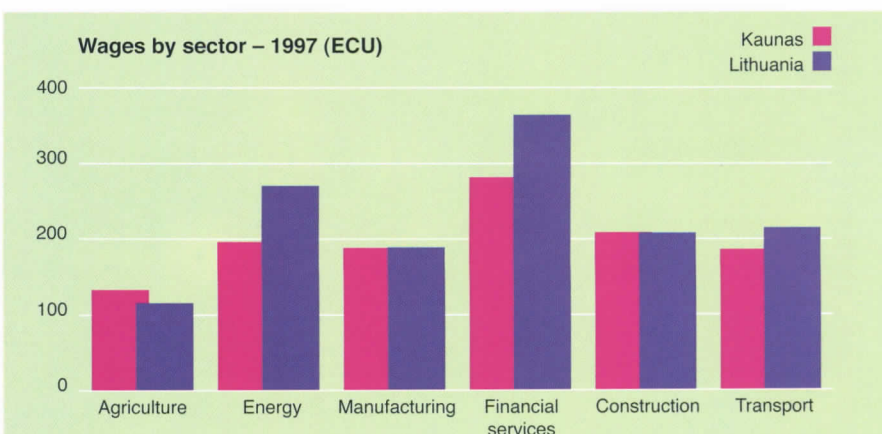
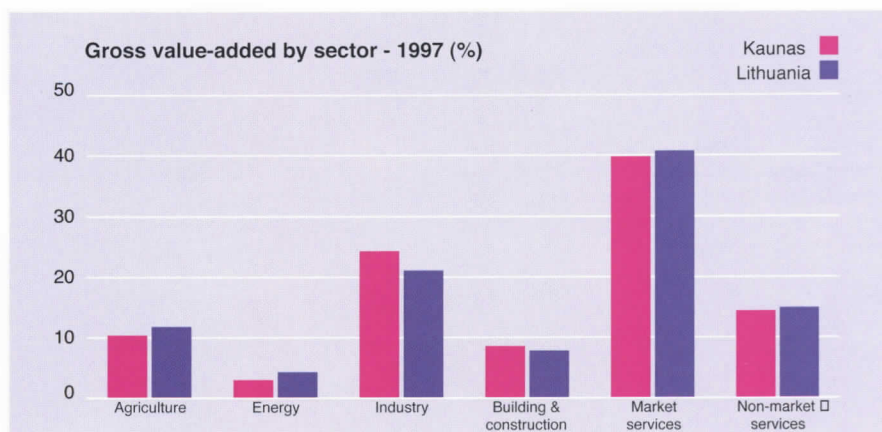
Average wages and salaries in the county in the period from 1995 to 1997 increased at almost the same pace as those nationally. Wages and salaries in the high paid sectors, such as electricity, gas and water supply, financial services, increased at the slowest pace.

On average a Kaunas city resident had a higher disposable income (13% more) than the national average. Kaunas residents

### Main enterprises

Name	Activity
Achema	Manufacture of mineral fertilizers
Kauno medicinos universiteto klinika	Hospital activities
Kausta	Civil engineering
Lietuvos žemės ūkio universitetas	Higher education
Kauno medicinos universitetas	Higher education
Šatrija	Clothing manufacturer
Lifosa	Manufacture of mineral fertilizers
Kauno energija	Energy supplier
Drobė	Textile weaving
Dirbtinis pluoštas	Textile manufacturer

also spent more of their income on health care, with the per capita average expenditure in Kaunas city almost 45% more than the national average.





## Below average unemployment

Between 1992 and 1998 the overall level of employment dropped by a similar amount to the decrease nationally (11%), although since 1996 this trend has been slightly reversed, and employed numbers are on the increase again. The drop in employment was not consistent throughout the county, as the decrease was greater in Kaunas city, where the number of employed decreased by 13.8%, while the district of Kėdainiai saw its employment actually increase.

The employment structure here is somewhat different from other counties. In 1998 as compared to 1995 the number of people employed in agriculture decreased very slightly, whereas it barely increased in industry, and service sector employment rose by 4%, albeit a slower than average growth rate in this area.

The employment rate in the county is lower than average, and in fact the second lowest rate in the country. The employment level for both men and women has however remained stable. Between 1994 and 1997, 7 000 graduates and 20 000 workers improved their qualifications or were re-trained.

Using Labour Exchange data on registered unemployed reveals that in 1998 the unemployment rate was 4.6% and the lowest in the country. However, the unemployment level differed across the county. In the districts of Kaunas and Jonava it was considerably higher than the average indicator in the county, whereas in Kaunas city, and in the districts of Kėdainiai and Prienai it was 50% lower. Moreover, the unemployment rate in Prienai district is the lowest in the country. While the number of women who were unemployed increased considerably between 1993 and 1998, the number of men who were unemployed barely changed.

According to the Labour Force Survey, the overall level of unemployment in the county is well below average, standing at 11.5% in 1998 as against 13.3% in the country as a whole. The level of male unemployment equalled that of women in 1997, however by 1998 the rate of female unemployment had decreased from 14.1% to 10.9%. Youth unemployment (25 years and below) in the total unemployed grew to reach 18.0%, and in the districts of Jonava, and Raseiniai it was as high as 20.7% and 21.4% respectively.

## Good roads and high car ownership

Situated in the centre of Lithuania, Kaunas county has one of the best transport networks in the country. Railways and highways stretch across the county to Vilnius, Riga (Latvia), Kaliningrad (Russia), and Poland. Two international highways cross the county. The Via Baltica connects Helsinki-Tallinn-Riga-Kaunas-Warsaw, while another road leads from Klaipėda through Kaunas, Vilnius and on to Minsk.

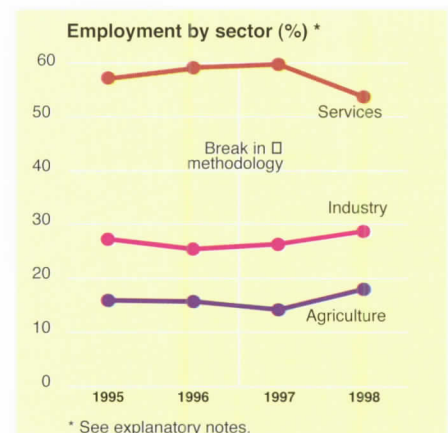
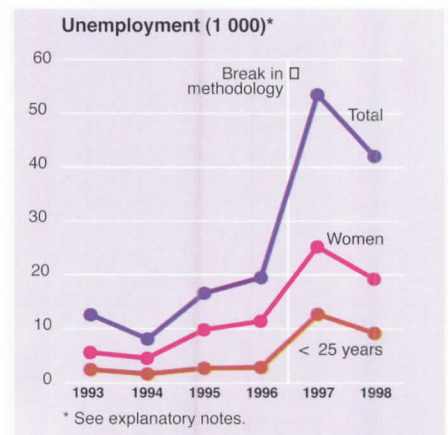
Karmėlava airport is located in the county. It meets international standards and is capable of servicing all types of aircraft. The Nemunas river is the most important waterway and is suitable for the transportation of cargo, and passengers as well as being capable of handling developing tourism along its banks. From the Nemunas river here it is possible to travel all the way to the Curonian Bay.

Kaunas is one of the country's main railway junctions, with lines connecting Vilnius, Šiauliai, Marijampolė and Kaliningrad. There was 257 km of track at the end of 1998, of which 139 km was double track, and 50 km electrified lines. At 32 km per 1 000 km<sup>2</sup> the railway network is denser than average here.

There are 2 792 km of roads in Kaunas county, with an above average share of them having had their surface upgraded. Road density at 342 km per 1 000 km<sup>2</sup>, as well as the density of roads with an improved surface at 198 km per 1 000 km<sup>2</sup>, are both above average.

The number of cars has been rapidly increasing, and between 1994 and 1997 went from 168 to 241 cars per 1 000 population. One fifth of all cars in the country are registered in Kaunas county.

Inhabitants of Kaunas county are better provided with telephones than on average. Between 1995 and 1997 the number of telephones per 1 000 population increased from 223 to 248, as against 204 to 232 in Lithuania.



	< 25 years	25-54 years	> 54 years
Men	12	73	15
Women	8	81	11
Total	10	77	13

### County suffers from above average levels of pollution

Emissions of pollutants from stationary sources are influenced by the presence of large enterprises producing nitrogen and phosphate chemical fertilisers in Jonava and Kėdainiai. 206 kg of particulate matter and 2 484 kg of gaseous and liquid substances were emitted per 1 km<sup>2</sup> in 1997, with both these figures exceeding the national average.

Kaunas county currently experiences serious problems in the treatment of its wastewater. Only one third of all waste water is passed to sewerage treatment plants, and just under one third of all discharged water receives biological treatment. These figures should change after a biological treatment plant is constructed here.

The water supply network works quite efficiently servicing the needs of inhabitants and enterprises. The population of the county also has better gas connections in comparison to other counties. The length of gas piping is 0.70 km per 1 000 population. Natural gas is most often used in industry and for heating private houses and consumption of natural gas is much higher here than in other counties.

The only pumped storage power plant in the Baltic States is situated in Kruonis. After its construction is completed, its expected capacity will be 1 600 MW. Currently, its capacity is 800 MW. The largest hydroelectric power station, on the Nemunas dam in Kaunas (capacity 100 MW), has been supplying electricity for several decades. The Kaunas heat and power station, which was built several years ago, has a capacity of 170 MW.

### Surfaced public roads – 1997

	Kaunas Lithuania	
Length in km per km <sup>2</sup> *	0.20	0.17
Length in km per 1 000 population *	2.1	3.0
Length in km per 1 000 private passenger cars (1998) *	8.4	12.0
% private passenger cars in total number of vehicles (1998)	84	84
Number of accidental deaths per 1000 private passenger cars (1998)	0.8	0.9

\* See explanatory notes.

### Environment - 1997

	Kaunas Lithuania	
Towns connected to public water supply	14	107
Towns connected to public sewerage	14	105
Sewerage subject to treatment (%)*	33	76
Per capita consumption of water (m <sup>3</sup> )*	41.2	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	19 694
Primary	41 876
Secondary comprehensive	67 771
Secondary vocational	12 586
Tertiary (higher education)*	37 263
Total	179 190

\* See explanatory notes.

### Health care - 1997

	Kaunas Lithuania	
Number of hospitals	29	187
Number of doctors per 10 000 population	43.4	39.8*
Number of hospital beds per 10 000 population	113.1	98.4*

\* See explanatory notes.

### Telephone services

	1995		1997	
	Kaunas	Lithuania	Kaunas	Lithuania
Lines per 1 000 population	223	204	248	232
% connected to digital network	:	:	:	:

### Lowest secondary school attendance

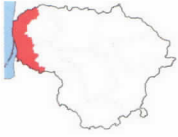
The number of children attending kindergartens has been increasing very rapidly, and in 1998 53% of all children aged 3-6 attended kindergarten. Two private pre-school nurseries are located in the city of Kaunas.

While the number of pupils in comprehensive schools has been increasing in recent years, the number of children aged between 7 and 18 attending school was the lowest in the country at 84%.

The number of students in tertiary education at university level has also been growing rapidly and by 1998 there were 29 355 students in such institutes, from which 4 000 students graduate every year. Almost half of Lithuania's university level institutes are concentrated in Kaunas county, including 4 universities, the Lithuanian veterinary academy, the Lithuanian physical training institute, as well as four subsidiaries of tertiary establishments from other areas. In 1999 the International School of Management, one of the first private institutes in the country, was opened in Kaunas city.

Ongoing health care reform in Lithuania saw the number of physicians per 10 000 population decrease, although it was still above average. While the number of hospital beds per 1 000 also dropped, in 1998 Kaunas county was second only to Klaipėda county for its provision of beds per 1 000.

Most museums in the county are situated in the city of Kaunas. The museum of the most prominent Lithuanian artist and composer, M. K. Čiurlionis, receives 100 000 visitors every year. The Lithuanian folk museum in Rumšiškės (Kaišiadorys district) had 78 000 visitors in 1998. There are also 3 state theatres in the county.



## Klaipėda county

Sea gateway to Europe and link between East and West

Klaipėda county is situated in the western part of Lithuania, in the Pajūris lowland. The county adjoins the Kuršių marios (the Curonian Bay) and the Baltic Sea, and includes the districts of Klaipėda, Kretinga, Skuodas, and Šilutė, the city of Klaipėda as well as the resorts of Neringa and Palanga. At the heart of the county is Klaipėda city, the third largest city by size in Lithuania, and its only sea port, the functioning of which influences the economy of the region, its structure as well as the lifestyle of its inhabitants.

The county occupies an uneasy position at the crossroads of Lithuania's history. Through the centuries it has been occupied by foreign powers on numerous occasions, the most recent being in 1937 when it was annexed by Germany.

The majority of the county's population speaks Lithuanian, with Russian also in use. The local dialect is called 'žemaičiai'.

Klaipėda city forms a long, narrow strip beside the Curonian Bay and the Baltic Sea. Within its boundaries at the mouth of the Danė river, the remains of a fortress, built by the Balt tribes to defend Lithuania from attack by Norman Vikings, have been discovered. The rectangular street network, characteristic of the Middle Ages, is typical of the city.

With its seaside areas of Palanga, Karklė, Giruliai, Melnragė, and the Curonian Spit, Klaipėda has much to offer in terms of tourism and recreation. Palanga, the largest resort situated on the broad sandy beaches of the Baltic Sea, is known for its healthy climate, spas, and mud baths. Its palace, in the Neo-renaissance style, currently houses a unique amber museum, surrounded by one of Lithuania's finest parks.

One of the founding fathers of Lithuanian literature, Liudvikas Rėza (1778-1849) was born in the Curonian Spit, in the village of Karvaičiai. The memory of Tomas Mann, the German writer who resided in the county, is preserved by the town museum in Nida. Klaipėda also has a maritime museum and a dolphinarium.

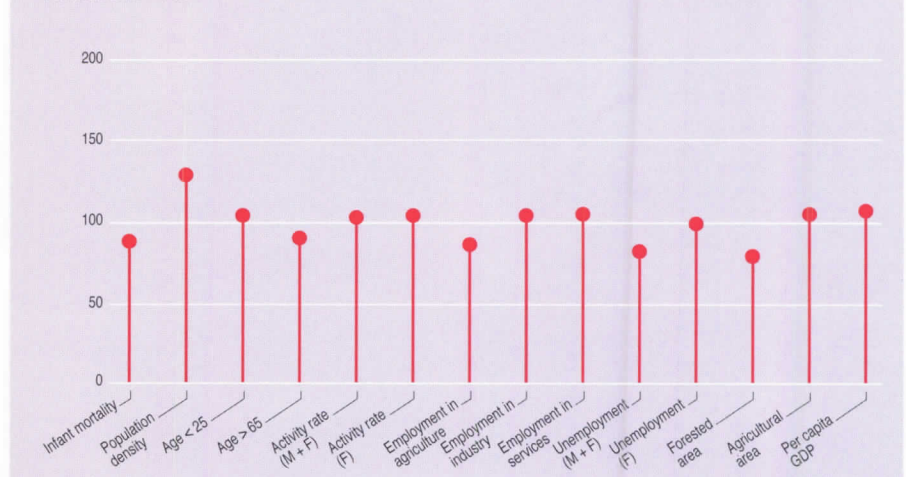
The county is known for its architectural monuments - the Klaipėda Renaissance church (16th century), the Kretinga Pranciškonai monastery and church (17th century) while the Degučiai church (18th century) is the only church in Lithuania of triangular design.



Klaipėda port and city centre  
(Photo: Kraštotvarka UAB, 1999)

### Main indicators

National level = 100



### Considerable foreign investment

The strength of Klaipėda county relates to its thriving economy, second only to that of Vilnius county. In particular, its large seaport plays a vital role in this development.

Direct foreign investment has been increasing rapidly, thanks to improvements in the investment climate and conditions in the county. Klaipėda ranks in second place after the capital of the country by amount of direct foreign investment. Major European enterprises are present in the county, with Danish and Norwegian capital invested in ship-building and repair.

Foreign companies are also attracted by the possibility of Lithuania's major seaport enterprises being privatised. There has also been foreign investment in oil extraction (partnership 'Minijos nafta' and 'Genčių nafta'), and in the production of construction material (joint stock company 'Gargždų mida'). Enterprises such as 'Vakarų laivų remontas' (ship building and repair), 'Naftos terminalas', and 'Švyturys' also play a significant part in the positive economic climate of the county.

The county's weaker point lies in the uneven development of regions within it. While the potential from industry, and from the services and financial sectors, is concentrated in Klaipėda district, agriculture prevails in outlying areas, namely in the districts of Skuodas and Šilutė, where the



Scale 1:1 500 000

0 40 km

### Agriculture 1998

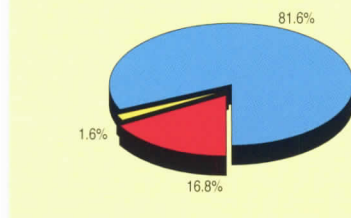
Number of private farms all types *	43 509
Persons working in agriculture	33 300
Total agricultural area (ha)	320 528
Total livestock	192 308
Cattle per 100 ha of total agricultural land	32.0
Pigs per 100 ha of total agricultural land	44.0
Share of crop products in total agricultural output (%)	52.0
Main crops (1 000 tonnes)	
Cereals	189.3
Vegetables	47.6
Potatoes	210.0
Sugar beet	0.0

\* see explanatory notes

possibilities for investment are less. The district of Šilutė, situated on the Nemunas river, constantly suffers from spring flooding, the solution to which requires considerable investment and drastic engineering decisions.

### Agricultural land use in 1998 (%)

- Permanent grassland
- Arable land
- Permanent crops



### A unique landscape

Located in the western part of Lithuania, Klaipėda county's 5 746 km<sup>2</sup> represents just under 8.8% of Lithuania's total area. The county's western border stretches along the Baltic Sea coastline for 99 km, while in the north the county borders with Latvia and in the south with the Kaliningrad region of Russia.

The Pajūrio lowland covers the majority of Klaipėda, with the lowest land found in the Nemunas delta (1.3 m below sea level), whereas the eastern part of the county is a little hillier.

Formed 5 000 years ago, the Curonian Spit separates the Baltic Sea from the Curonian Bay. This narrow peninsula is formed from

### Which regions are similar to Klaipėda?

#### Population density:

72 inhabitants per km<sup>2</sup>  
 Pazardjik (BG)  
 Verbano-Cusio-Ossola (I)  
 Niederösterreich-Süd (A)

#### Population:

415 800 inhabitants  
 Cáceres (E)  
 Östergötlands län (S)  
 Jász-Nagykun-Szolnok (HU)

#### Age structure:

12% over 65  
 Norte (P)  
 Noord-Brabant (NL)  
 Koroška (SI)

sand dunes up to 60m high in places.

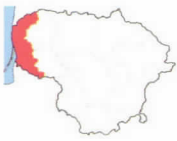
Klaipėda is distinguished by its maritime climate, with little variation in mean daily temperature. Winters here are much warmer than the average temperature in Lithuania, there is little snow, and summers are cooler. Furthermore, spring in the region comes later, whereas autumn is warmer and lasts longer. In winter, storms and foggy spells are frequent. Annual precipitation in some places amounts to 900 mm per year.

The seashore of Lithuania is abundant in natural resources. Oil has been found in Genčiai, Vėžaičiai, Palanga, and Vilkyčiai as well as below the Baltic Sea. Underground mineral and thermal waters are located near Klaipėda, Palanga, and Kretinga. Cod, salmon, herring, plaice, eel, and other fish are caught in the Baltic Sea.

Several rivers meander from the Žemaičiai upland across the Pajūrio lowland including the Jūra, the Šyša, and the Minija rivers which flow into the Nemunas, while the Šventoji and the Danė rivers flow into the Baltic Sea and the Curonian Bay. There are almost no lakes in the county, although there are several swamps in the southern part of the Pajūrio lowland.

Agricultural land covers 56.0% and forests account for 23.3% of the county's area.

This unique coastal area has been preserved by the State with the establishment of the Curonian Spit national park, the Nemunas delta, Pajūrio, Salantų and Rambynų regional parks, and the Minija valley reservoir.



## One of Lithuania's most densely populated counties

Klaipėda is one of the largest counties in the country, its population numbering 415 800 or 11.2% of the total population in Lithuania in 1998. 300 600 (72% of the population) live in urban areas, with two thirds living in Klaipėda city itself. The resort towns of Palanga and Neringa have populations of 19 600 and 2 700 respectively. The population density at 72 people per km<sup>2</sup> is higher than the national average (57 people per km<sup>2</sup>). This indicator is higher only in Vilnius (93 people per km<sup>2</sup>) and Kaunas (92 people per km<sup>2</sup>) counties. Women account for 52.2% of the population, with 1094 women per 1 000 men.

Klaipėda county is rather unusual in terms of the nationality of its population. According to the data from the 1989 population census, Lithuanians made up 63% of the population in the centre of the county, Klaipėda as against 80% in the country as a whole. The next largest group was Russians (28%). Belorussians made up 3% and Ukrainians 4%. In other towns and regions of the county, the proportion of Lithuanians was far above the national average.

The age structure of the population here is one of the youngest in the country. With only 11.7% of the population at the beginning of 1999 falling into the over 65 age group, this is the lowest figure in Lithuania. However, the county is experiencing a rapid increase in the age of its population, moving from the situation in 1990 when the number of children exceeded the number of old people by 72%, to the current excess of only 24%. Nevertheless, since

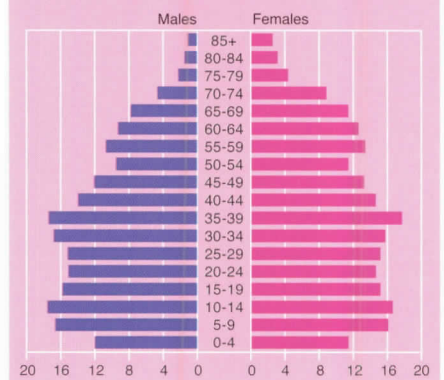
1990 the overall population in the county has risen slightly, despite negative net migration in this period, due to a greater number of births than deaths.

In 1999 58.3% of the population were of working age, while 19% were of non-working age. The number of dependants per 1 000 of working age was 715, half of whom were pensioners.

The birth rate is slightly higher than the Lithuanian average. After a considerable decrease in 1993, the birth rate has remained unchanged in the last two years. In rural areas there is a high birth rate of 66 births per 1 000 women aged between 15 and 49. Children born out of marriage make up one fifth of the children born, partly due to the decline in marriages, which have decreased by 46% since 1990. The divorce rate has now stabilised at 3.5 divorces per 1 000 population.

At 9.6 deaths per 1 000 population in 1998 the mortality rate of the population is the lowest in the country, while average life expectancy is 66.3 years for men and 76.6 years for women.

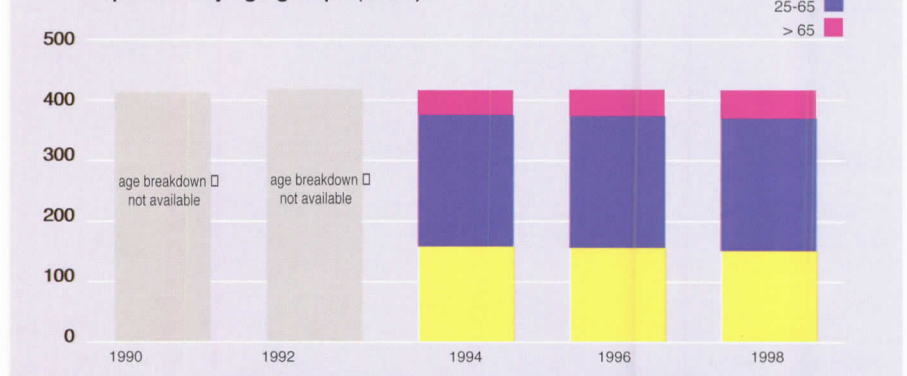
Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

Population (01 01 90)	410.6
Births	47.6
Deaths	38.2
Migration	-4.2
Population (01 01 99)	415.8

Population by age-groups (1 000)



Traditional fisherman's house  
(Photo: Kraštotvarka UAB)

## Klaipėda port dominates the county

Around 11% of Lithuania's total industrial production comes from Klaipėda county. Car parts, cardboard and paper products, peat extraction, ship building, clothing and food production form the main industrial sectors. Modern production methods are used by 'Baltijos automobilių technika' and ship building company 'Baltija', and their products are known to be of good quality. Beer produced by the 'Švyturys' company is highly appreciated by consumers.

Klaipėda port, nevertheless, is the dominating feature of the county. Domestic and transit transportation contributes considerable revenue to the county and to Lithuania. Over 15 million tons of cargo are handled per year in the harbour. To some extent the future of the county is related to continuing growth at the port's oil terminal.

The free economic zone, currently being established near Klaipėda city, should open up further opportunities for the socio-economic development of the region, whose per capita GDP (at current prices) is higher than the Lithuanian average by 6%, and is second only to Vilnius region.

81% of the agricultural land is arable land, and the main crops are cereal crops, potatoes, and vegetables. Livestock productivity is slightly higher than the national average.

Retail trade turnover in the county increased 4.4 times (4 times in the country) between 1993 and 1997, with per capita retail goods turnover also increasing. In 1997 the latter exceeded the level of the country by 10% (886.8 ECU in Lithuania and 979.6 ECU in the county). The county's purchasing power is higher than Lithuania's average.

Between 1994 and 1997 the amount of market services provided per capita in the county increased by 56%. However, it was still less than half of the Lithuanian average.

During the first phase of privatisation the value of the privatised state capital was almost half of the county's overall capital value. Klaipėda county is now entering the second stage of privatisation and its sea-port enterprises as well as other industries and infrastructure objects appear to be of high commercial value. Overall investment in the county as well as direct foreign investment has increased substantially in recent years, and both figures are higher than the Lithuanian average. This higher level of investment is related mainly to the development of Klaipėda's port area.

In a ranking of the 500 largest enterprises within the Baltic States, two of the county's companies are placed in the top forty - the stock companies 'Klaipėdos jūrų krovininių kompanija' and 'Klaipėdos laivynas'.

## Higher than average earnings

The average earnings of employees in the county, who make up around one tenth of the country's employees (excluding those employed in sole proprietorships), exceed the average in the country and this tendency has been observed for several years.

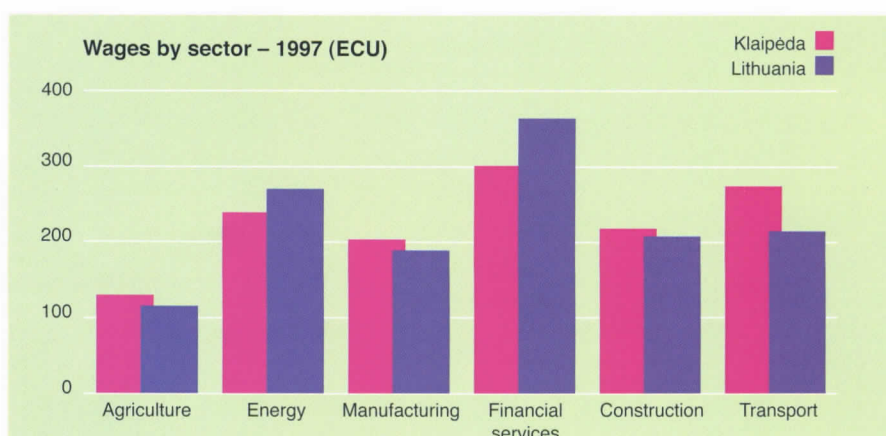
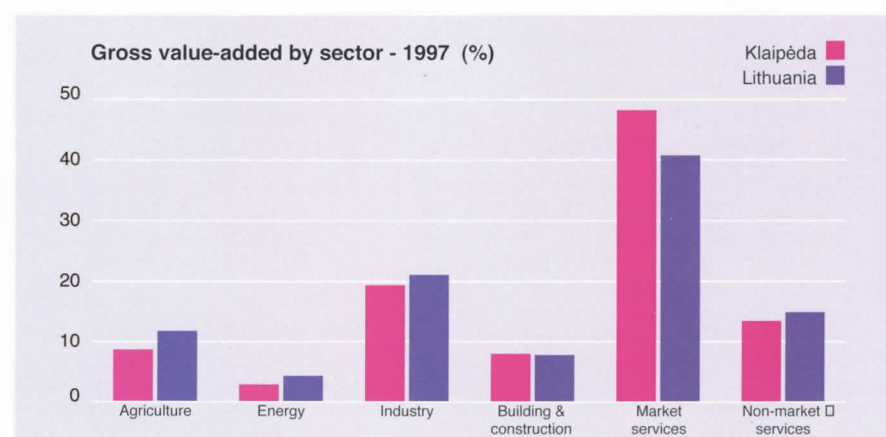
Average earnings in Klaipėda are higher than the national average in industry, in the utilities sector, in the market services sector as well as in some parts of the state administration. The lowest average earnings in the county are found in the fishing industry, where they are 60% of the country's average earnings in that sector. Average earnings in the government sector accounted for three-quarters of the national average earnings.

Overall, average earnings in the county increased most rapidly between 1995 and 1997 in the fields of agriculture, hunting and forestry, quarrying and mining as well

## Main enterprises

Name	Activity
Klaipėdos jūrų krovininių kompanija	Cargo handling
Lietuvos jūrų laivininkystė	Shipping company
Vakarų laivų remontas	Ship-building and repair
Baltijos laivų statykla	Ship-building and repair
Klaipėdos mediena	Wood products manufacturer
Klaipėdos jūrininkų ligoninė	Hospital activities
Baltijos automobilių technika	Manufacture of rubber cables
Klaipėdos maistas	Production of meat
Klaipėdos elektros tinklai	Electricity distribution
Klaipėdos energija	Energy supplier

as in the hotel and restaurant trade. Earnings in the financial services sector increased at a lower pace. There was only a slight increase in earnings in the transport, storage and communication sectors, due mainly to fact that they were already the highest in the country.







## Lowest male unemployment

The overall number of people employed in Klaipėda county decreased by 22 600 or 10.8% between 1992 and 1997, with a slight upturn noted in 1996. In relative terms the number of employed decreased mainly in Klaipėda city, and in the Šilutė district.

In 1998, as employment and unemployment surveys using ILO methodology showed, new employment trends appeared. During that year, if compared with 1997, the employment rate increased from 53.1% to 56.2%. Characteristically, during that period employment among men remained unchanged, whereas it increased considerably among women, and in fact the female employment rate is one of the highest in the country.

The changes in the overall distribution of the employed by type of activity reflected similar tendencies to those noted in other regions. The number employed in agriculture dropped between 1995 and 1997. In the construction sector the number employed remained stable, whereas it increased in the services sector. With 53.5% of people employed in the services sector, this is the second highest figure in the country.

In recent years an intensive re-training programme has seen 1 500 specialists retrained, and 13 000 workers underwent training to improve their qualifications.

The rate of unemployment from Labour Exchange data reached its highest level in 1995, although it was still slightly lower than the country's average, and the highest unemployment rate was noted in the districts of Šilutė and Skuodas. Running currently at just over 10% according to Labour Force Survey data, Klaipėda has one of the lowest unemployment rates in the country, and among men it is in fact the lowest in Lithuania.

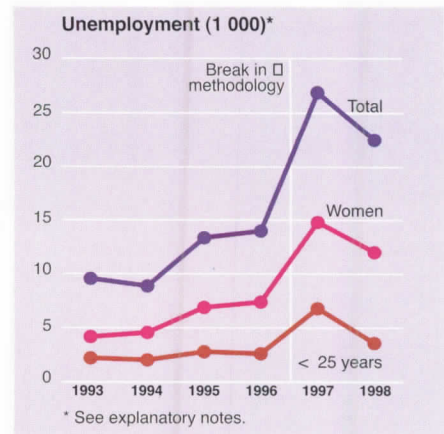
The average annual number of registered unemployed women increased between 1993 and 1996, but since then it has been slowly decreasing. The number of young unemployed people also increased between 1993 and 1996, whereas in 1998 it, too, started to decrease.

## The best transport infrastructure in the country

As the focal point of the county, Klaipėda city is an important junction for sea, land, and air transport. Its port is linked to the rest of Lithuania and neighbouring countries by a well-developed network of roads, such as the Klaipėda – Kaunas highway, which meets European standards, and connects with the international 'Via Baltica'. The railway network is dense near the coast. The most important railway for the transport of transit cargo is the Kaliningrad – Vilkauskis – Moscow line. Klaipėda's railway is the largest in Lithuania by volume of cargo handled and transit transportation. Klaipėda harbour recently opened ferry lines to Rotterdam, Kiel, Mucrane, Åhus, and Fredericia. The international airport at Palanga offers connections to Billund (Denmark), Hamburg, Frankfurt and Cologne in Germany, Kristianstad (Sweden), Moscow and Saint Petersburg.

The length of railway in the county amounts to 209.3 km, and the density exceeds the average in the country. The railway network extends into all districts within the county.

The road network is well developed. Out of a road network of some 2 135.7 km, almost half (1 114.4 km) have a concrete or asphalt surface. Both figures are higher than the



average in the country. The share of roads whose surface has been upgraded is some 41% above average, and amounts to 10.4 km per 1 000 cars.

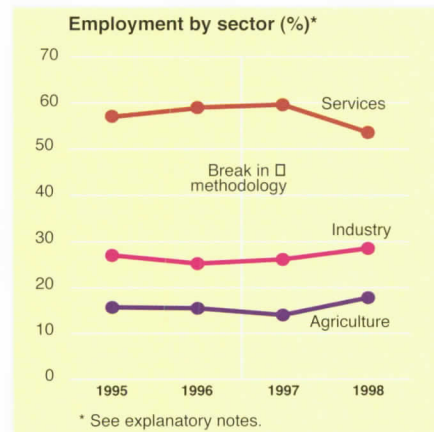
One of the most important tasks for the county involves the restructuring of the port in Klaipėda city to use it more effectively. It currently handles around 15 million tons of cargo, when its potential is in fact closer to 20 million tons.

## Biological treatment plant should improve environment

Emissions of pollutants into the atmosphere from stationary pollution sources in 1997 were less than the national average, especially emissions of solid waste, which were only 10% of the national level.

There was a serious problem with the treatment of industrial and household wastewater for a long time in the county. Only 6% of wastewater used to be completely treated using biological water treatment technology, a figure which was lower than in any other county. This situation changed greatly when the biological wastewater treatment plant was completed and began to be used in Klaipėda in 1998. Any improvement to wastewater treatment in Klaipėda, the town with most industry, is of great importance when trying to solve pollution problems in the Baltic Sea basin. Furthermore, the county has out-performed other Lithuanian regions in the removal and utilisation of household refuse.

The water supply network covers a greater area and more water is supplied through it than the national average. Per capita consumption of water stands at 66.4 m<sup>3</sup> as against 52.5 m<sup>3</sup> in Lithuania. In contrast, the network of piped gas is not well developed and the supply of gas to consumers



### Employment by age group - 1998 (%)

	< 25 years	25-54 years	> 54 years
Men	14	72	14
Women	10	80	10
Total	12	76	12

is 5 times less than the country's average.

Telephone penetration in the county is rapidly increasing. There were 124 800 telephones at the end of 1997, 10 452 of them were installed in apartments. It is worth mentioning that the number of telephones per 1 000 inhabitants is the highest in the country, with the majority of these installed in towns. In Neringa, this indicator equals 356 telephones per 1 000 inhabitants and is the highest figure in the country.

In an effort to preserve the uniqueness of the area, the Curonian Spit was established as a national park in 1991, covering a total area of 26 394 ha. This ensured the protection of the Great Dunecrest of the Spit as well as numerous other areas of special interest. At the same time the area's flora and fauna as well as its cultural heritage (old fishermen's houses, villas in the settlements of Nida, Juodkrantė, Preila, Pervalka, and Smiltynė from the 19th and 20th centuries, and memorial grounds) were also preserved. Furthermore, educational and recreational facilities, handicrafts, small businesses, the promotion of environmental protection and of the region's heritage and culture were also developed.

#### Surfaced public roads – 1997

	Klaipėda Lithuania	
Length in km per km <sup>2</sup> *	0.19	0.17
Length in km per 1 000 population *	2.7	3.0
Length in km per 1 000 private passenger cars (1998) *	9.7	12.0
% private passenger cars in total number of vehicles (1998)	86	84
Number of accidental deaths per 1000 private passenger cars (1998)	0.7	0.9

\* See explanatory notes.

#### Environment - 1997

	Klaipėda Lithuania	
Towns connected to public water supply	12	107
Towns connected to public sewerage	12	105
Sewerage subject to treatment (%)*	63	76
Per capita consumption of water (m <sup>3</sup> )*	53.3	43.4

\* See explanatory notes.

#### Number of pupils - 1998

Pre-school	12 613
Primary	26 952
Secondary comprehensive	41 876
Secondary vocational	7 631
Tertiary (higher education)*	9 552
Total	98 624

\* See explanatory notes.

#### Health care - 1997

	Klaipėda Lithuania	
Number of hospitals	27	187
Number of doctors per 10 000 population	33.3	39.8*
Number of hospital beds per 10 000 population	114.4	98.4*

\* See explanatory notes.

#### Telephone services

	1995		1997	
	Klaipėda	Lithuania	Klaipėda	Lithuania
Lines per 1 000 population	208	204	252	232
% connected to digital network	:	:	:	:

#### Increasing number of pupils

There has been an increase in the number of children attending all types of educational establishments in the last few years. Between 1993 and 1998 there was a 7% increase in the number of children attending comprehensive schools. Of the county's 9 private primary schools, 6 are in Klaipėda city, and furthermore the only Russian orthodox school in Lithuania is situated here. The number of pre-school establishments has also increased.

The county has 12 state colleges, and attendance has been on the rise in these too. There are also four private colleges in the county.

There is one university situated in the county, in the city of Klaipėda, where over 4 000 students study. More than half of them follow courses for teacher training and educational psychology as well as technical sciences. The S. Šimkus conservatoire, a nautical college, and a technical medical college are also located in the county.

Apprentices receive specialised training from the Klaipėda shipbuilding and repair school in all aspects of construction and repair.

Klaipėda ranks in third place after Kaunas and Vilnius by the number of physicians per 10 000 population, at 33.3 in 1997. The number of paramedical personnel is the highest in the country. This is mainly due to the number of resorts and recreational facilities in the county, which employ many paramedical personnel. The number of beds in hospitals per 10 000 population is much higher than the average in the country, and in the resort of Palanga this indicator is 4 times the national average.



## Marijampolė county

### Land of historical monuments

Marijampolė county is situated in the southwestern part of Lithuania, covering the ethnic region of Suvalkija (Sūduva). Almost the entire territory of the county covers the lower reaches of the Šešupė river, with only the southern part being in the Sūduva uplands, which are part of the Baltic mountain range.

In ancient times, the Sūduviai and Jotvingiai tribes inhabited this territory. In the 13th century the Jotvingiai tribe, the ancestors of the Lithuanians, completely disappeared. Lithuanians started to settle in this area only after the Grunwald battle in 1410. After the last division of the Polish - Lithuanian Republic in 1795, this area became the property of Prussia. In 1807, Prussia, together with the region of Užnemunė, which was its property as well, were occupied by Napoleon. Later, the land was occupied for a time by Tsarist Russia and then given to the Kingdom of Poland.

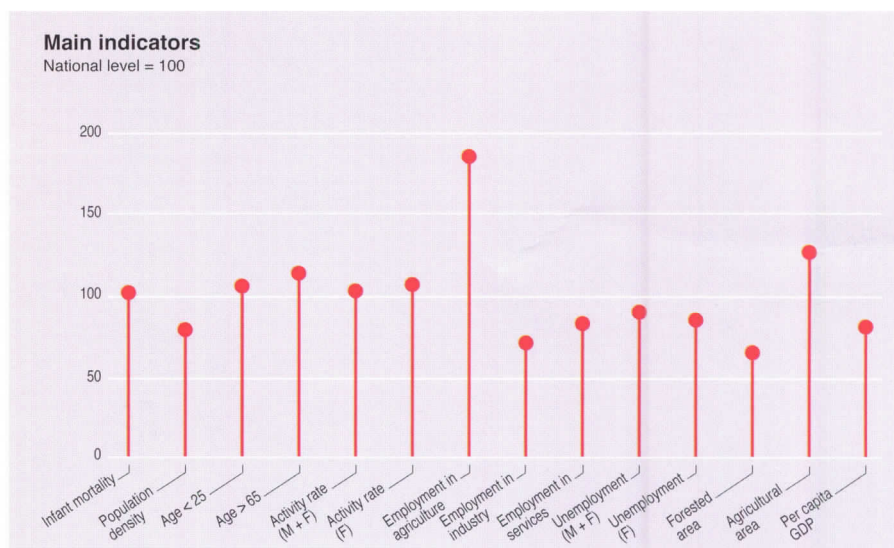
Today, Marijampolė is the administrative centre of the county, often called the capital of Suvalkija (Sūduva). The town is situated in the Šešupė valley, and on the crossroads from Lithuania to Poland and Kaliningrad (Russia). Founded around Pašešupio village, which was first mentioned in historical manuscripts in 1667 and derives its name from the order of monks who founded it, the town started to develop rapidly when the Kaunas to Warsaw road was constructed in 1829. Further expansion followed the building of the railway at the beginning of the 20th century from Kazlų Rūda to Šeštokai.

The county includes the districts of Marijampolė, Šakiai, and Vilkaviškis, and the majority of its population speaks Lithuanian, with Russian and Polish also in use.

Marijampolė county is known for its architectural monuments. Tourists can visit and admire the beautiful Pašešupis park, Paežeriai mansion and lake (18th century), Griškabūdis regional park, Amalva botanical and wildlife reserve, and Žaltytis ornithological reserve. Prominent Lithuanian citizens who lived here include V. Kudirkas (1858-1899), Dr. J. Basanavičius (1851-1927), Dr. K. Grinius (1866-1950), and linguist J. Jablonskis (1860-1930).



The Old Town  
(Photo: Methodical Publishing Centre, 1999)



### Active participant in regional development programmes

The county has developed strong ties and actively co-operates with other countries, and participates in programmes of regional development and cooperation. Cooperation agreements with Burgenland county (Austria), Kaliningrad region (Russia) and Vyborg county (Denmark) have already been signed. The county is a member of the Baltic Sea Tourist Commission and of the "Nemunas" Euroregion (a joint venture between Lithuania, Poland, and Belarus in the fields of environment and the development of transport infrastructure). It has observer status in the activities of the European Union regional assembly, and plays an active role in joint European Union projects

such as 'Ecos-Ouverture Food I' and 'Food II', and the Phare-Interreg IIC project on the 'Via Baltica spatial planning zone'. Twinning links with foreign municipalities have also been established.

The road network is well developed in the county, which is crossed by the 'Via Baltica'. A railway meeting European standards runs from Kaunas to the Polish border via Marijampolė. This rail link will, in the future, join up with the European rail network.

Industrial enterprises in the county were obliged to decrease the number of employees due to the loss of Eastern markets in recent years and production correspondingly fell. Furthermore, the second hand car market, which had been one of



Scale 1: 1 500 000

0 40 km

### Agriculture 1998

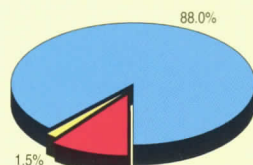
Number of private farms all types *	50 720
Persons working in agriculture	33 900
Total agricultural area (ha)	300 902
Total livestock	220 126
Cattle per 100 ha of total agricultural land	38.0
Pigs per 100 ha of total agricultural land	46.0
Share of crop products in total agricultural output (%)	60.0
Main crops (1 000 tonnes)	
Cereals	359.4
Vegetables	16.3
Potatoes	196.6
Sugar beet	290.1

\* see explanatory notes

the main sources of employment for the working population of the county, failed, causing further loss of jobs. The volume of international cargo transported also decreased markedly, which had in turn a negative impact on the income of companies in the services sector.

### Agricultural land use in 1998 (%)

- Permanent grassland
- Arable land
- Permanent crops



### Fertile region

The total area of the county of Marijampolė is 4 463 km<sup>2</sup> or 6.8% of Lithuania's total area. The county is situated in the southern part of the country. It borders Russia (Kaliningrad region) in the west and Poland in the south. Within Lithuania, it borders the counties of Kaunas, Alytus and Tauragė. The county has a large number of small towns.

Marijampolė county is situated in the fertile Užnemunė lowland. The Sūduva range of hills are situated on the border with Poland and Russia's Kaliningrad region, and contains the highest point of the county at Dunojus (282.6 m). The county's northern boundary stretches alongside the Nemunas river.

### Which regions are similar to Marijampolė?

#### Population density:

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

Lesvos (EL)

Yonne (F)

Altmarkkreis Salzwedel (D)

#### Age structure:

15% over 65

Franche-Comté (F)

Magdeburg (D)

Kesk-Eesti (EE)

#### Land use:

67% agriculture

Bretagne (F)

Mazowieckie (PL)

Basilicata (I)

The average temperature in winter and summer in the county is slightly lower than the average in the country, varying from - 3.5 to - 4.5° C in January and getting no higher than 17° C in July. Average annual precipitation is lower than the average in the Republic and varies from 550 mm to 650 mm.

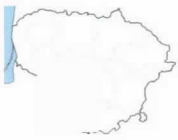
Some clay deposits (used mostly for the production of bricks) have been exploited in the county, while chalk has been found near the Nemunas river.

Few rivers cross the county, and, except for the Nemunas, they tend to be small. The largest and most prominent river in Suvalkija is the Šešupė, and it carries most water where it runs along the border with the Kaliningrad region.

Small lakes, of which there are 100 in the county, add diversity to the landscape of plains, especially in the region of Vilkiškis. The largest lake, Vištytis, is situated in the Sūduva hills.

Two thirds of Marijampolė county is covered by agricultural land, the highest ratio of any Lithuanian county, a figure which rises to 77.2% in the district of Vilkiškis, where there are large areas of arable land. Suvalkija is also known for its fertile soil.

Forests are not characteristic of the region, and with only 19% of the county covered by forest, this makes Marijampolė the least forested county in Lithuania. The largest forested area can be found in Kazlų Rūda, located in the north west of the county.



## Fertility rate is the highest in the country

The county of Marijampolė is one of the smallest in the country. Its population numbers 198 400 or 5.4% of the total population in Lithuania. The share of the population residing in towns is quite small, as half of the county's population still live in its 1 500 rural settlements. The other half inhabits Marijampolė's nine towns. The population density is 45 people per km<sup>2</sup>. Women account for 52.4% of the county's population, with 1 101 women per 1 000 men.

Even though the population increased at the beginning of the century in the county, it has remained unchanged in recent years. Net migration, which was positive for all of the previous decade, became negative in 1998. The majority of people living in the county are of Lithuanian nationality.

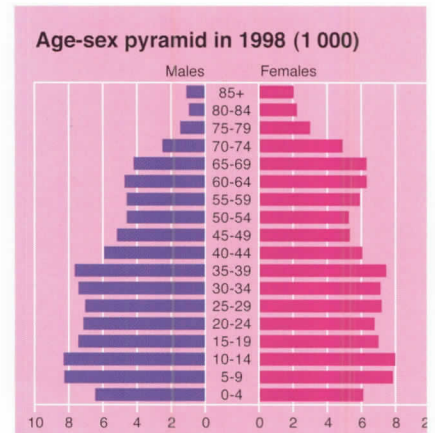
The birth rate in the county has fluctuated recently, and from being the lowest in the country in 1996, it is now the highest at 59 births per 1 000 women aged between 15 and 49. Children born out of marriage make up 13.7% of the total number born. The number of marriages almost halved in the period from 1990 to 1998, although the divorce rate is one of the lowest in the country.

A higher than average mortality rate has been noted in Marijampolė county for some time. It was only in 1998 that the mortality rate showed any decline over the rate in recent years, and its high level is mainly attributable to diseases such as malignant neoplasms, diseases of the circulatory and respiratory systems.

Infant mortality rates tend to be quite low and between 1991 and 1995 were the lowest of all the counties.

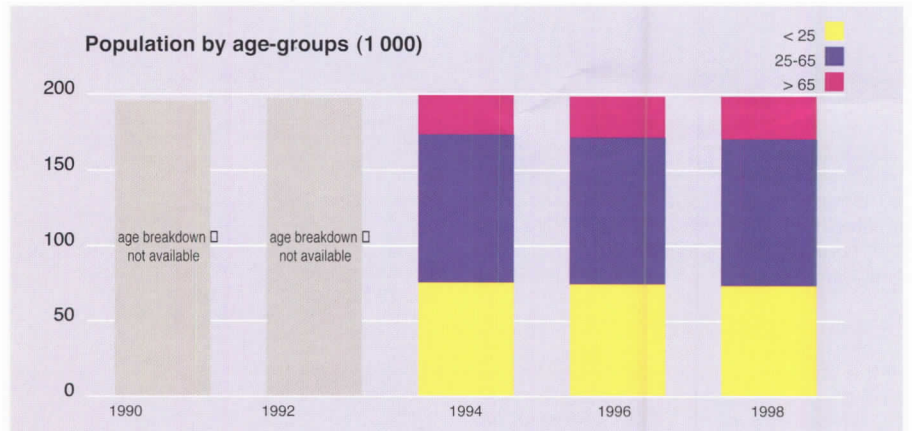
The age structure of the population is one of the oldest in the country, with the population aged 65 and over accounting for 14.6%, while 54.5% are of working age and 21.8% are over working age. For every 100 children there are 90 people over 60, and in some villages there are actually more old people than children. In 1998 there were 835 dependants per 1 000 in the population of working age, of whom half were of pensionable age.

Average life expectancy for both men and women is comparable to the national average.



## Demographic account (1 000)

Population (01 01 90)	195.2
Births	24.2
Deaths	23.0
Migration	2.0
<b>Population (01 01 99)</b>	<b>198.4</b>



Birthplace of Vincas Kudirka, author of Lithuania's anthem, in Paežeriai Village  
(Photo: Kraštotvarka UAB)

## Intensive agriculture and rapidly growing trade

Agriculture is important to Marijampolė and the share of value added produced by this activity accounted for 27.7% in 1996 and 26.7% in 1997, which is more than double the national average. Consequently, two-thirds of the county's area is covered by agricultural land, 88% of which is arable land. Furthermore, almost all of this arable land is used for growing crops. The main products grown are cereals (47%), sugar beet (4%), and potatoes (3%). The remaining land is given over to fodder crops and flax. The yield of cereals is 25% above the national average, and is highest in the district of Šakiai. Livestock productivity is also slightly above average.

Marijampolė county does not make a large contribution to Lithuania's total industrial output. The main industrial products are yarn, fodder crops, sugar, and dairy products.

Turnover by volume in the retail trade in the county increased 5 times in the period from 1995 to 1998 (4 times in the country), with per capita retail turnover also increasing. In 1997 the latter exceeded the level of the country by 10% (979.4 ECU in the county and 886.8 ECU in Lithuania).

While from 1995 to 1998 the volume of charged services provided for per capita in the county increased by 2.3 times, this was a below average increase. Similarly, GDP created by the county (per capita, at current prices) was 20% lower than the national average.

The value of privatised capital in the first stage of privatisation accounted for 59% of the state capital value. While the overall level of investment in the county increased 1.9 times in the period from 1995 to 1998, it was, nevertheless, much lower than that observed elsewhere in Lithuania. When compared to the average of the country, per capita investment was around half the Lithuanian average.

In a similar way, while direct foreign investment in the county has increased four-fold in the same time period, the overall level of investment is significantly lower than in Lithuania as a whole.

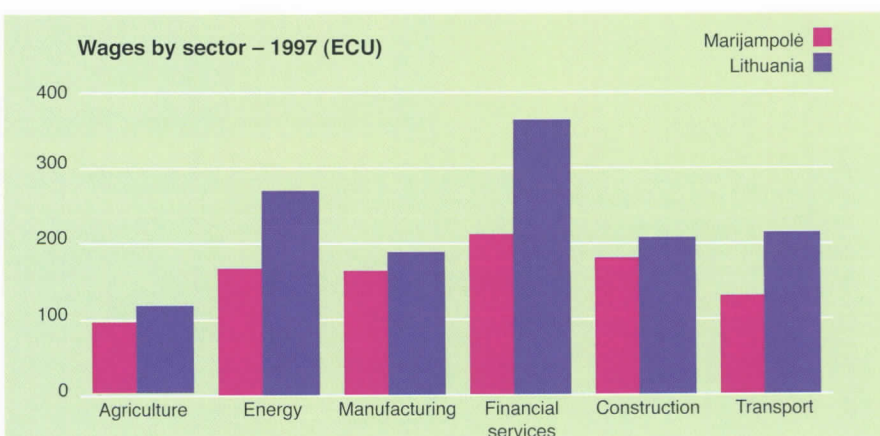
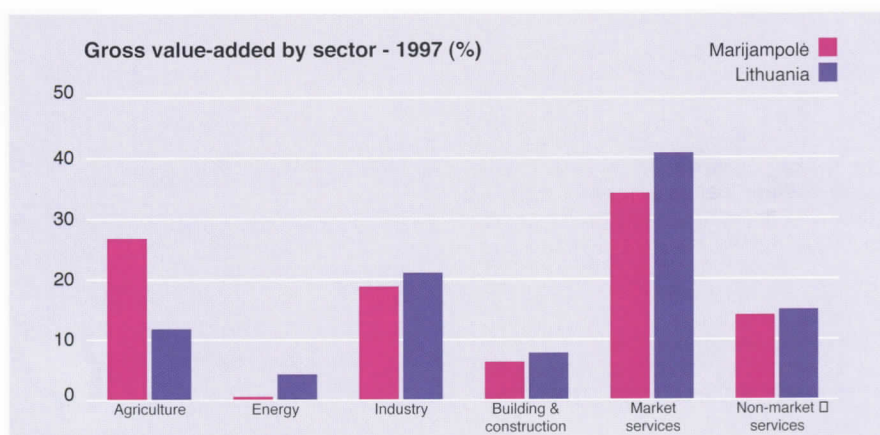
## Poorly paid primary sector

Just over 4% of those active in Lithuania's economy (excluding sole proprietorships) work in the county, one fifth of whom are employed in agriculture, hunting, and forestry. These activities have traditionally provided low earnings and, given that a sizeable proportion of Marijampolė's workforce are employed in this area, this contributes to the fact that the county has the lowest earnings overall in Lithuania. In 1997 the average monthly salary in the county was 80% of Lithuania's average monthly salary. Furthermore, those employed in agriculture earned substantially less than those employed in other sectors in Marijampolė.

It is, however, worth noting that average earnings in the county increased more rapidly between 1995 to 1997 than in other parts of Lithuania, with a particularly high rise in average monthly salaries in the hotel and restaurant sector.

### Main enterprises

Name	Activity
Marijampolės pieno konservai	Dairy producer
Vernitas	Textile weaving
Marijampolės ligoninė	Hospital
Žemkalnija	Textile manufacturer
Fasa	Machinery manufacturer
Marijampolės cukrus	Sugar producer
Marijampolės pirminės sveikatos priežiūros centras	Medical practice activities





## Most jobs in agriculture and services sectors

In the course of the last decade, there has been a marked downward trend in the number of people employed in the county of Marijampolė, a fall of some 14.6% since 1992. The greatest decrease was observed in Marijampolė town and Marijampolė district (18.7% and 18.8% respectively).

While the number of people employed in agriculture decreased by 11.4% in the period from 1995 to 1997, the county can, nevertheless, boast that it has the one of the highest percentage of employment in the agricultural sector as compared to other counties. In addition to a slight increase in the number of people employed in industry, there was a 12.7% increase in employment in the services sector. There was also a negative trend in overall employment in construction.

In contrast to the majority of other counties, the tendency in Marijampolė county is for employment to continue to fall. According to data from the Labour Force Survey (using ILO definitions) the employment rate from 1997 to 1998 decreased from 58.2% to 55.4%. Among men it dropped from 60.7% to 56.5% to become the lowest in the country.

In the period from 1994 to 1997, the labour exchange training centre in Marijampolė carried out training programmes for a number of people, which saw 1 317 graduates getting retrained, while 3 272 workers were re-trained and improved their qualifications.

According to the data provided from Labour Exchanges the unemployment rate in the county, in contrast to other counties, increased up to 1996 before stabilising at 5.9%. There is a slightly higher unemployment rate (6.2%) in Marijampolė town. The number of unemployed women continues to grow in Marijampolė county, as between 1993 and 1998 their number increased three times. During the same period, youth unemployment increased by 1.7 times.

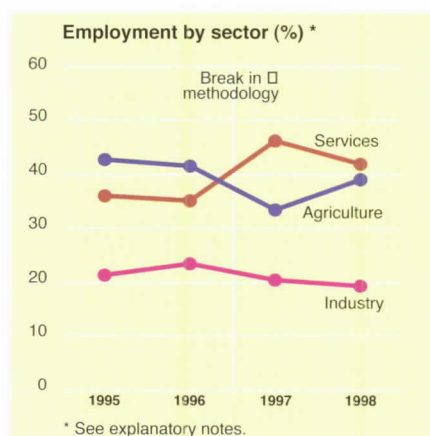
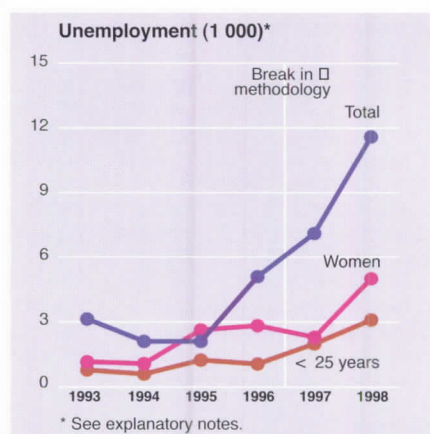
According to Labour Force Survey data from 1998, the unemployment rate among men was 13.7%, while at 10.8% among women it was somewhat lower.

## Dense network of roads

The length of railway in the territory of the county in 1998 amounted to 124.6 km, which represents a density of 27.4 km per 1 000 km<sup>2</sup>. Just under half of this track is double track. The planned railway line complying with European standards, which will start from the Poland-Lithuanian border via Marijampolė to Kaunas, will be of great strategic value for the county.

There is a well developed road network in the county. Two major roads cross the county – the Marijampolė – Kybartai – Kaliningrad (Russia) road, and the Kaunas – Marijampolė – Suvalkai (Poland) road. Total road length amounts to 1 518 km, of which there are 804 km with an improved surface. The total length of road within the county amounts to 0.340 km per km<sup>2</sup>, while there are 12.5 km of upgraded roads per 1 000 passenger cars.

Three border customs posts operate in the county, one at Kalvariija on the frontier with the Polish Republic, and one at Kybartai and at Sudargas on the border with the Russian Federation.



	< 25 years	25-54 years	> 54 years
Men	16	69	15
Women	12	74	14
Total	14	72	14

## Low emission of air pollutants

In 1997 the emission of pollutants into the air per km<sup>2</sup> from stationary sources consisted of 105 kg of particulates and 829 kg of gaseous and liquid substances. At respectively 70% and 42% of the national average, these figures represent considerably lower level of stationary pollution than is experienced elsewhere in Lithuania.

A high proportion of discharged water (85%) passes through sewerage treatment facilities, and of that amount 85% receives complete biological treatment.

Per 1 000 population there were 2.16 km of piping delivering water and 49 cubic meters of water supplied. Of this amount 43.0 cubic metres were supplied to households and other public bodies.

The length of piping supplying gas is 0.19 km per 1 000 population, and 315 dwellings per 1 000 population are supplied with gas. 145 cubic meters of natural gas per 1 000 population are supplied over this network.

The number of main telephone lines in 1998 amounts to 50 660 units, of which 85% are installed in dwellings. One third of the total number of units are located in rural areas. There are 217 telephone units per 1 000 population in the county.

## Surfaced public roads – 1997

	Marijampolė Lithuania	
Length in km per km <sup>2</sup> *	0.18	0.17
Length in km per 1 000 population *	4.1	3.0
Length in km per 1 000 private passenger cars (1998) *	12.5	12.0
% private passenger cars in total number of vehicles (1998)	86	84
Number of accidental deaths per 1000 private passenger cars (1998)	0.8	0.9

\* See explanatory notes.

## Environment - 1997

	Marijampolė Lithuania	
Towns connected to public water supply	9	107
Towns connected to public sewerage	9	105
Sewerage subject to treatment (%)*	85	76
Per capita consumption of water (m <sup>3</sup> )*	43.0	43.4

\* See explanatory notes.

## Number of pupils - 1998

Pre-school	4 066
Primary	13 035
Secondary comprehensive	19 859
Secondary vocational	2 956
Tertiary (higher education)*	1 514
Total	41 430

\* See explanatory notes.

## Health care - 1997

	Marijampolė Lithuania	
Number of hospitals	9	187
Number of doctors per 10 000 population	20.7	39.8*
Number of hospital beds per 10 000 population	77.1	98.4*

\* See explanatory notes.

## Telephone services

	1995		1997	
	Marijampolė	Lithuania	Marijampolė	Lithuania
Lines per 1 000 population	194	204	217	232
% connected to digital network	:	:	:	:

## Nursery teachers trained here

Kindergartens in the county are already over-crowded and are failing to meet the increasing demand for places in them. Furthermore, with only 71 places on offer per 100 children, this is the lowest figure in the country.

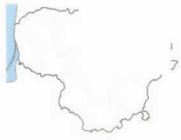
Since 1994 the number of pupils attending primary and secondary school has been rising, and currently, 86% of the county's population aged between 7 and 18 go to 186 comprehensive schools. State comprehensive schools prevail at primary level. Out of the 6 non-state secondary schools in the county, 2 are located in the town of Marijampolė. They are both run by religious orders.

The Marijampolė teacher-training college is an important establishment for the training of nursery teachers, and annually 60% of all new teachers graduate from here.

In terms of health care the county is not so well provided for, as it has one of the lowest figures of physicians per 10 000 population. The number of hospital beds decreased in the period from 1994 to 1997 from 90.8 per 10 000 population to 77.1. In the same period, visits to outpatient clinics increased slightly, going from 4.5 times per capita in 1994 to 5.2 times in 1997.

At present, there are 80 cultural centres in the county. With the closure of 16 centres in recent years, Marijampolė county has experienced a greater loss of such centres than any other county. A quarter of the county's inhabitants use the services of the 117 public libraries in the municipalities, and the museum dedicated to the memory of former President K. Grinius receives a large number of visits from local inhabitants.





# Panevėžys county

## The ethnic capital of West Aukštaitija

Panevėžys county is situated in the north of Lithuania, in the ethnic region known as West Aukštaitija. The Upytė, on the meandering Nevėžis river, separates the two main ethnic regions in Lithuania, namely the Žemaitija and Aukštaitija. The Upytė was first mentioned in written manuscripts in 1254 and was known for its well-constructed castle, which defended Lithuania from invaders.

The county of Panevėžys includes the districts of Biržai, Kupiškis, Pasvalys, Rokiškis and Panevėžys town. The town was established in 1503 and started to grow rapidly in 1873 after the Panevėžys-Daugavpils (Latvia) railway was built. Panevėžys grew further after the Second World War, becoming the fifth biggest town in the country and a centre for culture, education, industry and transport not only for West Aukštaitija but also for the North of Lithuania.

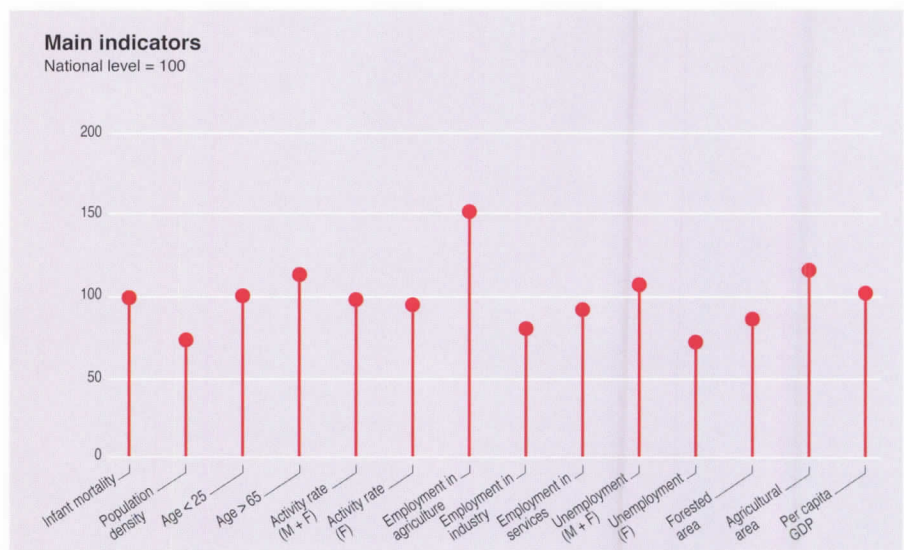
The majority of the population in the county speaks Lithuanian, with Russian, and Polish also in use.

The first school of music in Lithuania was opened in the manor of the nobleman Tyzenhauz in the period from 1785 to 1904. Many well-known Lithuanian composers, including Mikas Petrauskas, Juozas Gruodis and Juozas Tallat-Kelpša studied there. The linguist J. Balčikonis was born in the county (1885-1969), while the theatre of J. Miltinis was founded in 1925 in Panevėžys, and is well known not only in Lithuania but also abroad.

Places of interest in the county include the Pašiliai forest, which is the only area in the county, where European bison are bred, while Lake Sartai is famous for its winter horse races over the ice. A huge park was established on an island in Lake Dviragis in the district of Rokiškis in the 16th century, and later a palace was added in the neo-classical style. The small town is now connected to the shore by a bridge. Likėnai, situated 8 km to the west of Biržai, the centre of the district, is a spa town, where people go for cures and mud therapy.



The centre of Panevėžys City  
(Photo: Kraštotvarka UAB, 1999)



## Industrial revival is expected

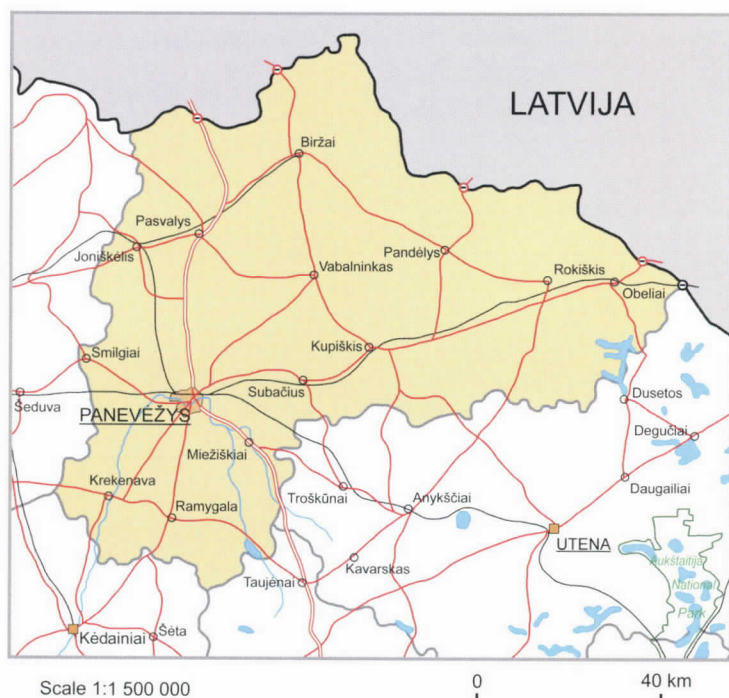
Panevėžys county has a broad base of industrial production, including companies manufacturing electronic and glass products as well as other light industry.

The county has taken a leading role in implementing the environmental programme, 'Tatulas', established by the Government to reorganise agriculture towards more ecologically sound practices (that is without using pesticides and mineral fertilisers).

Its convenient geographical location, halfway between the capitals of Latvia and Lithuania, is a positive feature for the county. As well as being crossed by the Via Baltica, the county also possesses a nar-

row-gauge railway line which crosses the picturesque hills and slopes of Aukštaitija. Tourists from Panevėžys to the Rubikiai settlement on Lake Rubikiai, situated in Utena county, may go by train and enjoy the scenery.

In the wake of the transition to a market economy, industrial enterprises face a number of obstacles in implementing reform. Unemployment grew as some enterprises went bankrupt, while other, non-profitable, enterprises shed workers, and others introduced new technologies. Those now seeking work tend to be skilled workers who have little prospect of finding employment in the county. At the same time the volume of production also decreased here.



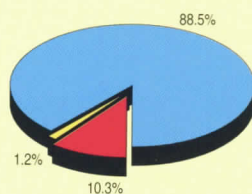
### Agriculture 1998

Number of private farms all types *	68 323
Persons working in agriculture	42 400
Total agricultural area (ha)	484 974
Total livestock	287 361
Cattle per 100 ha of total agricultural land	28.0
Pigs per 100 ha of total agricultural land	41.0
Share of crop products in total agricultural output (%)	56.0
Main crops (1 000 tonnes)	
Cereals	446.8
Vegetables	31.3
Potatoes	146.5
Sugar beet	112.9

\* see explanatory notes

### Agricultural land use in 1998 (%)

■ Permanent grassland  
■ Arable land  
■ Permanent crops



### Fertile soil is the county's main asset

Panevėžys county covers 7 881 km<sup>2</sup> or 12.1% of Lithuania's total area. It is situated in the north-east of Lithuania and has the longest border with Latvia of all the northern counties.

Situated in the Middle Lowlands, the county is flanked on the east by the Baltic Uplands, the hills of which extend into the district of Rokiškis.

In winter the average air temperature is particularly low in the eastern part of the county and the climate in general is more continental. In summer the temperature is close to the national average, except in the central part of the region where the tem-

### Which regions are similar to Panevėžys?

**Area:**  
7 881 km<sup>2</sup>

La Coruña (E)  
Puy-de-Dôme (F)  
Burgas (BG)

**Population:**

321 700 inhabitants  
Noord-Friesland (NL)  
Bielefeld, Kreisfreie Stadt (D)  
Podravska (SI)

**Employment structure:**

22% industry  
Devon (UK)  
Aquitaine (F)  
Świętokrzyskie (PL)

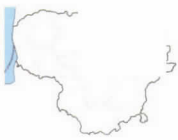
perature is slightly higher. Annual precipitation is below average and amounts to 550-650mm.

Several peat bogs are exploited in the region, while dolomite has been found near the border with Šiauliai county and mineral waters near Biržai and Rokiškis.

Many rivers and rivulets meander across the Middle Lowland, the largest of which are the Nevėžis, the Mūša, and the Lėvuo. 150 small lakes are located in the county. The largest, Lake Sartai, is situated in the eastern part of the county, where it borders with Utena county.

Fertile soil is a valuable asset to the county, with agriculture covering 61.5% of its total area. Agriculture land covers a proportionately larger area of the district of Pasvalys, where it accounts for 75% of its total area.

The area covered by forests varies considerably through the county, ranging from 31.6% in Panevėžys district, to only 16.3% in Pasvalys district.



## Declining birth rate and ageing population

The county's population numbers 322 000 or 8.7% of the country's population. Population density at 40.8 people per km<sup>2</sup> is below average. 61% of the population reside in the county's twelve towns, with the majority of them concentrated in the county's main town, Panevėžys. There are 1 146 women per 1 000 men in the county.

While the demographic account over the last 10 years reveals a slight increase in the overall population here, this reflects high migration and a natural increase at the start of the decade, reaching a peak in 1994. Since then, deaths have started to outnumber births, the migratory flow has been negative, as a result of which the county's population is now declining.

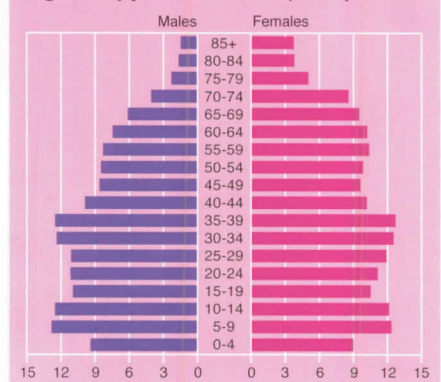
The birth rate has been decreasing since 1992 and currently it approaches the national level (10.1 births per 1 000 population), with 43 births per 1 000 women aged between 15 and 49. The decrease in marriages influences the continuous decrease in the birth rate, as since 1990 the number of marriages has halved. The number of children born out of marriage is lower than the country's average and accounts for 15% of all children.

In comparison to other counties, Panevėžys had a higher mortality rate at 11.9 deaths per 1 000 population in 1998. As in the rest of the country, the mortality rate increased for several years, reached a peak in 1994 and since then has been declining. The infant mortality rate is the same as in the country as a whole and amounts to 10.1 deaths per 1 000 births.

The county is one of the oldest in Lithuania in terms of the age structure of its population. At the beginning of 1999, the population aged 65 and over accounted for 14.5% of the county's total population as against the national average of 13.6%. 56.0% of the population are of working age, giving a higher than average number of dependants on the working population. In 1998 there were 785 dependants per 1 000 working age population, half of whom were of pensionable age.

In 1998 life expectancy for men and women differed greatly, with women having one of the highest life expectancies in the country at 77.1 years, whereas for men it is one of the lowest at 65.5 years.

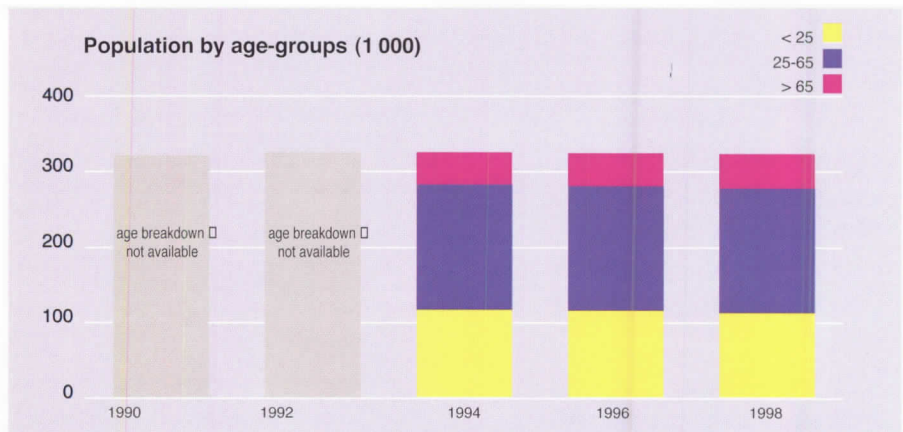
Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

Population (01 01 90)	319.7
Births	36.7
Deaths	36.4
Migration	1.8
Population (01 01 99)	321.7

Population by age-groups (1 000)



In the market centre of Panevėžys City  
(Photo: Methodical Publishing Centre)

## Agriculture and industry are backbone of local economy

Agriculture and industry are the county's two main economic sectors, in the sense that they both contribute higher than average gross value added to the economy. Gross value added from market services, while on the same level as industry, falls well below the national average.

Agricultural land covers 61% of the county's area, 88% of which is arable land mainly devoted to crop growing (grain and fodder crops). Potatoes and vegetables cover only 4% of the crop area. While the yield from grain crops is close to the national average, the productivity of livestock is below average.

Panevėžys county contributes approximately 10% to Lithuania's total industrial production. The main industrial products are tubes for TV sets, window glass, cabling, and food products. TV set tubes produced by joint stock company 'Ekranas', milk products by 'Biržų pienas' and 'Rokiškio sūris' use modern technology to produce high-quality goods. 'Ekranas' is in 21st place and 'Rokiškio sūris' in 37th place in the ranking of the major enterprises in the Baltic States.

Retail trade turnover more than tripled in the county between 1992 and 1997, with per capita turnover also increasing. Nevertheless, this increase did not match the performance of this indicator nationally, as a result of which in 1997 the per capita retail trade turnover here was a quarter lower than the national average (682.3 ECU here as against 886.8 ECU in Lithuania as a whole).

The volume of market services rendered per capita increased 2.1 times in the period from 1993 to 1997, but again was substantially lower than average.

Using per capita GDP as an indicator of economical potential reveals a gradual decline in the county's performance, as per capita GDP moved from a position where it was marginally above average in 1996 to being 6.6% lower in 1998. In the county two thirds of the state's capital has been privatised in the initial stage of privatisation.

Economic potential is greatly influenced by any increase in investment. However, even though the total amount invested here increased 5.4 times between 1992 and 1997 and direct foreign investment increased by 3.6 times in the period between 1995 and 1997, investment per capita lags behind the Lithuanian average.

Foreign investment has been made by

Swedish investors in 'Kalnapilis', the leading beer producer in Lithuania. In 1997 this company was in 33rd place on the list of the largest Baltic State enterprises. Danish companies became the main investors in a Panevėžys enterprise, 'Panevėžio cukrus' (a sugar factory).

## Fast growth in earnings narrows gap with national wages

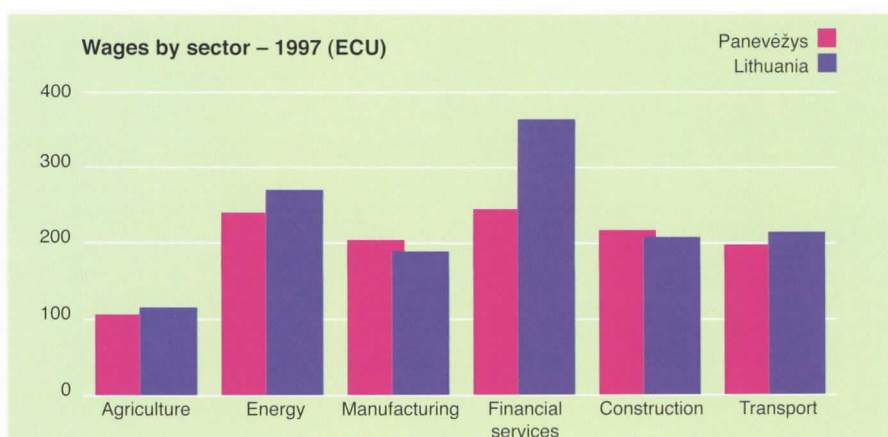
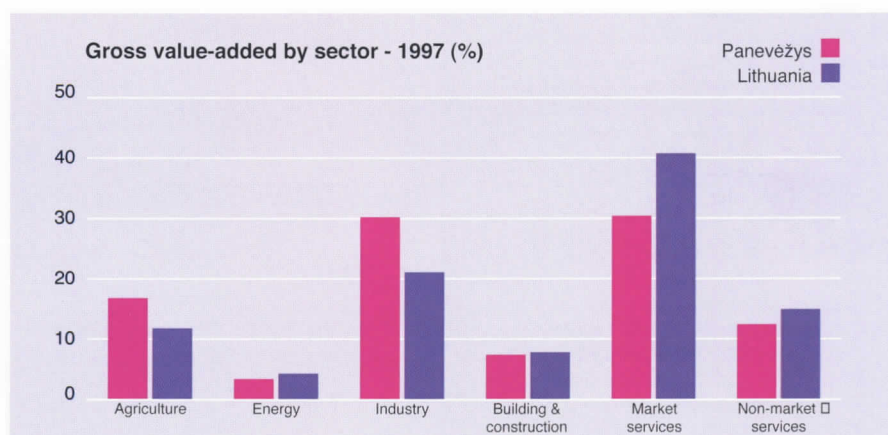
Just under one in ten of Lithuania's workforce are employed in Panevėžys county. Between 1995 and 1997 average wages and salaries in the county grew faster than in any other county except Telšiai and at the same time also exceeded national growth rates. Despite this growth, average wages and salaries have not yet reached the national level, although the gap between earnings here and in the country as a whole is gradually closing.

Over a quarter of the county's employees work in manufacturing, where average earnings were some 13% above average in 1997. Those employed in hotels and restaurants receive the lowest wages of all workers in the county, and their earnings are also well below average for this sector.

### Main enterprises

Name	Activity
Ekranas	Electrical components manufacturer
Panevėžio liginė Linas	Hospital activities
Panevėžio stiklas	Manufacture of flax-type fibres
Rokiškio sūris	Glass manufacturer
Panevėžio šilumos tinklai	Dairy producer
Panevėžio elektros tinklai	Energy supplier
Krekenavos agrofirma	Electricity distribution
Panevėžio cukrus	Agriculture
	Sugar producer

While those working in the agricultural sector enjoyed above average growth rates in their earnings, they still remained below average for the sector in 1997. Those employed in the construction, transport and financial sector also experienced above average growth in their earnings between 1995 and 1997, while those working in mining, manufacturing, the energy sector and in the hotel trade had below average growth in their wages in this period.





## Female unemployment lowest in country

On-going processes to restructure the economy, privatisation, and migration have influenced the employment structure in Panevėžys county. Overall employment decreased by 14.9% in the period from 1992 to 1998 as against an 11% drop in the country as a whole.

Within the main sectors of the economy, there were varying degrees of change. In the agricultural sector the number employed decreased by 10.7% between 1995 and 1998, which was just slightly above average, whereas employment in industry decreased by 11% - more than double the decrease in this sector in the economy as a whole. While service sector employment increased by 4% in this same period, this growth rate was well below overall growth rates in this sector in Lithuania as a whole.

Data obtained from the Labour Force Survey between 1997 and 1998 also confirmed the trend towards declining employment levels, with male employment in particular dropping considerably. It also suggested that employment in agriculture was still well above average here, while employment in industry and services is below average.

1 400 people were retrained in labour market centres here in the period from 1994 to 1997, while 15 000 workers acquired new qualifications and/or improved their skills.

According to Labour Exchange data the unemployment rate increased between 1993 and 1996, although it has started to decrease slightly since then. During this period, the number of unemployed women rose from 3 500 in 1993 to 5 800 in 1998, while the number of unemployed below 25 changed only slightly.

Data from the Labour Force Survey recorded unemployment in the county at 14.1% in 1998, which was slightly above average, whereas female unemployment at 8.6% was well below average (12.2% nationally) and the lowest of any county.

## A unique old-fashioned narrow-gauge railway

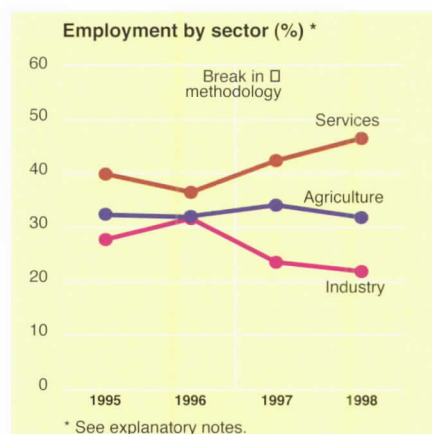
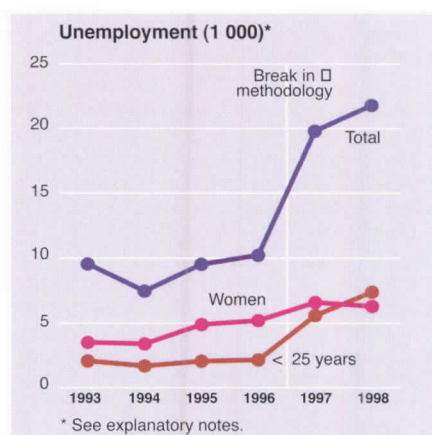
Panevėžys county has a very dense railway network, with 291 km of track in total, giving a density of 36.9 km per 1 000 km<sup>2</sup>. However, just over half (52%) of the railway lines are of narrow gauge. Narrow gauge railway track (unofficially called "siaurukas") were constructed in the late 19th century during the rule of tsarist Russia. The railway enjoyed intense traffic in the inter-war period and after World War II. Today, the railway connects Panevėžys with Šiauliai city and Biržai district (Panevėžys county) in the north-west, whereas towards the east it runs into Utena county.

Parts of the network are no longer used at present as they are not economically viable, partly because of the costly repairs needed and the maintenance of cars and engines. The line running from Panevėžys to Rubikiai in Utena county is the most frequently used route for tourist trips. Technical maintenance of the track as well as the development of tourist infrastructure requires huge investment, which will hopefully attract private capital and investment.

At the end of 1998 the total length of road in the county was 2 447 km, of which 1 192 km had had their surface upgraded. In terms of overall road density, this gives 310 km per 1 000 km<sup>2</sup>. There are 16.3 km of roads with an improved surface per 1 000 cars.

Within the county two customs posts operate on the border with Latvia.

The number of main telephone lines installed has been increasing and between 1995 and 1998 there was an 11% increase in the number of telephone lines, giving 209 units per 1 000 population in 1998. Despite this increase the county still lags well behind the Lithuanian average of 232 lines per 1 000 population, and the situation is worse only in Tauragė county. With 150 lines per 1 000 population in rural areas, this latter indicator slightly lags behind the national average.



## Employment by age group - 1998 (%)

	< 25 years	25-54 years	> 54 years
Men	15	72	13
Women	11	81	8
Total	13	77	10

## Good water and sewerage network

In 1997 the emission of pollutants into the atmosphere from stationary sources per km<sup>2</sup> was less than in the country as a whole, with 64 kg of solids, and 791 kg of gaseous and liquid substances being emitted per 1 km<sup>2</sup>.

The water supply network is well developed in the county at 1.83 m in length per 1 000 population. Of the 47.8 cubic meters of water per capita supplied through it to meet end users' needs, 32.4 cubic meters per capita are used for household consumption.

In addition to having a well developed water supply network, the county also has a good sewerage network. Furthermore, just over half of all discharged wastewater is treated biologically. Increasing pollution of the rivers crossing the county has been a problem that encouraged targeting attention and efforts at wastewater treatment. The river Nevėžis, which flows through one of the leading industrial towns of Lithuania, Panevėžys, suffers particularly from pollution. The Soviet military bases, which were sited in the area from the post war period until the restoration of independence, had a negative impact not only on the rivers but also on the environment generally. These included a strategic air force base near Panevėžys in Pajuostė and an aircraft repair depot in the town on the bank of the river Nevėžis.

In contrast, the natural gas network is less dense here, as a result of which more liquid gas is consumed here than natural gas. There are 320 dwellings attached to the gas network per 1 000 population in the county.

### Surfaced public roads – 1997

	Panevėžys Lithuania	
Length in km per km <sup>2</sup> *	0.15	0.17
Length in km per 1 000 population *	3.7	3.0
Length in km per 1 000 private passenger cars (1998) *	15.0	12.0
% private passenger cars in total number of vehicles (1998)	83	84
Number of accidental deaths per 1000 private passenger cars (1998)	1.0	0.9

\* See explanatory notes.

### Environment - 1997

	Panevėžys Lithuania	
Towns connected to public water supply	12	107
Towns connected to public sewerage	12	105
Sewerage subject to treatment (%)*	96	76
Per capita consumption of water (m <sup>3</sup> )*	32.5	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	8 444
Primary	19 890
Secondary comprehensive	29 827
Secondary vocational	4 525
Tertiary (higher education)*	3 276
Total	65 962

\* See explanatory notes.

### Health care - 1997

	Panevėžys Lithuania	
Number of hospitals	20	187
Number of doctors per 10 000 population	24.4	39.8*
Number of hospital beds per 10 000 population	90.4	98.4*

\* See explanatory notes.

### Telephone services

	1995		1997	
	Panevėžys	Lithuania	Panevėžys	Lithuania
Lines per 1 000 population	188	204	209	232
% connected to digital network	:	:	:	:

## Number of children in education increases

In 1998 there was an increase in the number of children attending kindergartens, although the growth rate is slower than average.

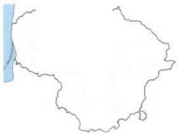
Since 1993, the number of pupils attending school has also increased and in 1998 some 86% of all children aged between 7 and 18 were in education. There are also 10 vocational schools in the county, with 4 500 pupils studying there, while over 300 girls attend the only Catholic agricultural college. Out of 7 colleges, 2 training pupils in business and management are private.

Over 1 000 students study at the Panevėžys polytechnic faculty of the Kaunas University of Technology. There are plans to reorganise the faculty and establish it as part of Panevėžys University.

Some changes occurred in health indicators, which were influenced by the health system reform in the country. The number of beds in hospitals decreased, while the number of physicians remained unchanged. A rapid increase in the number of pharmacies has also been noted.

There is a strong cultural base in the county, with 675 groups of artists who organised over 7 000 concerts and other cultural events. The only musical theatre is in Panevėžys, where 20 performances, attended by 5 000 spectators, were staged in 1998. The J. Miltinis drama theatre, established in 1925, is well known in the country and abroad. 222 performances were staged there in 1998.

Among the county's many museums are the ethnographic museum in Uogintai. The folk music ensemble, 'Kupiškėnų vestuvės', founded in Kupiškis, re-enacts wedding traditions from former times. While the number of libraries decreased here, the readers were very active, taking out an average of 30 books per library visitor in 1998.



# Šiauliai county

## Northern Lithuania's transport hub

The county of Šiauliai is situated in the north of Lithuania and covers parts of the regions of West Aukštaitija and Žemaitija. The county borders Latvia in the north and the counties of Panevėžys, Kaunas, Tauragė, and Telšiai.

Šiauliai town was first mentioned in the 13th century in the chronicles of the Livonian Order describing the battle of the Sun which took place in 1236. In the 15th century the town expanded greatly before becoming a prominent crossroads for transit transportation in the second half of the 19th century. The road from Saint Petersburg to Kaliningrad, as well as the railway from Russia and the Ukraine to the Baltic ports (Riga in Latvia) pass through the town, as do highway connections from every town in Lithuania.

Nowadays Šiauliai is a prominent cultural, educational, scientific, industrial, and transport centre for the northern part of Žemaitija and the entire northern part of Lithuania.

The county of Šiauliai includes the districts of Akmenė, Joniškis, Kelmė, Pakruojis, Radviliškis, Šiauliai, and the town of Šiauliai. The majority of the population speaks Lithuanian, with Russian and other languages also in use.

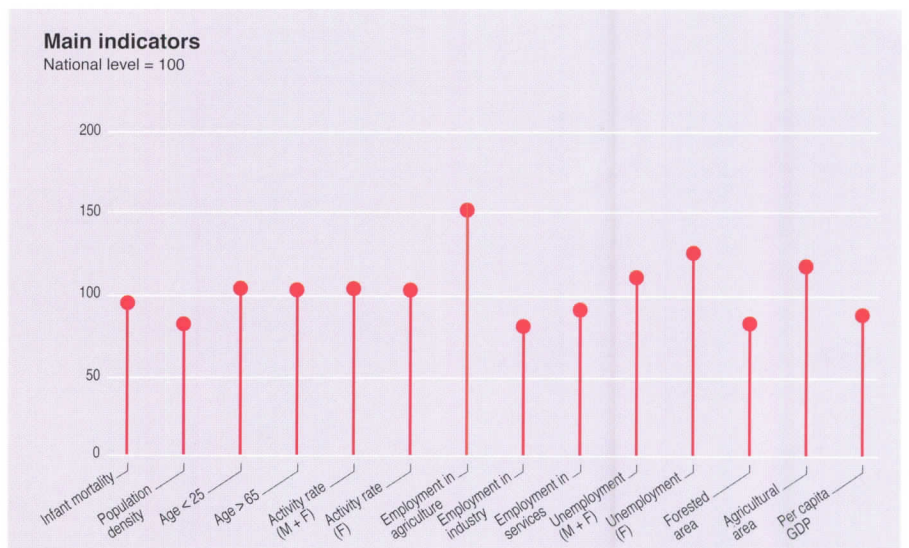
The plains of north Lithuania are picturesque with the Venta river meandering through them. A regional park has been established in its lower course, while the Žagarė regional park as well as the Kurtuvėnai and Tytuvėnai regional parks, established in the 17th century, attract tourists from the whole country.

Among the county's main architectural and cultural monuments are the Šiauliai St. Peter and Paul church (17th century), the Kelmė manor palace (18th to 19th century), the Linkuva monastery (18th century), and above all the Hill of Crosses, called the Saints' Hill.

One of the oldest and largest museums in Lithuania, "Aušra" is situated in Šiauliai House, while the museum of S. Daukantas is in Papilė.



The Crosses' Hill  
(Photo: Methodical Publishing Centre, 1999)



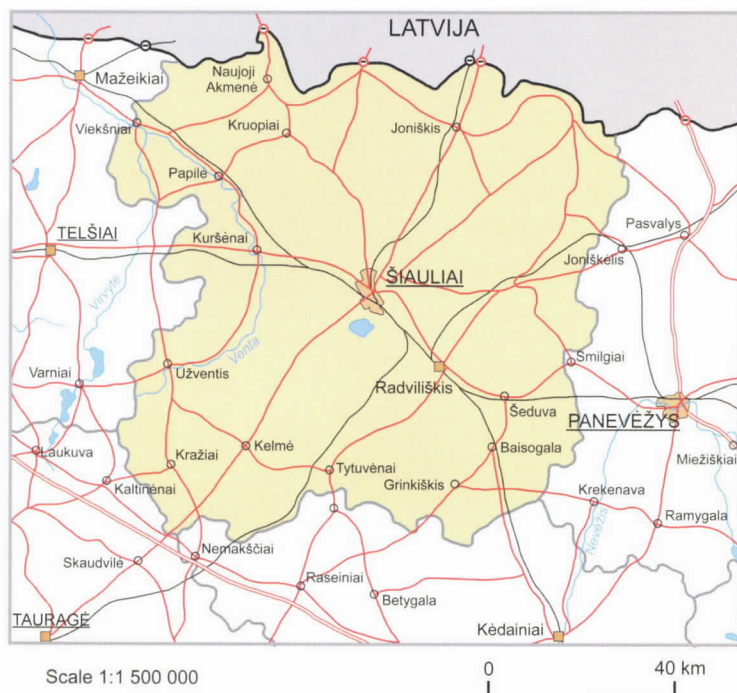
## Free economic zone to be established in Šiauliai

Nowadays the former military airport, which is located close to the county's borders, serves as an international airport and boasts the longest runway in Europe. There are plans to designate the area around the airport as a free economic zone, with the hope that this might have a positive influence on the development of the county's economy and at the same time help to solve its employment problems.

Following the reorganisation of the Šiauliai Pedagogical Institute and its amalgamation with the technical faculty of the Kaunas University of Technology, the University of Šiauliai was established in 1997. Scientists and pedagogical person-

nel come to lecture here from all over Lithuania. Šiauliai University actively cooperates with universities in Germany, Sweden, Denmark, Austria, the United Kingdom, France and other countries. They develop a variety of research projects in the fields of ecology and psychology.

Industrial enterprises, whose production until recently had been geared towards the Eastern market and particularly based on receiving orders from the former Soviet Union, are undergoing a difficult transition period towards a market economy. The volume of production has decreased, while the financial situation is complicated. Enterprises are actively looking for new partners, for potential investors as well as for markets for their production.



**Which regions are similar to Šiauliai?**

**Land use:**  
63% agriculture  
Wielkopolskie (PL)  
Centre (F)  
Overijssel (NL)

**Population:**  
401 500 inhabitants  
Potenza (I)  
Baranya (HU)  
Turnhout (B)

**Area:**  
8 751 km<sup>2</sup>  
Côte-d'Or (F)  
Almería (E)  
Timiș (RO)

in the district of Akmenė, is abundant in natural resources such as dolomite and clay. Towards the south of Šiauliai county, industrial peat areas are located (Rėkyva, Tytuvėnai Tyrelis, Šiluva Tyrelis). Most of the production from this area is exported to Western Europe.

A rather dense network of three rivers, the Mūša, Dubysa, and Venta, as well as their tributaries, crosses the county. In addition to many small rivulets and streamlets, there are 80 lakes in the county. The largest lake is Lake Rėkyva near the town of Šiauliai. Furthermore, there are 60 artificial water reservoirs in the county.

With the soil here being particularly fertile, agricultural land covers almost two-thirds of the county's overall area, and is the second highest ratio of agricultural land in Lithuania after the county of Marijampolė. In the districts of Joniškis and Pakruojis it accounts for as much as 70% of the district's total area. Soils are particularly fertile in these districts and indeed crop yields per ha in the districts of Joniškis and Pakruojis in 1996 were well above the national average.. The districts boasted a higher than national average yield of sugar beet and potatoes, two crops which are of great importance for the districts.

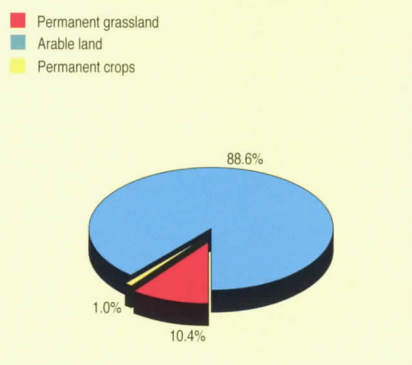
Forests cover approximately a quarter of the county's area, though they are distributed unevenly. The districts of Šiauliai and Akmenė are more densely wooded (31.6% and 30.4% respectively), than the districts of Joniškis and Pakruojis (approximately 18% only). The largest forest area, the Žagarė wood, is located in the north of the county.

**Agriculture 1998**

Number of private farms all types *	77 936
Persons working in agriculture	55 100
Total agricultural area (ha)	547 353
Total livestock	395 627
Cattle per 100 ha of total agricultural land	32.0
Pigs per 100 ha of total agricultural land	51.0
Share of crop products in total agricultural output (%)	62.0
Main crops (1 000 tonnes)	
Cereals	621.1
Vegetables	96.9
Potatoes	282.1
Sugar beet	293.8

\* see explanatory notes

**Agricultural land use in 1998 (%)**



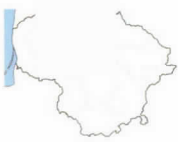
**The lowest level of precipitation and vast areas for agriculture**

The area of the county is 8751 km<sup>2</sup> or 13.4% of Lithuania's total area. The relief here is gradually tilted, as it moves via the Venta lowland and the Žiemgala plain towards the gently undulating Žemaičiai uplands.

Winter and summer temperatures in the county are close to the national average, while average annual precipitation is the lowest in Lithuania and amounts to 550 mm per year. This is influenced by the prevailing winds and the situation of the Žemaičiai uplands.

The northern part of the region, especially





## Declining birth rate

The population in the county numbers 401 500 or 10.8% of the total population in Lithuania. The county ranks in fourth place by population and is slightly below average with a population density of 46 people per km<sup>2</sup>. While just under two-thirds of the county's population live in towns, the majority of them inhabit the town of Šiauliai, the centre of the county and the fourth largest town in Lithuania.

Women account for 52.9% of the population, a figure which corresponds to the national average.

While the demographic account reveals an overall increase in the size of the population between 1990 and 1999, in fact this growth halted in 1993, since when the population has been decreasing. The growth at the beginning of the decade was in the main due to positive migration. Overall there has also been a trend towards positive net migration in rural areas.

The birth rate has been decreasing since 1992, and in 1998 was 10.3 births per 1 000 population, or 44 births per 1 000 women aged between 15 and 49. The number of children born out of marriage is the highest in the country, and accounts for 20% of all children.

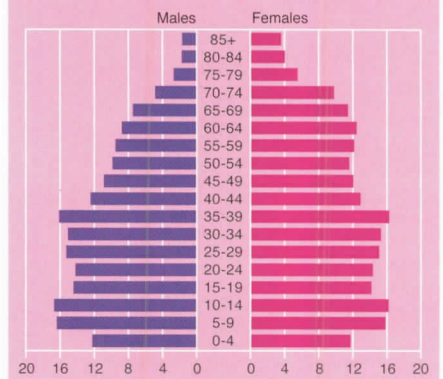
As in the whole country, the mortality rate, which increased from 1994 to 1995, has again become stable, and is just above average. The mortality rate here is influenced by blood circulatory diseases. Infant mortality is, in contrast, slightly below average.

The age structure of the county's population reveals little difference from the national average at the beginning of 1999. The population aged 65 and over accounts for 13.2%, while those under 25 make up 35.7%. In 1999 the population of working age accounted for 56.5% and the non-working age population 20.3% of the total population. In 1998 there were 766 dependants per 1 000 working age population, of whom half were of pensionable age.

Average life expectancy is slightly lower than the average in the country at 66.1 years for men and 76.3 years for women.

In terms of nationality, the vast majority of the population are Lithuanians. It is only in Šiauliai where another ethnic grouping is present in any number, as one tenth of the population are Russian here.

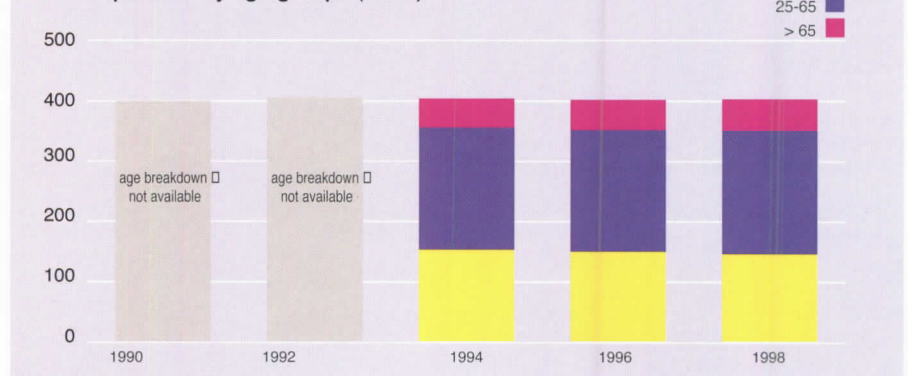
Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

Population (01 01 90)	399.1
Births	47.5
Deaths	42.9
Migration	-2.3
Population (01 01 99)	401.5

Population by age-groups (1 000)



Akmenė Town  
(Photo: Kraštovarka UAB)

## Great importance attached to agriculture

Within the structure of Šiauliai county's economy, the agricultural sector plays a significant role. The share of value added produced by this sector is almost double the national average, running at just over 20% as against 11.7% nationally. Only the counties of Marijampolės and Tauragės produce higher gross value added from agriculture.

Agriculture covers 62.6% of the county's total area, of which 88.6% is arable land. Half of this land is given over to grain crops, the rest being used for potatoes, sugar beet, and fodder crops. The yield from grain crops exceeds the average in the country by 10%. Šiauliai county is in a leading position as far as the yield of sugar beet is concerned, as one third of Lithuania's total production is grown here.

The county of Šiauliai produces 7% of the country's total industrial production. Significant industrial products are bicycles and mopeds (produced by 'Baltik vairas'), cement (by 'Akmenės cementas'), and TV sets (by 'Taurus'). These products are sold in both Eastern and Western markets.

Retail trade turnover increased 3.6 times in the county in the period between 1992 and 1997, with per capita retail turnover also increasing. Both figures are nevertheless below the national average. In the period between 1993 and 1997, the volume of market services provided per capita doubled, but was still well below average.

The economic potential of the county has been constantly decreasing because of the decrease in industrial output. Per capita GDP decreased between 1996 and 1998. At 13% below the Lithuanian average, it is the fourth lowest of all the counties.

While both total investment and direct foreign investment have been increasing, both figures are well below average in this region.

## Despite high growth rates, wages still below average

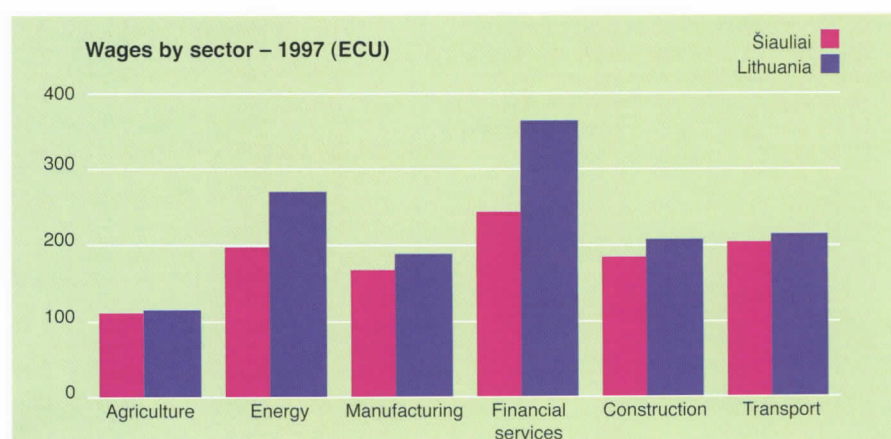
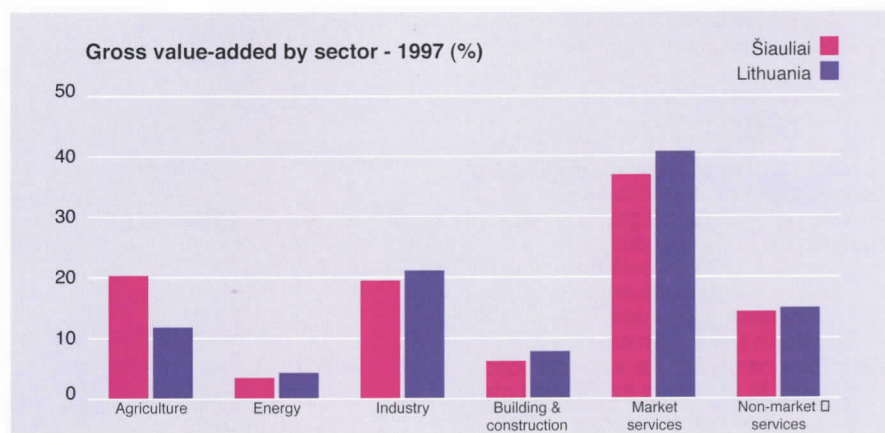
One tenth of all Lithuania's wage and salary earners work in Šiauliai county. Despite recent growth rates, their overall wages and salaries remained some 12% below the national average.

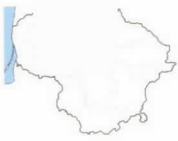
Furthermore, one fifth of the county's employees work in the manufacturing sector, where although earnings are higher than the average wage paid in the county they still fall well below the Lithuanian average for earnings in that sector.

One sixth of all hired employees in the county are employed in the agricultural sector, where despite large increases in wages in the last few years the average wage in Šiauliai is still slightly below the national average for the sector. Wages paid to agricultural workers in 1997 were also well below average earnings in the county as a whole. While average wages and salaries slightly exceed the overall national average in some sectors such as energy, construction, transport, storage and communications, they were nevertheless below average earnings for that particular sector.

### Main enterprises

Name	Activity
Šiaulių ligoninė	Hospital activities
Lietuvos telekomas	Telecommunications
Šiaulių energija	Energy supplier
Šiaulių regiono geležinkelio stočių skyrius	Rail transport company
Šiaulių elektros tinklai	Electricity distribution
Akmenės cementas	Cement manufacturer
Šiaulių vyriausiasis policijos komisariatas	Police station
Šiaulių pienas	Dairy producer
Šiaulių autobusų parkas	Transport company





## High unemployment rate

Between 1992 and 1998 the number of people employed in the county decreased just as in all other counties of Lithuania, although the 13.2% drop was above average, making this the third worst hit county. This downward trend started to be reversed in Šiauliai town by 1996 when employment started to grow again. The districts of Radviliškis and Joniškis have also experienced growth rates in employment.

According to the Labour Force Survey, overall employment levels remained quite stable between 1997 and 1998, and in fact in 1998 it was slightly higher than the national average at 54.4%.

Across the different sectors of the economy, the changes in the number of employed in Šiauliai county as compared to other counties had some unusual features. In contrast to other regions, the number of employed in the agricultural sector increased between 1992 and 1996 and then started to decrease considerably from 1997. In the industrial sector the number of employees remained stable up to 1996, before starting to decrease in 1997. This has been partly influenced by the situation in Šiauliai town, where the number of jobs in industry decreased by 2 300 from 1995 to 1997. In the construction sector, the number of jobs decreased at a lower pace, while in the services sector it started to grow rapidly in 1997.

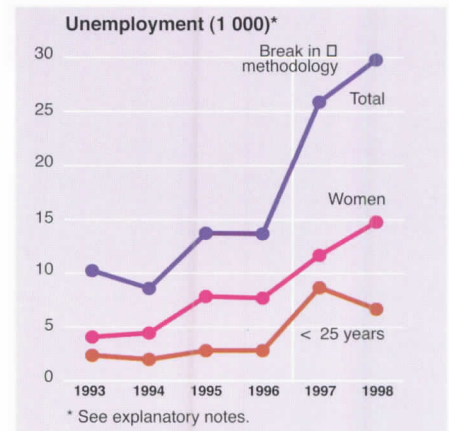
The job centres retrained or gave basic skills to a total of 8 000 people between 1994 and 1997.

Labour Exchange data revealed a higher than average unemployment rate between 1993 and 1998. The number of unemployed women registered at the Labour Exchange also grew rapidly, doubling between 1993 and 1998 to 8 900. At the same time, the number of young people (under 25 years old) who were unemployed increased from 2 400 in 1993 to 3 300 in 1998. The majority of the unemployed had previously been working in industry (26.1%), although the number of unemployed who before had been working in agriculture has been continuously increasing.

The unemployment rate in Šiauliai county in 1998 was, using Labour Force Survey

data, one of the highest in the country at 14.7%. Of note was the fact that the unemployment rate for women was higher than that for men, and was the highest in Lithuania.

According to Labour Exchange data, long-term unemployment is characteristic for Šiauliai county, as there are fewer people here who have been unemployed for less than 6 months than in any other county. Indeed, long-term unemployment (out of work for 12 or more months) affects almost 9 out of 10 of the unemployed.



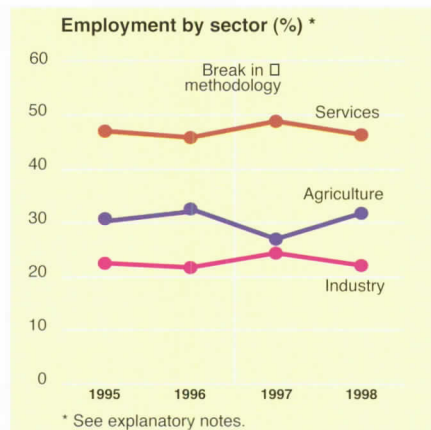
## The largest railway junction in the country

Šiauliai town, together with the town of Radviliškis which is also situated in the county, form the largest railway junction in Lithuania. Cargo flows across Šiauliai heading towards the port at Klaipėda. There were 294.4 km of railway track in the county in 1998, giving a density of 33.6 km per 1 000 km<sup>2</sup>. In terms of overall length of track, the county is in second place after Vilnius county, although it is only in fourth place by density of railway track.

There are good road connections from Šiauliai to every town in Lithuania, as well as to towns in neighbouring countries such as to Riga (Latvia), Sovetsk, Kaliningrad, and Saint Petersburg (Russia). The European-standard highway from Vilnius to Klaipėda also crosses the county. Šiauliai international airport is of great importance for the county. The airport receives all types of aircraft, and places few limitations on noise emission and night flight requirements.

Road length here is 2 714.2 km, giving a total road density of 310 km per 1 000 km<sup>2</sup>, and the density of roads with an upgraded surface is 134 km per 1 000 km<sup>2</sup>. There are 13.3 km of roads with an improved surface per 1 000 cars.

In 1998 there were just over 100 000 telephones in the county, of which 86% were installed in urban areas. There were 214 telephone units installed in dwellings per 1 000 population, while in rural areas this figure dropped to 157 units per 1 000 population.



	< 25 years	25-54 years	> 54 years
Men	14	71	15
Women	12	79	9
Total	13	75	12

## High pollution levels

The county suffers greatly from air pollution from stationary sources, and in 1997 had the highest emissions' level per km<sup>2</sup> in the country, with 454 kg of particulate matter emitted. This figure is three times higher than the national average, and the largest polluter is the cement enterprise in Akmenė. Emissions of gaseous and liquid contaminants are, however, below average.

There is a well developed sewerage network in Šiauliai county, and 92% of waste water is discharged via sewerage treatment facilities. The majority of this discharged waste water then undergoes biological treatment.

The water supply network consists of 0.42 km of street piping per 1 000 population, supplying 36.5 cubic meter of water per capita, of which 29.6 cubic meters per capita is used by households.

Natural gas penetration is high in the county, with 1.28 km in length of gas piping per 1 000 population. There are 304 dwellings with a gas connection per 1 000 population, and 52 cubic meters of natural gas and 16.9 kg of liquid gas are supplied per 1 000 population.

The Kamanai state reserve, which is situated in the county, ranks in second place by size in the country. It covers 4 300 ha and offers protection to 38 species of animals, 124 species of birds, and 68 species of plants.

### Surfaced public roads – 1997

	Šiauliai Lithuania	
Length in km per km <sup>2</sup> *	0.13	0.17
Length in km per 1 000 population *	2.9	3.0
Length in km per 1 000 private passenger cars (1998) *	13.3	12.0
% private passenger cars in total number of vehicles (1998)	82	84
Number of accidental deaths per 1000 private passenger cars (1998)	1.1	0.9

\* See explanatory notes.

### Environment - 1997

	Šiauliai Lithuania	
Towns connected to public water supply	16	107
Towns connected to public sewerage	15	105
Sewerage subject to treatment (%)*	92	76
Per capita consumption of water (m <sup>3</sup> )*	29.7	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	8 892
Primary	25 725
Secondary comprehensive	38 925
Secondary vocational	7 123
Tertiary (higher education)*	7 848
Total	88 513

\* See explanatory notes.

### Health care - 1997

	Šiauliai Lithuania	
Number of hospitals	24	187
Number of doctors per 10 000 population	23.3	39.8*
Number of hospital beds per 10 000 population	87.8	98.4*

\* See explanatory notes.

### Telephone services

	1995		1997	
	Šiauliai	Lithuania	Šiauliai	Lithuania
Lines per 1 000 population	187	204	214	232
% connected to digital network	:	:	:	:

## More than one third of the country's teachers are trained here

The number of children receiving pre-school education is not high in the county, as only 43% of the total number of children aged between 3 and 6 attend nursery school. The only non-state kindergarten in the county is located in Pakruojis district.

While the number of schools providing primary and secondary education decreased by 5 between 1995 and 1998, the number of children in them increased by 5 700 during the same period. However, with 85% of all children between 7 and 18 in education, this is one of the lowest figures in the country.

At tertiary level, there is a private business school, and four other colleges attended by 2 200 students in 1998. Šiauliai Pedagogic University trains over one third of all teachers in the country.

The number of physicians per 10 000 people is below average, while paramedical staff has been decreasing, as have the number of beds per 10 000 population between 1994 and 1997 and at a higher than average rate.

There are 7 museums in the county, and of these the most popular is the Daugyvenė museum which received 33 000 visitors or 30% of all museum visits in the county in 1998. The Šiauliai choir, 'Polifonija', organised 23 concerts, which were attended by 40 000 spectators in 1998. Cultural centres have become more active since 1995, and in 1998 there were 122 cultural centres in the county.



## Tauragė county

### Scene of important historical events

Tauragė county is Lithuania's smallest county both by size and by population. It covers the southern part of the Žemaitija ethnographic region. In the south the county border is formed by the Nemunas, the largest river in Lithuania. The Jūra, Mituva and Dubysa rivers meander across the county.

Historical manuscripts first mention the castle of Veliuona in the 11th century, when it played an important role in defending the area. In 1443 Veliuona was granted town status. Two international agreements have been signed in the county, the 1807 peace agreement of Tauragė-Tilžė between France and Russia, and the Tauragė convention signed in 1812 between Russia and Prussia concerning joint action against Napoleon.

Situated on the Jūra river, the town of Tauragė is the county's administrative centre. It was first mentioned in written manuscripts in 1507, when the first church was built and the first Žemaitija parish school opened. The parish of Evangelistic Lutherans was established in 1567. Between 1688 and 1793 Tauragė belonged to Prussia and was then a part of the Russian Empire from 1795. The town was completely destroyed during the First World War and had to be rebuilt afterwards.

Tauragė county includes the districts of Tauragė, Jurbarkas, and Šilalė. The majority of the county's population speaks Lithuanian, with Russian and other languages also in use.

Archeological monuments found in the county include impressive mounds, as well as old graveyards. Raudonė castle (16th to 19th century) is included in the programme for the country's development of cultural tourism. Tauragė palace (19th century), Belvederis mansion, and the churches of Skaudvilė, Pagramantis, Sartininkai, and Veliuona (17th -19th century) are distinctive cultural monuments located in the county.

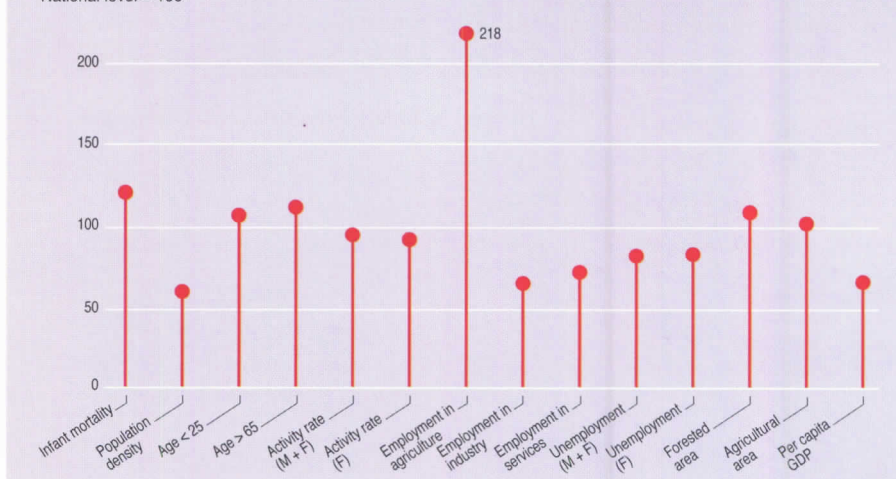
The Baubliai museum in Bijotai village, which commemorates the writer D. Poška, is the oldest ethnographic museum in Lithuania (1812), and was originally based in the trunks of hollowed out oak trees. A museum has been established in the house of D. Girėnas, one of two pilots who crossed the Atlantic in 1933, in Šilalė district in Vytogala village. A handicrafts museum is active in Upyna.



Raudonė Castle  
(Photo: Kraštotvarka UAB, 1999)

### Main indicators

National level = 100



### Development of non-traditional activities

In the process of restructuring the economy, emphasis was placed on the development of small and medium businesses, and the setting up of joint companies. Agrarian reform resulted in some of the large collective farms that had previously dominated the region's agriculture being reorganised as agricultural partnerships. In other cases, land was returned to its former owners, dispossessed under the Soviet nationalisation programme of 1940 or during the post-war collectivisation, and most agricultural land is now exploited as small, individual farms.

In 1993 a partnership agreement with Riedstadt (Germany) was signed in Tauragė

district. The aim of the agreement was to promote contacts between Lithuanian and German enterprises, the exchange of specialists, the development of sporting and cultural links, cooperation between schools as well as strengthening economic ties.

Non-traditional activities are being introduced into rural areas. They cover areas such as agrotourism, ecological agriculture and the growing of rare and medicinal herbs. Alternative energy sources, such as water, wind, and geothermal, are being experimented with in urban and rural areas.

Tourism is another area currently under development, and the Jūra river and its tributaries serve as a basis to attract



Scale 1:1 500 000

0 40 km

**Agriculture 1998**

Number of private farms all types *	31 012
Persons working in agriculture	24 000
Total agricultural area (ha)	210 308
Total livestock	159 371
Cattle per 100 ha of total agricultural land	36.0
Pigs per 100 ha of total agricultural land	53.0
Share of crop products in total agricultural output (%)	51.0
Main crops (1 000 tonnes)	
Cereals	161.2
Vegetables	48.3
Potatoes	100.6
Sugar beet	0.0

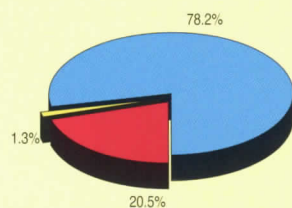
\* see explanatory notes

tourists for water sports.

The main problem which the county faces is that its economic potential is rather weak. This not only influences the standard of living but also has an impact on the morale of its inhabitants. The problem of low employment levels is proving difficult to solve in the county's small towns and villages.

**Agricultural land use in 1998 (%)**

■ Permanent grassland  
■ Arable land  
■ Permanent crops

**Baltic Sea influences the climate**

Tauragė county covers 3 874 km<sup>2</sup> or 5.9% of Lithuania's total area. In the south the county borders the Kaliningrad region of Russia. Within Lithuania, the county is surrounded by the counties of Marijampolė, Kaunas, Šiauliai, Telšiai and Klaipėda.

The relief here is typical of the northern part of the county, with the presence of the hilly Žemaičiai upland. The highest hill situated in the region is the Medvėgalis, which reaches 234.6 m. The southern part of the county comprises the Karšuva lowland.

The Baltic Sea has a considerable impact on the climate of the county. Winters are not severe, with an average January tem-

**Which regions are similar to Tauragė?****Area:**3 874 km<sup>2</sup>

Varna (BG)  
Siena (I)  
Sønderjyllands amt (DK)

**Population density:**34 inhabitants per km<sup>2</sup>

Indre (F)  
Thesprotia (EL)  
Notranjsko-kraška (SI)

**Employment structure:**

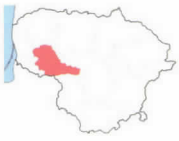
18% industry

Åland (FIN)  
Highlands and Islands (UK)  
Podlaskie (PL)

perature of -4.5°C, while summers are warm, with an average July temperature of 17.0°C. Southwesterly winds prevail, bringing more rain to this part of Lithuania than to any other part. The highest average annual precipitation is in Šilalė district, where 900 mm fall annually.

There is little in the way of natural resources here, only some areas of gravel, clay, and peat. The southern part of Tauragė county stretches alongside the Nemunas river and the picturesque Dubysa river. Although rivers in the county carry considerable volumes of water, only 25 lakes are located here.

Agricultural land covers half of the county's area, although in the district of Šilalė it covers a higher proportion of the district's area (57.0%). Forests cover one third of the county's territory, with the districts of Jurbarkas and Tauragė being more wooded. The Karšuva woods and Pagramantis forests are situated in these districts.



## High birth rate keeps population buoyant

As well as being the smallest county by area, Tauragė county is the smallest in terms of its population, which numbers 129 800 or 3.5% of Lithuania's total population. The county's five towns are populated by 45% of the county's inhabitants. The population density is the second lowest in the country after Utena county, with 34 people per km<sup>2</sup>.

Women account for 52.5% of the population, with 1 103 women per 1 000 men, which is slightly less than the national average.

Looking at the demographic account for the county since 1990 reveals an overall increase in the size of the population, although this trend began to be reversed from 1997. This increase is quite exceptional, as it was influenced both by a natural increase in the population with births exceeding deaths as well as by migration. Net migration was positive up to 1997, whereas the number of emigrants exceeded the number of immigrants in 1998. The increase in the population in rural settlements was also influenced by internal migration.

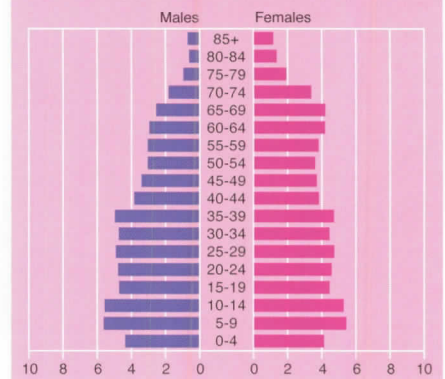
In 1998 the birth rate was one of the highest in the country, with 10.9 births per 1 000 population. Birth rates for specific age groups were also high, with 48 births per 1 000 women aged between 15 and 49. The percentage of children born out of marriage is below average, with 14.9% of children born out of marriage in 1998. Since 1990 the number of marriages has halved, while the number of divorces dropped in 1998 to 2.7 divorces per 1 000 population, which is one of the lowest figures in the country.

Mortality rates in the county were higher than average, and in 1998 accounted for 11.5 deaths per 1 000 population. Male mortality rates were also higher than in other counties. Infant mortality in 1998 was higher here than in any other county at 13.3 deaths per 1 000 live births.

The age structure of the population is close to the national picture. At the beginning of 1999 people aged 65 and over accounted for 14.4% of the population (13.6% nationally), while 36.8% were under 25 (35.2% nationally). There were 843 dependants per 1 000 working age population, 47% of whom are of pension age. It also should be noted that the under 15s make up a considerable share of the population at 24.2%.

Average life expectancy in the county in 1998 was lower than average at 64.4 years for men and 76.4 for women.

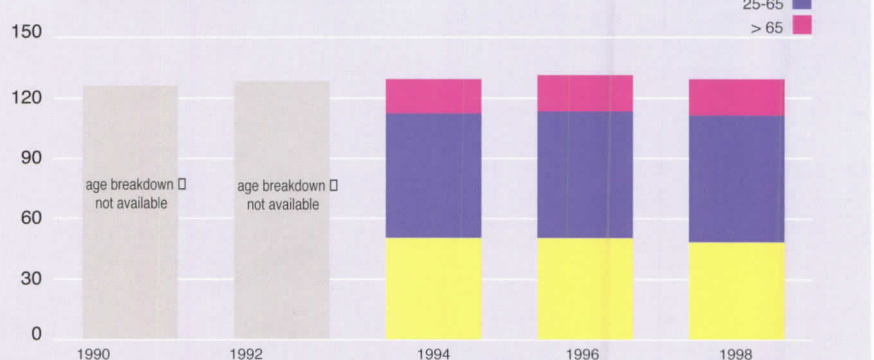
Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

Population (01 01 90)	125.7
Births	16.3
Deaths	14.6
Migration	2.6
Population (01 01 99)	129.9

Population by age-groups (1 000)



Serezius petrol station and café-bar  
(Photo: Kraštovtarka UAB)

## Agriculture prevails while market services are underdeveloped

Tauragė county's economy is heavily dependent on agriculture, with the greatest share of the county's gross value added coming from this sector which is also the biggest employer. In 1997 gross value added from agriculture reached 34.7%, or 3 times the Lithuanian average, and a higher figure than in any other county. In contrast, the gross value added produced by other sectors of the economy is below average, with industry accounting for 12.6% as against 21% nationally, and market services for 30.5% as against 40.6% nationally.

Agricultural land covers 54% of the county's area, of which 80% is arable land. Crops cover almost all of the arable land, half of which is given over to grain crops, 6.1% to potatoes, and a small portion to field vegetables. The yield from sugar beet is very high in the county, exceeding the national average by 70%. It is Lithuania's leading county in terms of the number of livestock and milk yield per 100 ha of agricultural land.

Tauragė county makes the smallest contribution to industrial production of all the counties. Its main industrial products are drainage pipes (produced by joint stock company 'Tauragės keramika'), and mixed fodder (produced by joint stock company 'Tauragės grūdai').

The turnover from retail trade increased 4.2 times in the period from 1992 to 1997, with per capita retail turnover also increasing. However, per capita retail turnover grew at a slower pace than that achieved nationally (886.8 ECU in the country and 584.2 ECU in Tauragė county). In the period from 1993 to 1997 the amount of market services rendered per capita increased 2.3 times, although it still remained well below the Lithuanian average.

While total investment in the county grew, its level was well below average, as was per capita investment, which was a quarter of the national average. Similarly, direct foreign capital investment in the county was very low, with 11.6 times less direct foreign capital investment per capita than average.

With economic growth in Tauragė county at a low level, its contribution to national GDP has been decreasing and in 1998 accounted for only 2.1% of Lithuania's overall GDP. Its per capita contribution was two-thirds of the national average, giving the county the lowest per capita GDP in Lithuania.

## Low average earnings

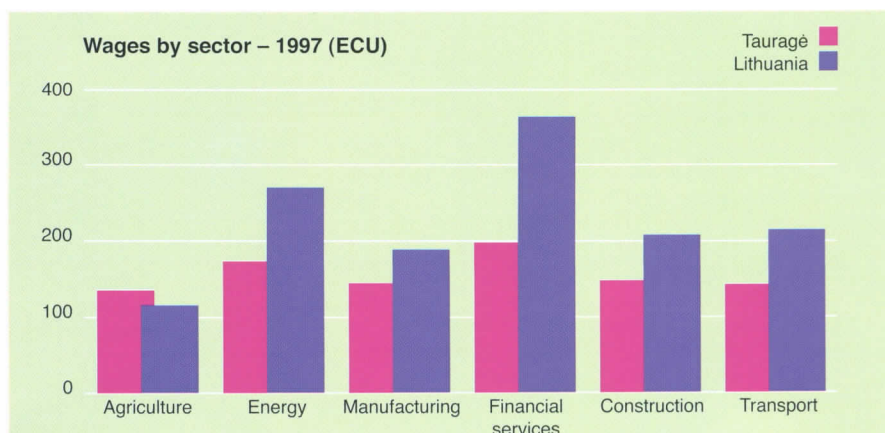
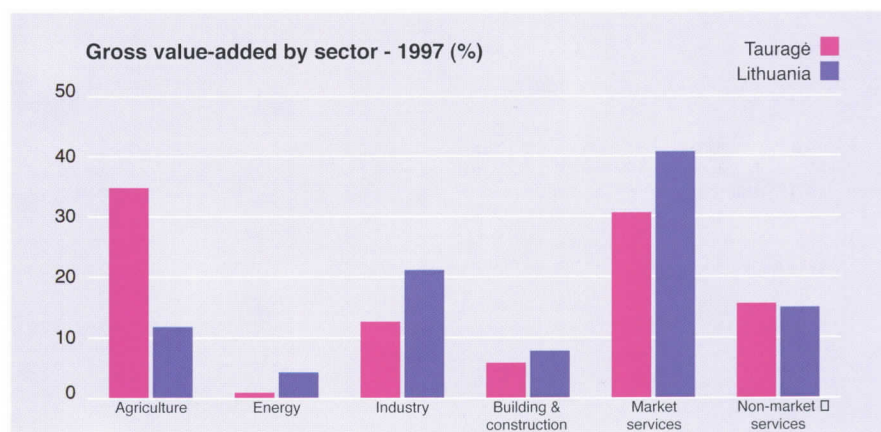
Tauragė county is the smallest by number of employees in comparison with the other counties, employing only 2% of all workers in the national economy. Wages and salaries were on average one fifth lower than the national average in 1997.

One fourth of the employees work in the field of education, where earnings are low both nationally and here too. One sixth of employees work in manufacturing, whereas agriculture, hunting and forestry employ one seventh of the county's employees. Average wages and salaries in these activities account for 81% and 76% respectively of the national average salary. In all sectors except financial services, state administration and defence, earnings were below the national average.

Despite the fact that average earnings in the county increased more rapidly than average from 1995 to 1997, the employment structure here, with quite a considerable share of employees in low paid activities, meant that earnings were some of the lowest in the country.

## Main enterprises

Name	Activity
Tauragės apskrities ligoninė	Hospital activities
Jurbarko ligoninė	Hospital activities
Tauragės maistas	Production of meat
Jurbarko pirminės sveikatos peržiūros centras	Medical practice activities
Tauragės rajono pirminės sveikatos peržiūros centras	Medical practice activities
Vienybė	Food retailer
Tauragės keramika	Manufacture of mortar
Šilalės rajono ligoninė	Hospital activities
Tauragės regiono keliai	Road maintenance
Dangija	Clothing manufacturer







## Number of employees in agriculture increases

Tauragė county experienced a similar fall in overall employment levels to that observed elsewhere in Lithuania: between 1992 and 1998, the number of people in employment decreased by 10.3%. Within the county, some differences were noted, as for example in Jurbarkas district where employment remained higher than in 1992 until 1998 when it started to drop, whereas in Šilalė district a continuous decline was observed.

The employment structure of Tauragė county is quite different from the national one. Between 1992 and 1998, overall employment decreased in industry, construction and in the services sector. This latter decline was in contrast to the national trend which saw services sector employment increasing in this period. At the same time, employment in the county rose by over 20% in the agricultural sector, whereas it decreased nationally by 9%. This resulted in 1998 in double the number of people working in agriculture here than nationally, whereas there was below average employment in industry and in the services sector.

According to Labour Exchange data on registered unemployment, the unemployment rate in the county was the highest rate in Lithuania between 1993 and 1997, reaching 12.6% in 1995. Thereafter the unemployment rate started to decrease and in 1998 it was 8.8%. Unemployment levels were influenced by the situation in the district of Tauragė, where the unemployment rate went as high as 18.1% in 1995. The lowest unemployment rate was registered in Jurbarkas district, whereas in Šilalė district it decreased from 11.8% in 1993 to 5.9% in 1998.

The number of unemployed women registered at Labour Exchanges increased up to 1995, since then has declined and in 1998 amounted to 2 400. Youth unemployment decreased from 1 800 in 1993 to half that figure in 1998. The number of people facing long-term unemployment did not drop as rapidly as unemployment in other areas.

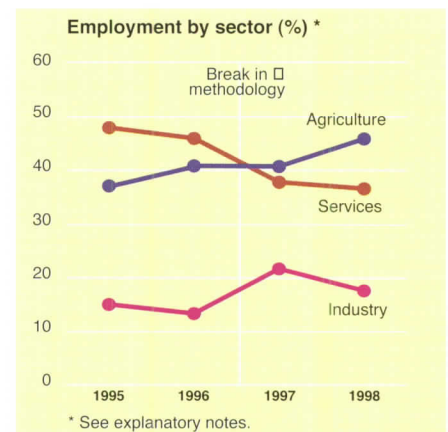
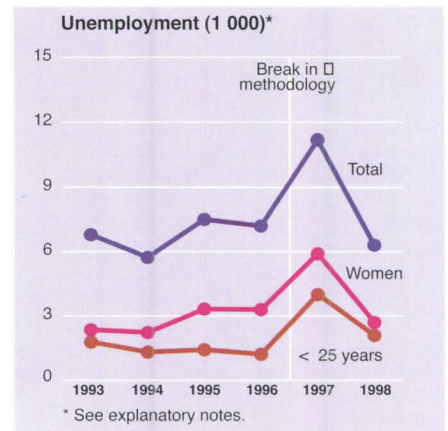
Figures from the Labour Force Survey suggested that the unemployment rate in 1997 was the highest in the country at 20.3%. Data from the 1998 survey showed that the unemployment rate had decreased considerably to 10.7%, and in particular among women, dropping from 21.5% in 1997 to 9.9% in 1998.

## Poor transport and communications infrastructure

Two railway routes cross the county, namely the Šiauliai to Pagėgiai and the Radviliškis to Sovetsk (Russia) lines. These railway routes are of little strategic importance, serving only peripheral needs. From a technical point of view they are primitive as they are single-track routes and are not electrified. There is no rail service in the districts of Šilalė and Jurbarkas. The overall length of railway here amounts to 75 km, giving a density of 19.4 km per 1 000 km<sup>2</sup>, which is two-thirds of the national average.

By contrast, the road network is well developed in the county, connecting Tauragė with Šiauliai, Sovetsk (Russia), Riga (Latvia) and Kaliningrad (Russia). The Klaipėda-Kaunas motorway, which is one of the best motorways in Lithuania and meets European standards, stretches along the border of the county. The motorway extends all the way to the capital of the country, thus offering excellent access to the neighbouring countries to the north and east of Lithuania. There are 1 250 km of roads in the county, almost half of them with a good quality, tarmacked surface. Road density is 323 km per 1 000 km<sup>2</sup>, while the density of upgraded roads is 155 km per 1 000 km<sup>2</sup>.

In 1998 there were 27 782 telephone units in the county, 85% of which were installed in dwellings. The county differs from other counties in terms of the number of telephones in rural areas, as almost half the telephones were in rural areas. Nevertheless, the county is one of the weakest by the number of telephone lines installed overall, with 182 telephones per 1 000 population as against 232 nationally.



## Employment by age group - 1998 (%)

	< 25 years	25-54 years	> 54 years
Men	16	71	13
Women	9	83	8
Total	13	77	10

## Weak industrial sector helps environment

With the industrial sector being relatively weak here, this has tended to have a positive impact on the county's ecological state. In 1997, 49 kg of particulate pollutants, which is only one third of the national average, 525 kg of gaseous pollutants and 525 kg of liquid pollutants were emitted per km<sup>2</sup> into the atmosphere from stationary pollution sources.

The sewerage network is not well developed in the county. There were only 0.57 km of sewerage piping per 1 000 population. However, the existing sewerage network is rather advanced, as three-quarters of all effluents were piped to biological treatment facilities.

The water supply network amounted to 1.90 km per 1 000 population, delivering 32.1 cubic meter of water per 1 000 population.

Unlike the rest of the country, there are no connections to the natural gas network in Tauragė county, leaving its inhabitants dependent on liquid gas. Every third dwelling is equipped with liquid gas containers for cooking, while solid fuel and wood is most often used for heating flats and houses.

State policy has had a great impact on improving the ecological state of the county, as 3 regional parks (Panemunė, Pagramantis, and Varniai), and one nature reserve (Viešvilė) have been established in the county. The Kamanos state reserve located in the county is the second by size in the country, with an area of 430 ha. It offers protection to 38 species of animals, 124 types of birds, and 685 varieties of plants.

### Surfaced public roads – 1997

	Tauragė Lithuania	
Length in km per km <sup>2</sup> *	0.15	0.17
Length in km per 1 000 population *	4.6	3.0
Length in km per 1 000 private passenger cars (1998) *	18.4	12.0
% private passenger cars in total number of vehicles (1998)	83	84
Number of accidental deaths per 1000 private passenger cars (1998)	1.1	0.9

\* See explanatory notes.

### Environment - 1997

	Tauragė Lithuania	
Towns connected to public water supply	5	107
Towns connected to public sewerage	5	105
Sewerage subject to treatment (%)*	77	76
Per capita consumption of water (m <sup>3</sup> )*	31.4	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	2 275
Primary	9 161
Secondary comprehensive	13 113
Secondary vocational	1 527
Tertiary (higher education)*	318
Total	26 394

\* See explanatory notes.

### Health care - 1997

	Tauragė Lithuania	
Number of hospitals	9	187
Number of doctors per 10 000 population	17.8	39.8*
Number of hospital beds per 10 000 population	69.1	98.4*

\* See explanatory notes.

### Telephone services

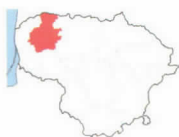
	1995		1997	
	Tauragė	Lithuania	Tauragė	Lithuania
Lines per 1 000 population	165	204	182	232
% connected to digital network	:	:	:	:

## Fewer schools but more pupils

Although the number of children attending pre-school establishments started to grow in 1994, the share of children receiving pre-school education is the lowest in the country. In contrast, 88% of all children between 7 and 18 are in education, which is the second highest rate after Vilnius county. Between 1995 and 1998, the number of schools dropped by 4, whereas the number of schoolchildren increased by 2 000 during the same period.

Medical services are less well developed here than elsewhere, with the county having the lowest number of physicians and paramedical personnel per 10 000 population. The number of physicians was lower in the district of Šilalė than in the county's other districts. On average each inhabitant visited an outpatient clinic 5 times per annum.

There are 84 libraries in the county, or one library for every 1 500 people. The county's cultural centres are also well used by local inhabitants. There has been an increase in the number of museums here, up from 2 in 1995 to 7 in 1998, accompanied by a rise in visitor numbers from 20 000 to 24 000.



# Telšiai county

## Capital of Žemaitija ethnic region

Telšiai county is situated in the north west of Lithuania and covers the Žemaitija ethnic region. This is one of Lithuania's smallest counties, bordering the counties of Šiauliai, Tauragė and Klaipėda as well as Latvia to the north.

The county's history goes back as far as the 13th century, when invaders attacked Lithuania. The county is known for being the religious centre for Catholicism, and the Žemaičiai bishop's residence was established here, as was the Seminary for Priests which was active from 1740 to 1864.

The town of Telšiai is the centre of the county, and the capital of Žemaitija. It was first mentioned in historical records in 1450. The town is sited on seven hills surrounding Lake Mastis.

Telšiai county covers the districts of Mažeikiai, Plungė, and Telšiai, and the majority of its inhabitants speak Lithuanian.

The county's landscape is picturesque, with its scenic lakeshores and riverbanks. Furthermore, it is home to the Žemaitija national park, the Plokštinė nature reserve and the Varniai regional park, as well as to a number of other nature reserves. There is a historic monument in a beautiful setting on Šatrija hill.

The largest lake in Žemaitija is Lake Plateliai, which is a base for water sports and a splendid place for recreation.

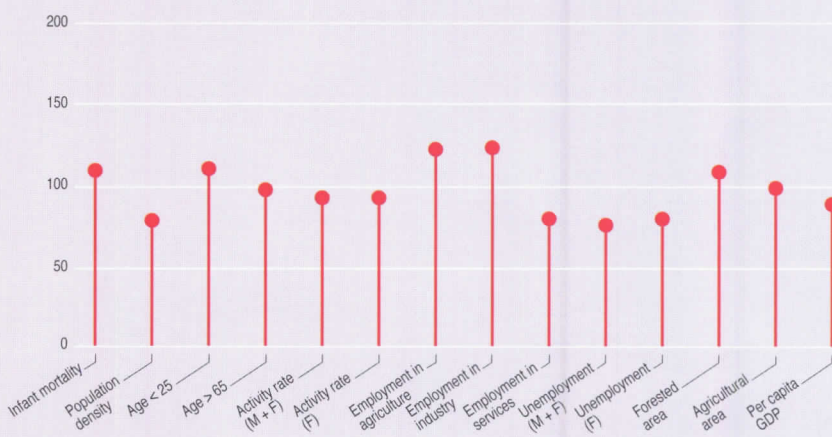
Many prominent Lithuanian writers resided in the county, among them two writers of classical literature, Julia Beniuševičiūtė-Žymantienė-Žemaitė (1845-1921), and Marija Pečkauskaitė-Šatrijos Ragana (1877-1930).



Telšiai Town on the shore of the picturesque Lake Mastis (Photo: Kraštotvarka UAB, 1999)

### Main indicators

National level = 100



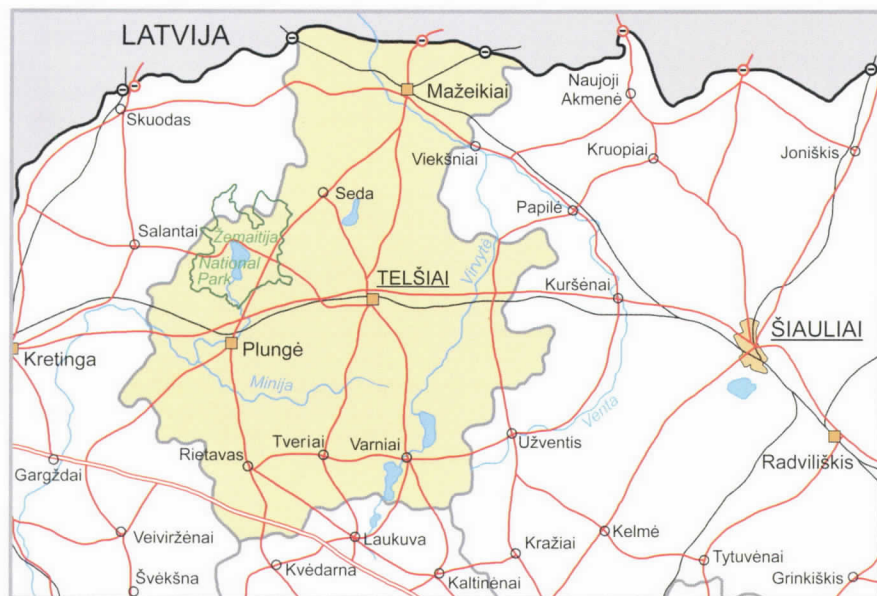
## Favourable conditions for the development of agrotourism

Due to the natural beauty of its landscape, the county is in a favourable position for the development of agrotourism. The Žemaitija national park, situated 45 km away from the Baltic Sea, is particularly valuable in this regard. The park covers 20 000 ha., and its camp sites, recreational facilities, educational tours, and various festivals are well organised for tourists.

Local farm owners, especially those situated in picturesque spots, have been willing to participate in agrotourism by restructuring their farms to provide the necessary facilities to meet contemporary needs and tastes.

The county is also engaged in non-traditional business activities, such as the breeding of crawfish. The old tradition of flax fibre production has been renewed and the production of wooden toys further developed. These activities serve as the basis for the development of small and medium-sized businesses in the county.

Huge economic and social losses have, nevertheless, been felt in the county's main towns as the process of economic restructuring has taken place. Some of the biggest industrial enterprises have been closed down (electro-mechanical gauges in Telšiai, artificial leather processing in Plungė, and compressor production in Mažeikiai). As a result, unemployment has emerged as a major socio-economic problem.



Scale 1:1 500 000

0 40 km

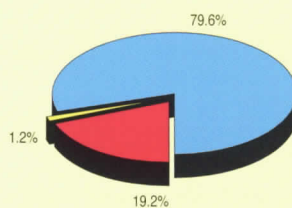
### Agriculture 1998

Number of private farms all types *	32 424
Persons working in agriculture	18 600
Total agricultural area (ha)	217 301
Total livestock	136 200
Cattle per 100 ha of total agricultural land	35.0
Pigs per 100 ha of total agricultural land	46.0
Share of crop products in total agricultural output (%)	48.0
Main crops (1 000 tonnes)	
Cereals	133.0
Vegetables	12.3
Potatoes	89.9
Sugar beet	0.6

\* see explanatory notes

### Agricultural land use in 1998 (%)

- Permanent grassland
- Arable land
- Permanent crops



### County with hilly relief

Telšiai county is one of the smallest in the country (after Tauragė county) and covers 4 139 km<sup>2</sup> or 6.3% of Lithuania's total area. The Baltic Sea and the hilly relief influence the climate of the county, bringing to it warm winters and cool summers. Average annual precipitation varies from 700 to 900 mm, which is due to the prevailing winds from the west and the south west.

The county is situated in the Žemaičiai uplands, which are well known for their picturesque hills, with Šatrija hill in particular known as one of the highest and most beautiful hills in the county.

The county has a rather dense network of meandering rivers and streams. The small,

### Which regions are similar to Telšiai?

#### Population:

182 700 inhabitants  
Ileia (EL)  
Luton (UK)  
Lovech (BG)

#### Age structure:

38% under 25  
Kujawsko-pomorskie (PL)  
Andalucia (E)  
Flevoland (NL)

#### Land use:

33% forest  
Prahova (RO)  
Namur (B)  
Oberbayern (D)

torrential, Virvytė river twists its way across the county. The riverhead of the Minija river rises here, while the Venta flows from Šiauliai into the north of the county. Of the 90 lakes found in the county, the majority are in the districts of Telšiai and Plungė.

The Žemaičiai uplands are quite typical with their infertile, stony land. Despite this, half of the county's area is used for agriculture, although the majority of it is to be found in the district of Mažeikiai.

Forests cover one third of the area here, and the large forested areas of Kuliai and Rietavas merge together in the district of Plungė.



## Positive demographic changes

Telšiai county is the second smallest Lithuanian county in terms of its population, which numbered 182 700 at the beginning of 1999, or 4.9% of the total population in Lithuania. Just under two-thirds of the population reside in the county's six towns, and the population density is below average at 44 people per km<sup>2</sup>. Women accounted for 52.4% of the population, again slightly below average.

The population increased by 3.5% in the period from 1990 to 1996, thereafter showing little change. While positive net migration had some influence on this growth up until 1996, it then became negative. At the same time, the number of births outweighed the number of deaths between 1990 and 1999.

Nevertheless during the last decade there has been a considerable decline in the birth rate, although a slight increase was observed in 1998. The overall birth rate in the county was one of the highest in Lithuania, and among women aged 15 to 49 was 48 births per 1 000, while in rural areas it was as high as 70 per 1 000 women. Children born out of marriage accounted for 17% of all births. Although the divorce rate has decreased, it was still above average at 3.3 divorces per 1 000 population.

In 1998 the mortality rate in the county was slightly below average at 10.7 deaths per 1 000 population. Infant mortality equalled the national average in 1998 at 10.1 deaths per 1 000 births.

The age structure of the population is comparatively young, with the population aged 65 and over accounting for 12.6%, while the county has the highest proportion of under 25s at 38%. Of particular note is that 25% of the total population are under 15, which has a considerable impact on the working age population in terms of dependants. In 1998 there were 794 dependants per 1 000 working age population, 43% of whom were of pension age.

Average life expectancy is quite different for men as compared to women. For men it amounts to 64.7 years, a figure which is lower only in Tauragė county. Average life expectancy for women is 76.1 years, which is closer to the national average.

## Lithuania's oil industry giant based here

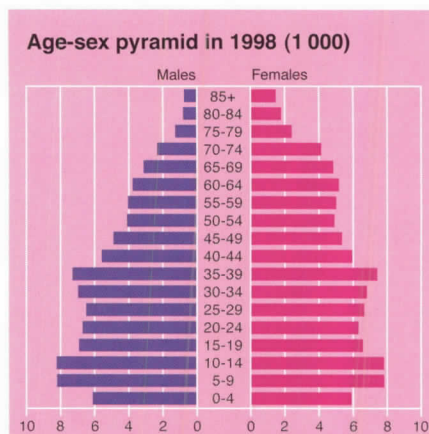
The industrial sector is very important to the economy of Telšiai county, and produces the largest share of its gross value added, which amounted to 35% of the total value added between 1996 and 1997. The county also produces a higher share of its value added from industry than any other county. As a result of this, and despite a rapidly growing service sector, only 30% of value added in 1997 came from the market services sector as against 40.6% nationally. Gross value added from the non-market sector was slightly below average, whereas the contribution from construction and agriculture was slightly above average.

The Mažeikiai oil refinery, which annually processes 12 million tons of imported oil, has a decisive impact on industrial development here. The company is the second largest in Lithuania and the fourth largest in the Baltic States. It is expected that the US corporation, 'Williams International', which has acquired the largest share holding, will contribute to the development and reconstruction of the company, which is needed to retain its competitive level within world markets.

Telšiai county produces one fifth of the country's total production, with the main goods produced including oil products ('Mažeikių nafta'), compressors ('Oruva'), and flax fibre ('Linų audiniai').

Almost half of the county is covered by agricultural land, 79% of which is arable land. Crops cover 86% of the arable land, the main ones being grain crops and potatoes. The yield from grain crops is below average, whereas vegetable yield is higher. Livestock productivity lags behind the national average.

Overall and per capita retail trade turnover increased between 1992 and 1997, with the latter exceeding the national level by 26%



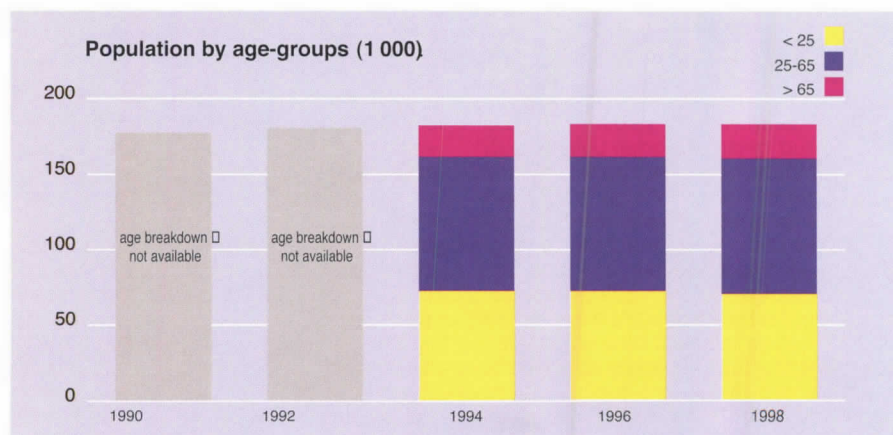
**Demographic account (1 000)**

Population (01 01 90)	176.6
Births	23.9
Deaths	18.3
Migration	0.5
Population (01 01 99)	182.7

in 1997. While per capita market services increased by 56% per annum, they were still well below average.

Between 1992 and 1997 investment increased 4.9 times, which was mainly due to investment in the oil industry. In 1997 per capita investment was 42% more than the average for Lithuania. Direct foreign capital investment in the county increased 3.4 times in the period between 1995 and 1997, although this figure was still below average.

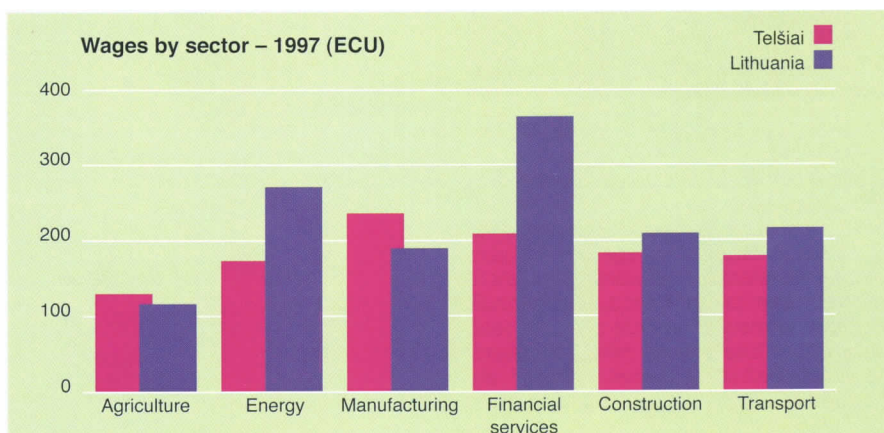
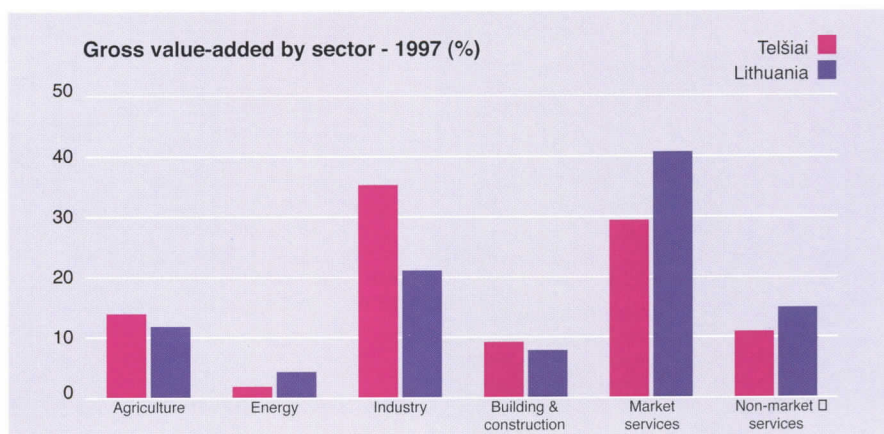
The economic potential of Telšiai county decreased slightly between 1996 and 1998, with the share of GDP produced in the county dropping from 4.5% to 4.2%. Per capita GDP here was also below average at the beginning of 1998.



### Manufacturing salaries highest in the country

The county employs 4% of people working in the country's economy, and their average wages and salaries were 3% above the average for Lithuania in 1997. With a third of the county's employees working in the manufacturing sector, their wage levels had a considerable impact on overall earnings in the county. In fact, the wages in this sector were not only the highest in the county, but they were also far higher than the wage enjoyed by employees in this sector nationally. Those working in hotels and restaurants were the poorest paid workers in the county, earning just over half of industrial employees.

Between 1995 to 1997 average wages and salaries in the county increased more rapidly than in the country as a whole, with particularly strong growth rates noted in mining, retail and wholesale trade, and the repair and maintenance sector. In contrast to this, those working in financial services, whose earnings were already below average, actually experienced a slight decline in their earnings in this period.



#### Main enterprises

Name	Activity
Mažeikių nafta	Petroleum products
Oruva	Compressors manufacturer
Žemaitijos pienas	Dairy producer
Linų audiniai	Linen manufacturer
Mažeikių pieninė	Dairy producer
Lukoil - Baltija	Fuel retailer
Mažeikių ligoninė	Hospital activities
Telšių apskrities ligoninė	Hospital activities
Plungės rajono ligoninė	Hospital activities

Žemaitija National Park  
(Photo: Kraštovarka UAB)



## Industry dominates employment structure

Structural changes in employment were influenced by ongoing economic reforms, and resulted in the number of people employed decreasing by 8.3% between 1992 and 1998. This decline was, nevertheless, below average and in fact the second smallest decline in the country as a whole. The district of Plungė recorded a 21.6% decrease in employment, although by 1996 it had started to rise again.

According to data from the Labour Force Survey employment levels in the county between 1997 and 1998 decreased from 53.9% to 51.3%, whereas in the same period it increased nationally from 52.8% to 53.5%. In 1998, female employment at 45.7% was one of the lowest rates in the country.

Between 1995 and 1998, employment levels remained stable in industry, the services sector and agriculture, whereas they decreased in the construction sector. With over a third of employees working in industry, this is the highest figure of all the counties, while service sector employment at just over 40% is well below the national average.

The unemployment rate according to the number of unemployed registered at Labour Exchanges was above average only in 1995 and 1996, whereas it was below average in other years. However, there is considerable variation in unemployment across the county's districts. The lowest unemployment level was in the district of Plungė, which was as low as 1.3% in 1994, rising to 5.3% in 1998. In Telšiai district the unemployment rate at the beginning of the decade was above average and rose to 10.6% in 1995, thereafter decreasing to 5.2%.

Female unemployment increased rapidly from 1 300 in 1993 to 3 500 in 1996, although by 1998 it had dropped again to 2 800. Youth unemployment increased from 700 to 1 300 in the period between 1993 and 1995, decreasing to 1 100 in 1998. The majority of the unemployed had also been out of work for over a year.

People who had previously worked in industry accounted for just under a third of all the unemployed in 1996, although by

1998 this figure had dropped somewhat. Between 1997 and 1998 the majority of the unemployed had previously worked in the construction sector.

According to data from the Labour Force Survey a downward trend in unemployment levels was observed in Telšiai county, with the rate dropping from 11.8% in 1997 to 9.9% in 1998, making it the lowest unemployment level in Lithuania. Both male and female unemployment rates were well below average.

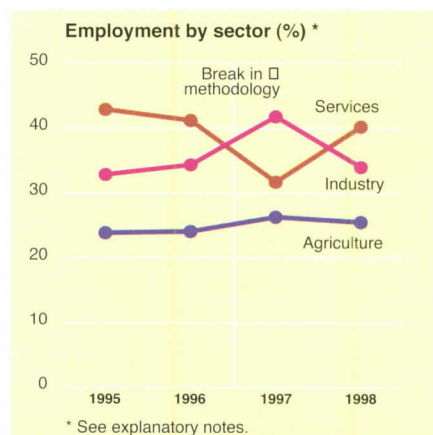
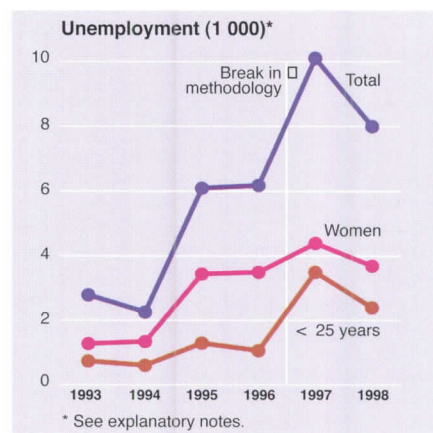
## Good route network, declining public transport

There is a good transport infrastructure in the county both in terms of rail and road. Two railway lines cross it, the Šiauliai to Klaipėda line and the Šiauliai to Mažeikių line. Each district in the county has a railway connection, and the overall length of rail track was 136 km in 1998, giving a route density of 32.9 km per 1 000 km<sup>2</sup>.

Road length amounts to 1 323 km, of which more than half has had its surface upgraded. Total road density is 320 km per 1 000 km<sup>2</sup>, while the density of roads with an improved surface is 174 km per 1 000 km<sup>2</sup>, or 16.8 km per 1 000 cars.

Telšiai county was, in the past, known for its intensive transportation of passengers by public transport. However, due mainly to economic reasons, a decline is apparent from indicators such as the scale of passenger transportation and the number of bus routes. The number of passengers decreased from 15.9 to 13.6 million between 1995 and 1997 and the number of bus routes dropped from 127 to 85. However, population mobility has considerably increased with the rise in the number of private cars, which went from 164 per 1 000 population at the end of 1995 to 208 per 1 000 population in 1997.

While the number of telephones has been increasing, it was still below average in 1997. In 1995 there were 191 units per 1 000 population as against a national average of 204. By 1997 this had increased to 209 in Telšiai county, and to 232 nationally. In the same period the number of telephones increased more rapidly in rural areas.



## Employment by age group - 1998 (%)

	< 25 years	25-54 years	> 54 years
Men	14	74	12
Women	12	81	6
Total	14	77	9

### 'Mažeikių nafta' is the main source of air pollution

The levels of atmospheric pollution vary from substance to substance. Emissions of solids do not exceed the national average, whereas gaseous and liquid substances exceed it 5 times over. In 1997 there were 10 034 kg of gaseous and liquid substances emitted per km<sup>2</sup> in the county. The main source of pollution in the county is the 'Mažeikių nafta' oil refinery.

The sewerage network is being developed quite successfully in the county. At the beginning of 1998 over 63% of effluents were put through sewerage treatment plants and 61% of discharged water was treated biologically.

Developments in the water supply network are geared towards satisfying the needs of the general public as well as other end users. Per capita consumption of water is slightly below average at 40.4 m<sup>3</sup>.

The gas network in the county is well developed. Figures for connections to the natural gas network, on dwellings which have gas installed, and on liquid gas supplied per 1 000 population are all above the Lithuanian average.

Energy needs in the county are also met by the medium-sized combined heat and power station located at the 'Mažeikių nafta' oil refinery. Several hydro-electric power stations are also operated in the county.

Environmental protection needs are met by the various parks and nature reserves. Varniai regional park includes the well known Lake Lukštas, which is the only lake in Lithuania where amber can be found as it is in the Baltic Sea. Several different types of reserves are also located here such as the fish reserve on the Minija,

#### Surfaced public roads – 1997

	Telšiai Lithuania	
Length in km per km <sup>2</sup> *	0.17	0.17
Length in km per 1 000 population *	3.9	3.0
Length in km per 1 000 private passenger cars (1998) *	16.8	12.0
% private passenger cars in total number of vehicles (1998)	84	84
Number of accidental deaths per 1000 private passenger cars (1998)	1.0	0.9

\* See explanatory notes.

#### Environment - 1997

	Telšiai Lithuania	
Towns connected to public water supply	6	107
Towns connected to public sewerage	6	105
Sewerage subject to treatment (%)*	63	76
Per capita consumption of water (m <sup>3</sup> )*	40.4	43.4

\* See explanatory notes.

#### Number of pupils - 1998

Pre-school	4 911
Primary	12 836
Secondary comprehensive	19 399
Secondary vocational	2 364
Tertiary (higher education)*	677
Total	40 187

\* See explanatory notes.

#### Health care - 1997

	Telšiai Lithuania	
Number of hospitals	7	187
Number of doctors per 10 000 population	18.1	39.8*
Number of hospital beds per 10 000 population	69.1	98.4*

\* See explanatory notes.

#### Telephone services

	1995		1997	
	Telšiai	Lithuania	Telšiai	Lithuania
Lines per 1000 population	191	204	209	232
% connected to digital network	:	:	:	:

Sausdravas and Sruoja rivers, the geomorphological one at Vilkaičiai, the ornithological reserve on Lake Alsėdžiai, and the Babrungas botanical centre.

### Co-operation of Telšiai College of Applied Arts with Vilnius Art Academy

In 1995, the number of children attending pre-school started to grow, so that by 1998 43% of children aged between 3 and 6 received pre-school education. With the number of schools providing basic primary and secondary education also increasing, there was a corresponding increase in the number of children attending them. There is one non-state secondary school in the town of Telšiai, which is a church grammar school for boys attended by 32 pupils and attached to the bishopric.

Out of 4 vocational schools in the county, one is public, and provides training on handicrafts. Two colleges were recently opened in the county. The college for applied arts is unique in the country, offering courses on such things as sculpture, textile design, modelling, and metallic arts. In 1998 a division of the Vilnius Art Academy was also opened in Telšiai.

The Telšiai seminary for priests has a long tradition of involvement in cultural activities in the county. In addition, the Žemaičiai museum, named "Alka" after the pagan sacrificial altars, is one of the main cultural centres in the county, with a good collection of 'Žemaičiai' cultural artefacts. It also organises exhibitions in other districts.

Health care in the county is not sufficiently well developed. While there was no change in the number of physicians per 10 000 population between 1994 and 1997, it is the one of the lowest figures in the country. Paramedical personnel decreased during the same period. Furthermore, the county has the fewest hospital beds per 10 000 population in the country. Indicators on visits to outpatient clinics or hospitals vary little from the average, with in 1997 inhabitants attending hospital or an outpatient clinic an average of 5.9 times.





## Utena county

### Architectural monuments and museums

Utena county is situated in the north-eastern part of Lithuania, and is the heart of the Aukštaitija ethnic region.

The town of Utena is in the centre of the county, and was formed as a consequence of favourable historical circumstances and a convenient geographical location. This is one of the oldest settlements in Lithuania, first mentioned in historical manuscripts in 1261. The rights of the town were granted at the end of the 16th century. The castles built within the territory of the county in the 14th and 15th centuries defended Lithuania from the Sword-bearers, later known as the Livonian Order of knights.

Nowadays, Utena town is the main industrial, trade, cultural, educational and health care centre in the county. The county includes the districts of Anykščiai, Ignalina, Utena, Zarasai, and Visaginas town. The majority of the county's population speaks Lithuanian, with Russian and Polish also in use.

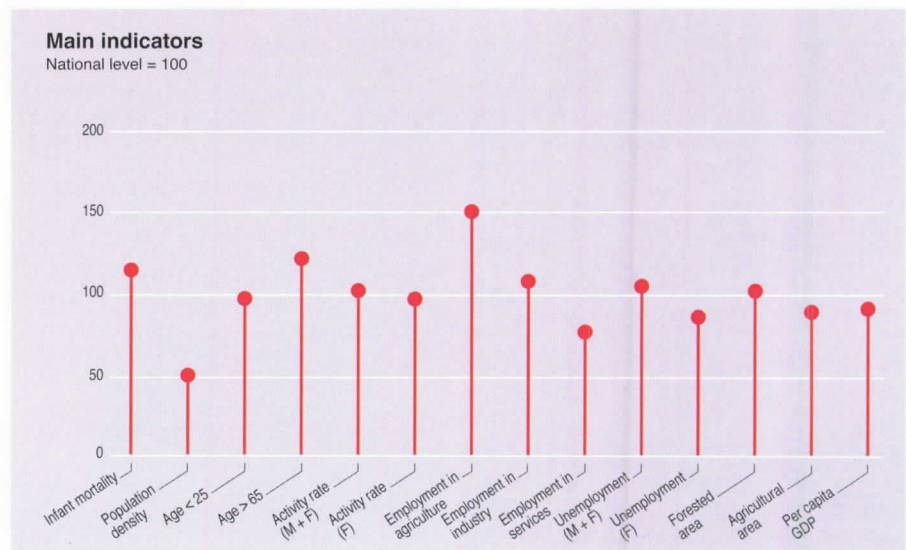
Some of the county's most important monuments include the Raguvėlė and Burbiškiai manors (18th and 19th century), the wooden Stelmužė church (17th century) built without use of either a saw or iron nail, the churches of Videniškiai (17th century), and Palūšė (18th to 19th century), and the church in Salakas built from square field stones in the neo-gothic style.

The county houses a number of unusual museums. The Lithuanian ethnocosmology museum is in Kulioniai village (Molėtai district), the garden museum devoted to the study of fruit-growing established by Prof. A. Hrebnički at the end of the 19th century is in Dūkštai, while there is the energy museum in Salakas, the bell museum in Sirutėnai, and a horse museum in Niūronys.

One of the largest "glacial erratics" in Lithuania, called 'Puntukas', was found near Anykščiai. The stone weighs 265 tonnes, and is 5.7 m high.



The 17th century architecture of Palūšė Church  
(Photo: Kraštotvarka UAB, 1999)



### 'Lithuania's Switzerland'

The Aukštaitija uplands, where Utena county is located, are known as 'Lithuania's Switzerland', with its picturesque landscape, scenic hills, many lakes and rivers. As a result of this, the county is in a good position to develop tourism.

One of the most attractive centres for tourists is the Aukštaitija National Park. It covers an area of 400 km<sup>2</sup>, with forest covering 70% of it. A variety of endangered species are protected in the park, including 50 kinds of animals, 196 types of birds, 29 species of fish, and 858 varieties of plants.

Conditions for recreational pursuits and tourism are especially favourable in the districts of Zarasai and Molėtai, where

local inhabitants are actively engaged in agro-tourism. Furthermore, the international folk music and dance festival, 'Ežerų sietuva', attracts visitors and artists from all over the world.

The county has been successful in developing socio-economic and cultural links with foreign countries. It joined the European Regional Assembly, signed cooperation agreements with the regions of Hedmark (Norway), and Tveré (Russia). Close ties have been established with a German organisation for technical cooperation over business issues.

Industrial enterprises are mainly concentrated in and around the town of Utena, while agriculture prevails in outlying areas. The lack of investment in the county pre-



Scale 1:1 500 000

0 40 km

### Agriculture 1998

Number of private farms all types *	43 387
Persons working in agriculture	27 600
Total agricultural area (ha)	339 685
Total livestock	122 697
Cattle per 100 ha of total agricultural land	28.0
Pigs per 100 ha of total agricultural land	24.0
Share of crop products in total agricultural output (%)	43.0
Main crops (1 000 tonnes)	
Cereals	116.2
Vegetables	24.7
Potatoes	92.6
Sugar beet	1.6

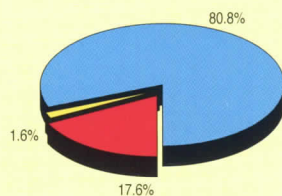
\* see explanatory notes

vents full exploitation of the potential for tourism, as there is a lack of funds to upgrade existing hotels and other recreational facilities, as well as establish new ones.

The likely gradual closure of the Ignalina nuclear power station is of great concern and brings uncertainty to the future of the town of Visaginas.

### Agricultural land use in 1998 (%)

- Permanent grassland
- Arable land
- Permanent crops



### Lithuania's largest and deepest lakes found here

With an area of 7 201 km<sup>2</sup>, the county covers just over one tenth of Lithuania's total area and is situated in its north-eastern corner. It borders Latvia to the north and Belarus to the east. Within Lithuania, the county borders the counties of Panevėžys and Vilnius. Zarasai district, which is one of Utena county's districts, with 24 600 inhabitants, adjoins Latvia, whereas Ignalina district with a population of 24 900 is sited on the Belorussian border. Visaginas town, with a population of 33 700, is situated between the two.

Utena is the furthestmost county from the sea, which has an influence on its climate, resulting in cold winters with thick snow

### Which regions are similar to Utena?

#### Area:

7 201 km<sup>2</sup>

Alentejo Central (P)  
Foggia (I)  
Sofia stolitsa (BG)

#### Population density:

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

Ariège (F)  
Lõuna-Eesti (EE)  
Florina (EL)

#### Age structure:

16% over 65

South Yorkshire (UK)  
Cataluña (E)  
Latgale (LV)

cover, and warm summers. The lowest (-42.9°C) and highest (+ 37.5°C) temperatures experienced in Lithuania have been recorded in this county. Average annual precipitation varies within the county from 550 to 700 mm per year.

Construction materials are the basic natural resources in the region. Near Anykščiai, a very significant deposit of quartz sand used for glass production has been found, while gravel is found in the districts of Utena and Zarasai, and clay in the districts of Ignalina and Anykščiai.

While there are only two main rivers (the Šventoji and the Dysna) which meander across the county, there are over 1 000 lakes. The district of Zarasai alone has over 300 lakes in it. Lithuania's largest lakes, Lake Drūkšiai, Dysnai, and Luodis, are located in the region, while Lithuania's deepest lake, Lake Tauragnas, is situated in the middle of the Aukštaitija uplands.

As the soil here is not fertile, agricultural land covers slightly less than half of the county's area. There is relatively more agricultural land in the district of Anykščiai.

Forests cover 30.5% of the total area of the county. Two large woods, Ažvinčiai-Minčia and Šimoniai, are situated in the county.



## Lowest population density, lowest birth rate and highest mortality

Utena county is one of the largest counties by area and smallest by population size, with 200 600 inhabitants or 5.4% of Lithuania's total population. 110 400 or 55% of the population live in the county's eleven towns, with the rest inhabiting the county's many rural settlements. The population density at 28 inhabitants per km<sup>2</sup> is the lowest in the country.

Women account for 52.9% of the population, with 1 122 women per 1 000 men.

The county's population increased up until 1992, although since then it has been decreasing. Migration helped in some way to slow down the decline, as throughout the last decade it was positive, except in 1992. Nevertheless, almost three thousand inhabitants left the town of Visaginas, where the Ignalina nuclear power station is situated. Migration figures in rural areas have also been positive during this same period. With deaths outnumbering births in this period, natural change was the main cause of the declining population.

The birth rate has been constantly decreasing in the last decade. In 1998 there were 8.6 births per 1 000 population, which was a decline of 38% over 1990, and was the lowest birth rate in the country. The relatively high number of old people in the population, fewer marriages, and the low birth rate among women aged between 15 and 49 years at 38 births per 1 000 all had an influence on this declining birth rate. Children born out of marriage made up 15.5% of all births. The divorce rate in the county almost equalled the national average.

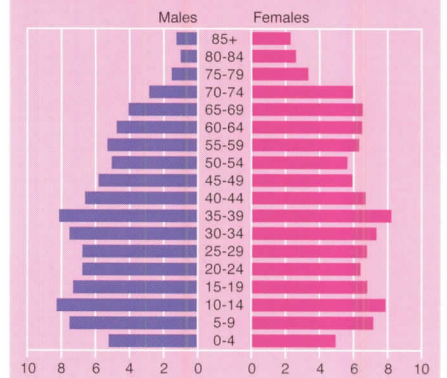
As in the rest of the country the mortality rate has been increasing for several years,

and the highest rate was recorded in 1995. While the rate declined in 1998, it was nevertheless the highest in the country at 13.9 deaths per 1 000 population. Infant mortality rates, which had in previous years been well above average, showed a substantial drop in 1998. Life expectancy rates at 75.9 years for women and 64.7 years for men are some of the lowest rates in the country.

Within the population, there is a higher proportion of elderly people than in any other county, with 15.7% of the population over 65 at the beginning of 1999. The county also has one of the lowest figures for under 25s at 33.2%. Furthermore, Utena county is the only county in Lithuania where the number of old people exceeds the number of children by some 2%. There are 794 dependants per 1 000 working age population, 52% of whom are of pension age.

The ethnic nationality of the population differs from district to district, as one third of the population are Poles in the district of Molėtai, whereas in Visaginas the majority of the population are Russians.

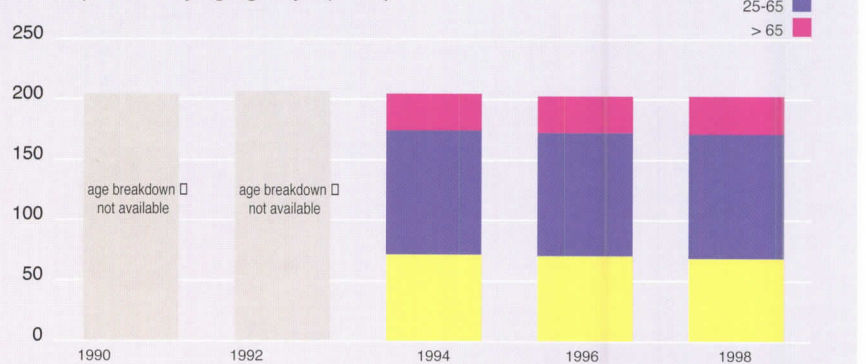
Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

Population (01 01 90)	204.5
Births	20.0
Deaths	25.2
Migration	1.4
Population (01 01 99)	200.7

Population by age-groups (1 000)



The lakes and forests so typical of Utena County  
(Photo: Kraštotvarka UAB)

## Giant of nuclear energy

The Ignalina nuclear power station, which is situated in the county, produces 95% of all electricity in the country. Electricity is exported abroad to countries such as Russia, and Belarus. Almost one-quarter of the county's gross value added comes from the energy sector, which is more than 5 times the national average.

Gross value added from agriculture is also slightly above average at 15%, while the contribution from market services is the lowest in the country at 24% as against 40.6% nationally.

Agricultural land covers 47% of the county's total area; 82% of this is arable land. A third of this land is given over to cereals, whereas the rest is used for potatoes, vegetables, and fodder crops. With the soil here not particularly fertile, the yield from cereals lags behind the national average. Livestock productivity is slightly below average too.

The county produces 4% of Lithuania's total output, manufacturing such items as knitted goods ('Utenos trikotažas'), beer ('Utenos alus'), and wine ('Anykščių vynas'). The Ignalina nuclear power station is the sixth largest enterprises in the Baltic States and the joint stock company 'Anykščių vynas' is 56th on the list.

Retail trade volumes increased three times in the period between 1992 and 1997, with per capita retail turnover also increasing to be 37% above average in 1997. While the volume of per capita market services also doubled between 1994 and 1997, it still remained only half the national average.

Per capita GDP indicates a declining contribution to the national economy, as the share of GDP per capita decreased from 74.4% to 60.6% during the period between 1996 and 1998 compared with the country's average. The county's contribution to the GDP of the country decreased from 5.1% to 4.8% during this period.

70% of the county's capital was privatised during the first stage of privatisation. While total investment in the county increased 5.8 times from 1992 to 1997, this was still slightly below average. Direct foreign investment lags quite considerably behind as in 1997 per capita investment was a third of the national average.

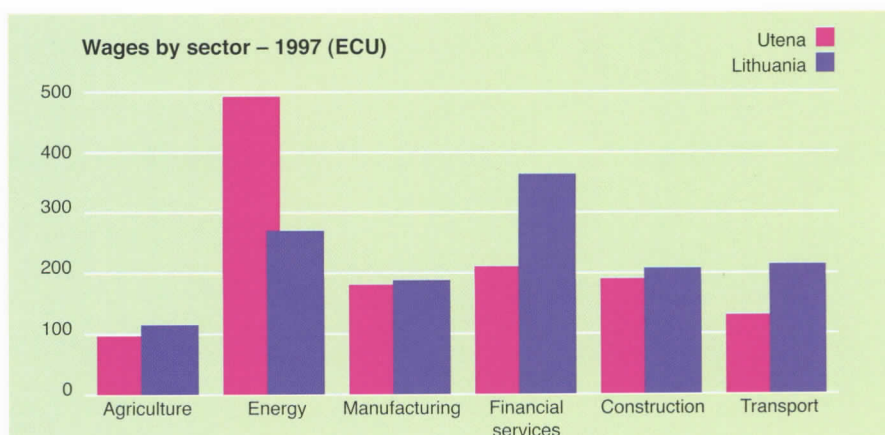
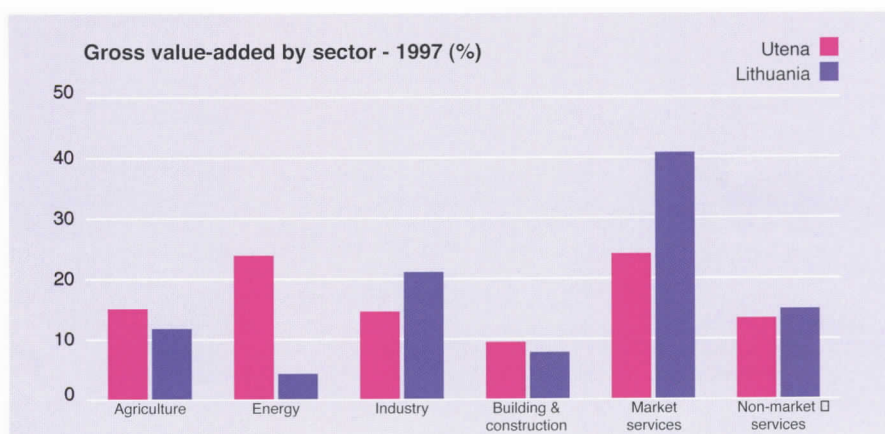
## Energy sector earnings push average wages higher

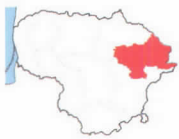
5% of all employees in the national economy work in Utena county, the wages and salaries of whom are well above average. In fact, overall average earnings here are the second highest in Lithuania, with the average being pushed up by the very high earnings paid to those working in the energy sector. One tenth of the county's employees work in this sector, and receive salaries which are 2.6 times higher than average earnings in the county and 2.7 times higher than average salaries nationally.

One sixth of employees work in the manufacturing sector, where earnings vary little from national earnings in this sector. Those working in construction enjoy wages which are close to average for the county, while the lowest wages and salaries are earned by those working in agriculture, which are just under half the county's average, and below average earnings for the sector as a whole. Apart from earnings in the financial sector, which were above the county's average (although well below the national average), all other sectors' average earnings were below both the county level, and the average earnings for that sector nationally.

### Main enterprises

Name	Activity
Ignalinos atominė elektrinė	Electricity production/ Nuclear power station
Utenos trikotažas	Knitted articles manufacturer
Mėsa	Meat producer
Utenos elektros tinklai	Electricity distribution
Anykščių vynas	Wine producer
Utenos alus	Brewery
Utenos pienas	Dairy producer
Utenos ligoninė	Hospital activities





## Highest unemployment rate in the district of Ignalina

The processes of restructuring and privatisation impacted upon the employment situation in Utena county. The tendency towards declining numbers in employment was most marked in the period between 1992 and 1995, when the number of employed people within the county decreased by almost one tenth. In 1996 an increase in the number of employed was observed, which then fell away sharply again in 1998. Within the county's districts there were quite different trends, with the highest decrease (28.4%) recorded in the district of Zarasai, and the lowest in Utena district (8.7%).

Overall numbers employed in the different branches of the economy showed some variation in the period from 1995 to 1998. While the numbers employed in agriculture dropped slightly, the decline was smaller than the overall decline in this sector nationally. In industry the number of people employed decreased between 1995 and 1996 and started to grow again in 1997. In construction, after a drop in 1996, the number of people employed remained stable. While services sector employment increased overall between 1995 and 1998, it grew at a slower rate than the national average.

The unemployment rate taken from numbers registered at Labour Exchanges in the county in the period between 1993 and 1995 was only slightly above the national average, and in 1996 it dropped down below average. The highest unemployment rate was noted in the district of Ignalina, which increased from 7.8% in 1993 to 11.8% in 1997.

Between 1993 and 1998 the number of women who were unemployed increased slightly from 2 700 to 3 300, while youth unemployment in this same period actually decreased from 1 500 to 1 200.

Data taken from the Labour Force Survey data gave the 1997 unemployment rate as 1.1% higher than the country's average, while the 1998 rate was 13.9%, of which male unemployment was 16.8% and female 10.4%. The latter indicator is one of the lowest in the country.

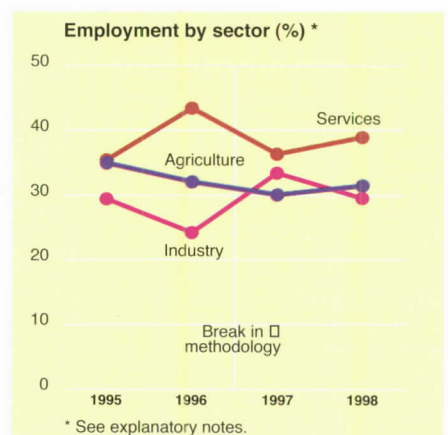
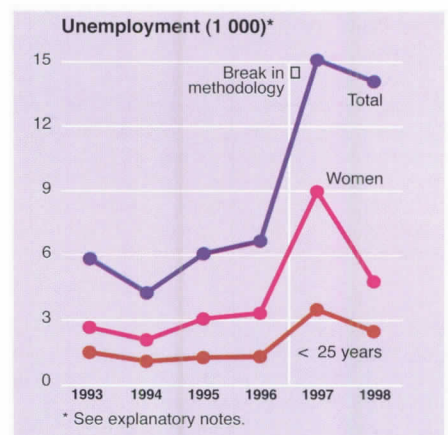
## Transport infrastructure unevenly developed

If different components of the county's transport infrastructure are considered, then it gives a picture which varies somewhat from the national situation. For example, the county has the smallest railway network, including seldom-used narrow-gauge railway routes crossing Anykščiai and Utena districts, whereas road length within the county is above average and the length of roads with improved surface is the highest figure in the country.

To the east, the county is crossed by the Vilnius - Daugavpils - Saint Petersburg railway line, from which there is a branch line running from Švenčionėliai to Utena town. In addition, a narrow-gauge railway line stretches from Panevėžys town across Anykščiai to Utena. The total length of track in the county in 1998 amounted to 128.4 km, of which there was 40.4 km of double track, and 46.0 km of narrow track. The rail density is the lowest in the country at 17.8 km per 1 000 km<sup>2</sup>.

Utena county has a total of 2 500 km of roads, of which 1 943 km have had their surface upgraded. This gives an overall road density of 349 km per 1 000 km<sup>2</sup>, while the density of upgraded roads is the highest in the country with 270 km per 1 000 km<sup>2</sup>. There are 24.2 km roads with improved pavement per 1 000 cars.

The number of telephones at the end of 1998 exceeded 45 200, of which well over three-quarters were installed in dwellings. While the number of telephones installed in dwellings per 100 population lagged behind the national average in the period between 1995 and 1997, in rural areas this indicator was the highest in the country in 1997 when there were 16 telephones per 100 population in rural areas.



	< 25 years	25-54 years	> 54 years
Men	14	70	16
Women	6	79	15
Total	11	74	15

### The lowest emission level of pollutants

In 1997 Utena county had the lowest level of emissions to the atmosphere from stationary pollution sources per km<sup>2</sup> of overall area. Emissions of solids per km<sup>2</sup> of territory were only one fifth of the national level, while liquid and gaseous substances were one third of the national emission levels.

It should be noted that nuclear energy security institutions established in the country determined that in 1997 the Ignalina nuclear power station discharged less radioactive substances (24 times) than in 1990 and 48 times less when compared to the beginning of its operations. The norms and standards defined for the Ignalina nuclear power station are stricter than those defined by the International Atomic Energy Agency.

The street sewerage network in the county is of good quality, with 87% of all discharged water receiving biological treatment. Similarly, the water supply network is dense in the county, giving better than average service to its end users.

Liquid gas consumption exceeds the national average here, whereas the consumption of natural gas is below average. The population of the county also consumes more electricity than average. This can partly be explained by the Ignalina nuclear power station, the main producer of energy, which sells electricity at a favourable rate to local inhabitants.

### Surfaced public roads – 1997

	Utena Lithuania	
Length in km per km <sup>2</sup> *	0.16	0.17
Length in km per 1 000 population *	5.7	3.0
Length in km per 1 000 private passenger cars (1998) *	24.2	12.0
% private passenger cars in total number of vehicles (1998)	84	84
Number of accidental deaths per 1000 private passenger cars (1998)	1.0	0.9

\* See explanatory notes.

### Environment - 1997

	Utena Lithuania	
Towns connected to public water supply	10	107
Towns connected to public sewerage	9	105
Sewerage subject to treatment (%)*	91	76
Per capita consumption of water (m <sup>3</sup> )*	66.2	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	4 411
Primary	12 143
Secondary comprehensive	20 003
Secondary vocational	2 664
Tertiary (higher education)*	1 589
Total	40 810

\* See explanatory notes.

### Health care - 1997

	Utena Lithuania	
Number of hospitals	10	187
Number of doctors per 10 000 population	21.6	39.8*
Number of hospital beds per 10 000 population	67.1	98.4*

\* See explanatory notes.

### Telephone services

	1995		1997	
	Utena	Lithuania	Utena	Lithuania
Lines per 1 000 population	186	204	213	232
% connected to digital network	:	:	:	:

### Medical school the first to offer social-work training

Although the number of children attending pre-school increased in 1994, it then started to decrease over the next two years. Nevertheless, in terms of the number of places per 100 children in kindergartens, the county is in a leading position in the country.

Between 1996 and 1998, the number of schools providing basic education decreased by 9, while the number of children increased by over a thousand during the same period. Presently, 87% of young people aged between 7 and 18 attend the county's 170 schools.

The Utena College of Agriculture and food industry is the only college of its kind in the country, and provides training in manufacturing technologies for food products. The Utena medical school was one of the first of 6 medical schools to be set up in the Republic, and it works in close contact with colleges in Norway. It offers special training programmes for social work.

In Utena county the health care system is not sufficiently developed in comparison with the national average. Due to health service reforms, the number of physicians, paramedical personnel, and hospital beds per 10 000 population decreased. The latter indicator was lower only in Telšiai county. The number of pharmacies also decreased considerably.

There is a good library service here, with 141 libraries holding a large stock of books, and library readers numbering 30 per 1 000 inhabitants in the county.

The ethnocosmological museum located in the district of Molėtai is the only one of its kind in Lithuania, and is attended by over 20 000 visitors per year on average. The museums commemorating the memory of A. Baranauskas and A. Vienuolis-Zukauskas in Anykščiai receive around 75 000 visitors each year.



## Vilnius County

### Capital city rich in historical buildings

Vilnius county is situated in the south-east of Lithuania. Numerous places here were mentioned in historical sources from as early as the twelfth century. The towns of Kernavė and, later on, Trakai were the first capitals of the state of Lithuania, and are today preserved as open air museums.

Vilnius county includes the districts of Šalčininkai, Širvintos, Švenčionys, Trakai, Ukmergė, and Vilnius city. The main language spoken in the county is Lithuanian, although Polish, Russian, and Belorussian are also used.

The city of Vilnius, the capital of Lithuania, was established in 1323 on rough and hilly terrain where the rivers Neris and Vilnelė meet. The town is encircled by vast, natural tracts of woodland.

The old town of Vilnius has been designated as a Natural and Cultural Heritage site by UNESCO. The architecture of the older part of Vilnius was created over several centuries in many different styles. St. Anne's Church is a Gothic ensemble, while St. Michael's Church and monastery buildings are a mixture of Gothic and Renaissance architectural features. St. Peter and Paul's Church (12th century) is a Baroque masterpiece, while Verkiai Palace (17th century) was built in the Classical style.

Vilnius University, one of the oldest universities in Europe and the oldest in the former Soviet Union, has had a considerable impact on culture, education and science in Lithuania. Today, innovative research, particularly in the fields of mathematics and laser physics, is carried out in Vilnius University.

Industry, science, and cultural institutions are all attracted to the capital, which in Lithuania is famous for its historical and architectural monuments as well as the different nationalities who lived here and worked together in the fields of science, art and literature.

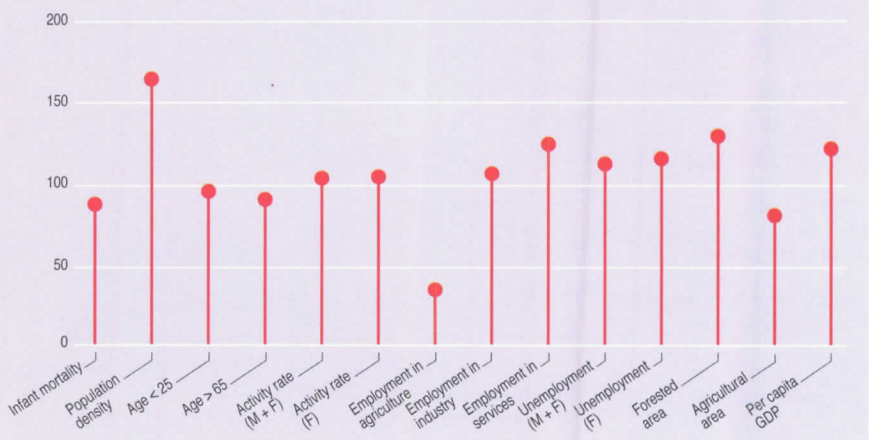
The district of Trakai houses remains of archaeological, historical and architectural value, with at its heart the National Park and the old town of Trakai. The town and its many castles stretch along a narrow peninsula through Lakes Galvė, Totoriškéš and Bernardinai. Of the many castles built on islands in the middle of lakes in Lithuania, the castle in Lake Galvė is the only one to



Traditional Kaziukas Fair in Vilnius  
(Photo: Kraštotvarka UAB, 1999)

### Main indicators

National level = 100



have survived. In the halls of the Ducal Palace, visitors to Trakai's historical museum are acquainted with the region's history. Masterpieces from the art collections of Lithuanian nobles are on exhibition in the basement of the castle.

### Problems of large towns are also inescapable for Vilnius

Vilnius county, and in particular the area around the city, stands out for its well-developed infrastructure, and movement of capital, goods and people. For centuries people of different nationalities, Lithuanians, Poles, Jews, and Russians, lived in Vilnius in concord, creating and cherishing its inimitable beauty. This spirit of tolerance is still characteristic of the city today.

The employment problems which Vilnius county faces are difficult to solve due to the uneven distribution of job vacancies across the county. There are marked differences between the city of Vilnius and other parts of the county. These problems should



Scale 1:1 500 000

0 40 km

### Agriculture 1998

Number of private farms all types *	68 148
Persons working in agriculture	28 100
Total agricultural area (ha)	411 610
Total livestock	198 306
Cattle per 100 ha of total agricultural land	28.0
Pigs per 100 ha of total agricultural land	48.0
Share of crop products in total agricultural output (%)	42.0
Main crops (1 000 tonnes)	
Cereals	214.8
Vegetables	37.3
Potatoes	225.4
Sugar beet	1.6

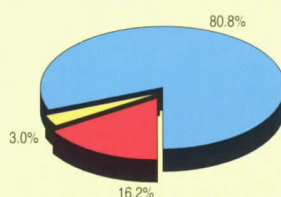
\* see explanatory notes

hopefully be solved by encouraging the setting up of small and medium-sized businesses.

Another serious problem confronting the county is the disposal of household and construction refuse. Existing dumps are having problems coping and there is a pressing need to reconstruct existing dumps and at the same time open new

### Agricultural land use in 1998 (%)

- Permanent grassland
- Arable land
- Permanent crops



ones.

The city of Vilnius has a large stock of high-rise flats, which are in need of huge investment to renovate them. Moreover, renovating them would require rehousing residents when there is already a housing shortage.

Since Vilnius is an administrative and economic centre, it attracts traffic from all over the country. Traffic jams are a common problem in the city centre, the solution to which requires both engineering and administrative input.

On the positive side, Vilnius city has a sufficient supply of good quality water. Any modernisation of the water supply network would only further improve the overall quality of water delivered to users.

### Which regions are similar to Vilnius?

#### Age structure:

33% under 25

Brabant Wallon (B)  
Balears (E)  
Kirde-Eesti (EE)

#### Employment structure:

64% services

Derbyshire and Nottinghamshire (UK)  
Basse-Normandie (F)  
Osrednjeslovenska (SI)

#### Population density:

93 per km<sup>2</sup>

Kyffhäuserkreis (D)  
Isle of Anglesey (UK)  
Pomurska (SI)

In terms of the level of economic development there is some degree of diversity throughout Vilnius county. The influence of the capital makes general indicators appear better, while in fact remote areas, particularly those more distant from the capital, are on the list of regions in need of financial support.

### County of lakes and forests

Vilnius county covers an area of 9 651 km<sup>2</sup>, or 14.8% of Lithuania's total area, and is the largest county in Lithuania. The centre of the county is the city of Vilnius. Its exceptional feature is that it performs four functions at the same time, namely those of a city, district, county centre and the capital of the country.

The county, which is situated in the central part of the Baltic highlands, is characterised by its scenic landscape and rough terrain. The Medininkai hills are to the south-east of Vilnius, where the highest spot in Lithuania, Mount Juozapinė (293.6m.), is situated.

Because of the continental climate, winters in the region are the coldest in Lithuania. Average air temperature in January is -5.5°C, and there is usually deep and constant snow in the eastern part of the region.

There are comparatively rich deposits of gravel near Trakai, in Vilnius county. A little further south sand is excavated. To the south of the city of Vilnius can be found one of the largest peat bogs in the country.

Three main rivers, the Neris, the Merkys and the Šventoji flow through the county, while many brooks meander through the south-east plain. There are almost 780





lakes here, with the majority of them lying in the districts of Trakai and Švenčionys. The lake district in Trakai is one of the most scenic in Lithuania.

A part of the Aukštaitija National Park is situated in the district of Švenčionys. This park is one of the most popular recreational and tourist destinations in Lithuania. There are also eight regional parks established in the county.

With the soil here not particularly rich, the greater part of arable land lies only in the districts of Ukmergė and Širvintos.

Forests cover 39.0% of the county's area. The district of Švenčionys has the most extensive woods, covering more than half of the district, mainly in the south-east and east. Many forests form part of protected areas.

### The largest and most densely populated county

894 300 people, or just under a quarter of the population of the country, live in Vilnius county. It is the most densely populated county in Lithuania, with 92.7 people per km<sup>2</sup>. About 65% of the population of the county live in the city of Vilnius, with a further 132 500 people in the county's other fifteen towns, and the remainder living in rural areas.

In comparison with other counties, Vilnius county has the smallest number of Lithuanians. Almost half of the population in Vilnius district are Poles, and indeed in the district of Šalčininkai they make up the majority. While Lithuanians are in the majority in Ukmergė and Širvintos districts, they make up only a quarter of the total population in Trakai and Švenčionys districts. This mix of nationalities is due to historical circumstances, with many Russians, Poles, Belorussians as well as people of other nationalities now living here.

With women making up 52.4% of the county's population, this corresponds to the national average.

Since 1992 there has been a decrease of 2.7% in Vilnius county's population, due mainly to negative migration. Furthermore, since 1993 the number of deaths have outweighed the number of births, and is an additional factor contributing to the declining population here.

Between 1991 and 1995 the birth rate decreased by 37% to become one of the lowest of all the counties. In 1998 the birth rate per 1 000 population was 9.1, while

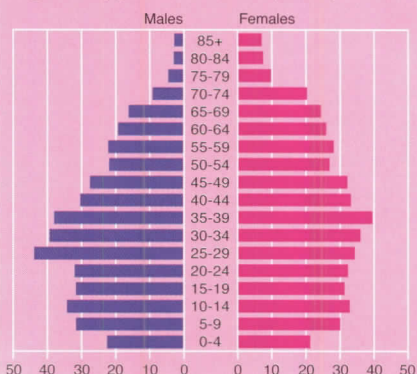
the birth rate among women aged 15 to 49 at 34 births per 1 000 women was the lowest in the country. Such a low birth rate was partially influenced by the 50% decrease in marriages. The divorce level corresponds to the national average at 3.1 divorces per 1 000 population in 1998. 16% of children were born out of marriage.

The mortality rate in 1998 was a little lower in comparison with the level of the republic at 10.6 deaths per 1 000 population. The infant mortality rate during the last three year period is on average around 9.5 deaths per 1 000 births.

Average life expectancy in the county since 1990 has decreased, and in 1998 it was 65.7 years for men, and 76 years for women.

The age structure of the county's population is rather young, with those aged 65 and over accounting for 11.8% of the total population as against the national average of 13.6%. Furthermore, in comparison with other counties, the number of children and old people is the smallest here, while the population of working age is the largest. This results in the lowest number of dependants on the working age population at 635 dependants per 1 000 population of working age in 1998.

Age-sex pyramid in 1998 (1 000)



Demographic account (1 000)

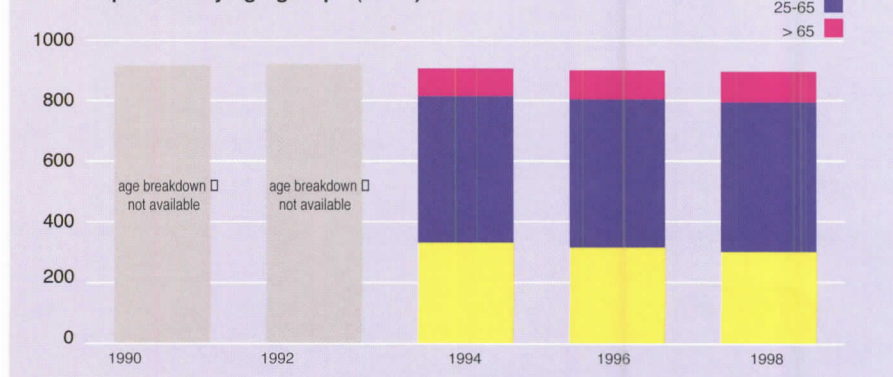
Population (01 01 90)	915.2
Births	90.1
Deaths	87.0
Migration	-23.9
Population (01 01 99)	894.4

### Almost one third of GDP is generated here

About 16% of Lithuania's industrial output is produced in Vilnius county. Basic industrial products include silicate products, paper and cardboard, plastic products, fibre boards, radio and television components, and confectionery products. Companies such as "Medienos plaušas", "Vilniaus vingis", and "Vilniaus pergale" have invested in modern production methods, and export their goods successfully abroad.

The headquarters of the largest Lithuanian enterprises are based in the city of Vilnius, including "Lietuvos telekomas", "Lietuvos energija", "Lietuvos geležinkeliai", and "Lietuvos dujos". Of the above mentioned

Population by age-groups (1 000)



enterprises "Lietuvos telekomas", "Lietuvos energija, and "Lietuvos geležinkeliai" all rank in the top ten of the largest enterprises in the Baltic States.

43% of the county's area is agricultural land, of which 81% is arable land. 71% of the arable land in all farms is used for growing crops, which take up the greatest part (50%) of the area and 8.5% is used for growing potatoes. While the yield from grain crops is below average, livestock productivity exceeds the national average by 23%.

A distinguishing feature of Vilnius county is its above average development in market and non-market services. 50.6% of gross value added is generated in the market services sector, some 10% above the national average.

Retail goods turnover in the county in the last five years has increased by four times. A similar increase was noticed in terms of retail goods turnover per capita, although this increase was some 19% above average in 1997.

Between 1993 and 1997, the volume of market services rendered per capita increased 2.9 times, and was some 70% higher than the national average. This reveals the greater purchasing power in Vilnius county in comparison to other counties.

The economic potential of the county is increasing, as between 1996 and 1998 the amount of GDP generated here increased from 28.5% to 32.0%. During this period per capita GDP also exceeded the national average.

The process of privatisation has intensified, with hotels, large trading and industrial enterprises being privatised. One of the largest Lithuanian enterprises, "Lietuvos telekomas", was also recently privatised.

Investment levels in the county increased 14.7 times between 1992 and 1997, running at some 44% above average. Direct foreign investment in the county increased 3.9 times, and with the greater part of foreign investment concentrated in Vilnius county, this makes per capita investment some 2.2 times higher than average.

Foreign capital is invested in joint stock companies 'Omnitel' (USA, Sweden), 'Lietuvos telekomas' (Sweden, Finland), 'Statoil Lietuva' (Sweden, Norway), 'Shell Lietuva' (United Kingdom), and 'Eurotextil' (Germany).

## Highest purchasing power

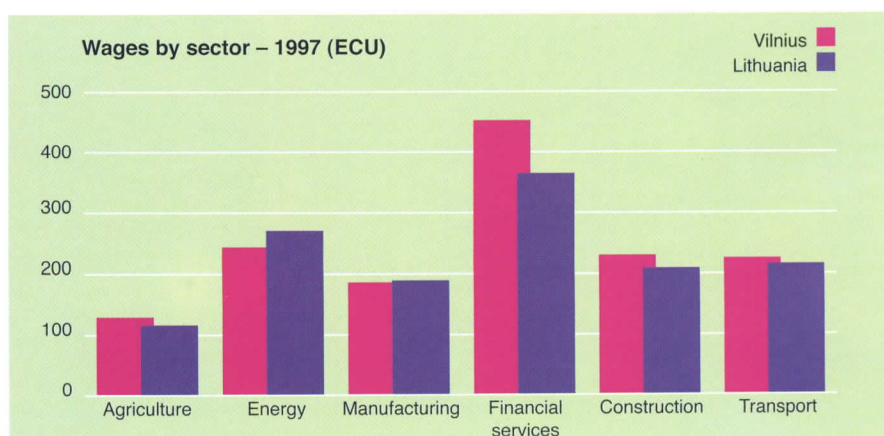
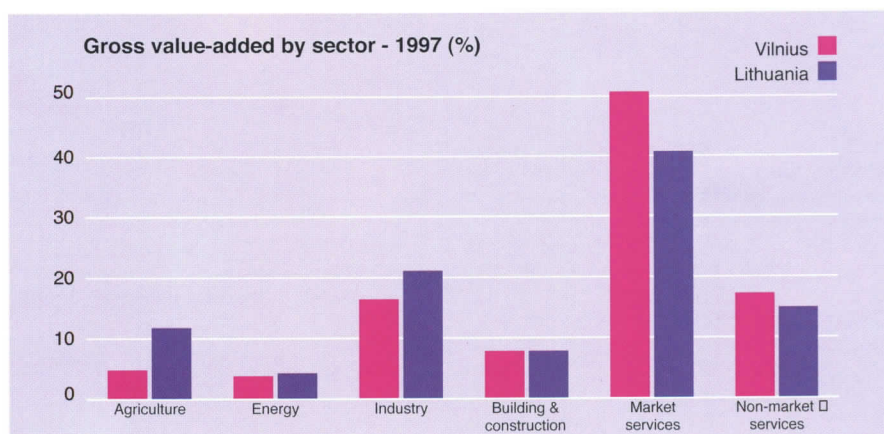
Over a quarter of all Lithuania's hired employees work in Vilnius county, and their wages and salaries are 14% higher than the national average, and in terms of overall average earnings are the highest in the country.

One fifth of the county's employees work in industry, where average earnings were both lower than average earnings in the county and also below average wages for this sector nationally in 1997. The highest wages and salaries were earned by those working in financial services, where earnings were well above those paid on average in this sector, and were also 2.5 times higher than the average national salary. This sector employs over 3% of all employees in the county. While average wages and salaries in the trade sector in other counties are below average, in Vilnius county they are above average.

According to the household budget survey the average income of a Vilnius resident is one third higher than the Lithuanian average. Consumer spending by Vilnius inhabitants is also the highest in the country, especially expenditure on recreation, culture, housing and transport.

## Main enterprises

Name	Activity
Lietuvos geležinkeliai	Rail transport company
Lelija	Clothing manufacturer
Kuro aparatūra	Pump manufacturer
Vilniaus vingis	TV and radio manufacturer
Lietuvos draudimas	Insurance
Vilniaus troleibusai	Transport company
Vilniaus Universiteto ligoninė	Hospital activities
Vilniaus duona	Bread manufacturer
Lietuvos nacionalinis radijas ir televizija	Radio and television company





## Diverse situation in labour market

As in other counties, changes in employment have been greatly influenced by the restructuring of the country's economy, by the privatisation process, and population migration especially in Vilnius city. Between 1992 and 1998, the number of people employed in Vilnius county decreased by 8.1%, although still over a quarter (26.4%) of all employees in the country worked in Vilnius county in 1998.

Within the county, Vilnius city saw the number of employed persons decreasing by 7% between 1992 and 1998, although 72.7% of all employees in the county still worked in Vilnius city in 1998. Employment decreased in Širvintai and Ukmergė districts, whereas in the districts of Švenčioniai, Trakai, and Vilnius it started to increase in 1996.

According to data from the Labour Force Survey employment in Vilnius county in the period between 1997 and 1998 grew more rapidly than average. This indicator was influenced by the increase in the rate of female employment, which at 49.1% was the highest in the country.

The overall employment structure differs substantially from the situation nationally. In 1998 the agricultural sector employed only 7.1% of all Vilnius county's employees, a figure which is around one-third of the average nationally. Industry employed some 20.1% of all employees, whereas service-sector employment was the highest in Lithuania with almost two-thirds of all employees working in this field.

In Vilnius some 32 500 people underwent retraining or improved their skills in the period between 1994 and 1997.

The unemployment rate among those registered as unemployed at Labour Exchanges was at its highest level in 1996 (7.3%), when it exceeded the national average for the first time. The comparatively low unemployment rate in Vilnius city influenced the general situation in the labour market, and the highest unemployment rate in Vilnius was recorded in 1996 when it reached 6.5%. Unemployment levels in 1997 varied between 6.6% in Trakai district up to 13.4% in Šalčininkai district.

According to the Labour Exchange data, unemployment among women increased up to 1996, and thereafter fell somewhat so that in 1998 some 14 300 women were

registered as unemployed. Youth unemployment in this period increased by over a quarter. It should be noted that most unemployed people had previously worked in industry.

According to data from the Labour Force Survey, the unemployment rate in 1998 dropped to 14.8% in the county, with male unemployment at 15.6% and female at 14.0%.

## Well developed transport network

Several major road routes stretch across the county. Among them are the Klaipėda-Vilnius-Minsk (Belarus) motorway, and the Vilnius-Panevėžys motorway, which meets European requirements and joins up with the Via Baltica.

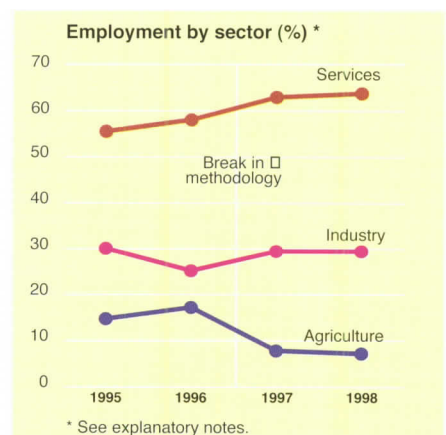
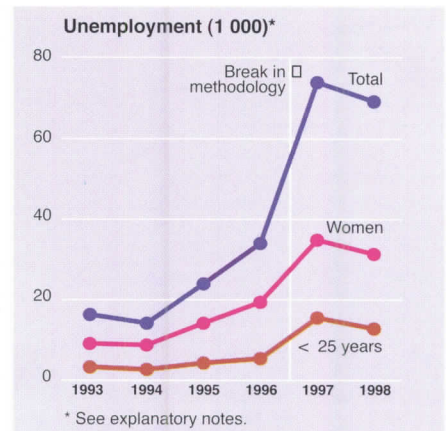
A number of main railway lines radiate from Vilnius, crossing Lithuania's borders and connecting it with other countries. One line runs eastwards towards Minsk (Belarus). Another heads north, and splits into two sections, one going towards St. Petersburg via Latvia while the other crosses through Lithuania to reach Latvia and then Estonia. The only electrified line runs westwards from Vilnius to Kaunas and on to the Kaliningrad region of Russia. Two lines head south, crossing into Belarus, and linking Lithuania with the Ukraine and Germany.

Vilnius airport serves aircraft from 11 countries operating a total of 26 routes.

At the beginning of 1998, there were 342.7 km of railway track in the county, of which 21% was electrified and 53% was double track. Rail density at 35.5 km per 1 000 km<sup>2</sup> is the third densest after Klaipėda and Panevėžys counties.

Total road length was 2 963.9 km, of which roads whose surface has been improved accounted for 58%. Road density in the county was 307 km per 1 000 km<sup>2</sup>, and upgraded road density was 179 km per 1 000 km<sup>2</sup>.

Telephone penetration has been increasing more rapidly in the county than it has nationally. At the beginning of 1998, there were 247 telephones per 1 000 population, which, while higher than the national average, lags behind the counties of Klaipėda and Kaunas.



## Employment by age group - 1998 (%)

	< 25 years	25-54 years	> 54 years
Men	10	78	12
Women	11	80	9
Total	10	79	11

## Heating plants, industry and transport the main polluters

Emissions of pollutants into the atmosphere from stationary sources are distributed unevenly. There were almost one third fewer solids emitted per km<sup>2</sup> of the county than the national average, while gaseous and liquid substances were 35% above average. Major polluters are heating plants, industrial enterprises in and around the city of Vilnius and vehicles.

In terms of the capacity of its power plants the county ranks in second place after Utena county, where the Ignalina power station is located. The plant in Elektrėnai is the largest in the county, with a capacity of 1800 MW. Two plants are active in Vilnius, the old one with the capacity of 24 MW and a new one with a capacity of 360 MW.

The county's good sewerage network discharges more water than average, and its well developed wastewater treatment system means that 96% of all effluents are passed to wastewater treatment plants for purification and 91% receives biological treatment. The latter figure is well above average. Furthermore, more water is supplied to inhabitants through the water supply network than is elsewhere in the country.

The gas network is quite dense in the county, with 1.11 km in length of gas piping per 1 000 population. There are 234 dwellings with a connection to the gas network per 1 000 population, and 804 cubic meters of natural gas supplied to all consumers, of which 42% is supplied to domestic consumers. This latter figure equals the national average, whereas only 10.6 kg of liquid gas per 1 000 population is used here, which is considerably less than average. It is noteworthy that natural gas is also supplied to industrial customers, as a result of which the overall amount of natural gas supplied is considerably higher than in other counties.

### Surfaced public roads – 1997

	Vilnius Lithuania	
Length in km per km <sup>2</sup> *	0.18	0.17
Length in km per 1 000 population *	1.9	3.0
Length in km per 1 000 private passenger cars (1998) *	8.3	12.0
% private passenger cars in total number of vehicles (1998)	83	84
Number of accidental deaths per 1000 private passenger cars (1998)	0.8	0.9

\* See explanatory notes.

### Environment - 1997

	Vilnius Lithuania	
Towns connected to public water supply	16	107
Towns connected to public sewerage	16	105
Sewerage subject to treatment (%)*	96	76
Per capita consumption of water (m <sup>3</sup> )*	50.1	43.4

\* See explanatory notes.

### Number of pupils - 1998

Pre-school	26 436
Primary	49 293
Secondary comprehensive	87 035
Secondary vocational	11 261
Tertiary (higher education)*	45 469
Total	219 494

\* See explanatory notes.

### Health care - 1997

	Vilnius Lithuania	
Number of hospitals	44	187
Number of doctors per 10 000 population	44.5	39.8*
Number of hospital beds per 10 000 population	108.1	98.4*

\* See explanatory notes.

### Telephone services

	1995		1997	
	Vilnius	Lithuania	Vilnius	Lithuania
Lines per 1 000 population	215	204	247	232
% connected to digital network	:	:	:	:

## The highest number of pupils

The county can boast the highest number of children in pre-school education. In 1998, 65% of all children aged between 3 and 6 in the county were in pre-school, with two-thirds of them being educated in another language (Russian, Polish).

The county has the most schools and correspondingly the most pupils, with 89% of all 7 to 18 year olds in education. Out of the county's 23 schools, 10 are private and 71% of all pupils in private schools in Lithuania study in them. There are also 20 colleges offering further education courses. Since 1995, the number of students has been rapidly increasing. In 1998, 45% of all students in Lithuania studied in the 3 universities and 4 academies which are located in Vilnius.

Vilnius County's 44.5 physicians per 10 000 population was the highest ratio in Lithuania in 1998 and while the number of paramedical personnel decreased between 1994 and 1998, it was still above average. An overall fall in the number of hospital beds was limited to outlying areas as the number of beds in Vilnius city remained unchanged. Visits to out-patient clinics remained stable, with 6.5 visits per year per capita.

The number of libraries is the highest in the country. The National Martynas Mažvydas library in Vilnius has the largest stock of books and number of readers (20 000). There is also a library for the blind, which is used by 4 000 readers.

In total, there are 21 museum in Vilnius city. As well as traditional museums, there is also a museum attached to the Bank of Lithuanian, the museum of architecture, and a geology museum. Trakai museum has over 200 000 visitors every year. Six state theatres and four orchestras, as well as the national opera and ballet companies are based in Vilnius and stage numerous performances each year.

Many traditional events are held in Vilnius, such as the Kaziukas market in the old town, and the Republican song festival in Vingis park, which attract participants from all over the world.

## Explanatory notes

Sources: Department of Statistics to the Government of the Republic of Lithuania (Statistics Lithuania) (all data relating to Lithuania)  
Eurostat database REGIO (all EU data)

### Notes on specific graphs and tables

#### Table: Main indicators

Reference year: 1998 except for GDP per capita (1997), infant mortality (1997), activity rate M+F (1997), and population density (1999).

#### Graph: Agricultural land use in 1998 (%)

Data have been provided in co-operation with the Ministry of Agriculture. Data refer to all farms, including private farms.

#### Table: Agriculture - 1998

Data on the number of private farms - all types include:

- private farms running as full time owner-occupier farms,
- small farms basically for own consumption (producing 50% of total Lithuanian production),
- large (private) partnerships and companies (producing a substantial share of overall production).

#### Table: Demographic account (1000)

Migration is presented as total, because it includes both migration within the boundaries of the country and outside the borders of the country.

#### Table: Number of pupils - 1998

Tertiary (higher education): data include colleges and universities.

#### Table: Employment by age groups - 1998 (%)

Source: Labour Force Survey.

#### Graph: Employment by sector (%)

Source: there is a break in the methodology. 1995 and 1996 data come from administrative reports; 1997 and 1998 data come from the Labour Force Survey.

#### Table: Environment - 1997

Sewerage subject to treatment (%): discharge of waste water through sewerage treatment facilities as per cent of total discharge after treatment.

Per capita consumption of water (m<sup>3</sup>): includes only water supplied to households and for community needs not other uses such as industry, agriculture, construction, etc.

#### Graph: Gross value added by sector - 1997 (%)

Gross value added at basic prices.

#### Table: Health care - 1997

Reference year: 1998 for data on the number of hospital beds per 10000 population (The figure for the number of hospitals in Lithuania also includes ones which are directly under the Ministry of Health).

#### Graph: Population by age groups (1000)

The breakdown into age groups is not available for the years 1990 and 1992.

#### Graph: Age-sex pyramid in 1998 (1000)

Population data are from the beginning of 1998.

#### Table: Surfaced public roads - 1997

Reference year: 1998 for data on length in km per 1000 private passenger cars, data on % of private passenger cars in total number of vehicles and data on number of accidental deaths per 1000 private passenger cars.

#### Graph: Unemployment (1000)

Source: there is a break in the methodology. From 1993 to 1996, data are taken from the Labour Exchange; from 1997 to 1998 from the Labour Force Survey.

#### Graph: Wages by sectors - 1997 (ECU)

Definition: gross average monthly salary.

## Notes on comparability

The definitions and methods used by the Department of Statistics to the Government of the Republic of Lithuania (Statistics Lithuania) do not always coincide with those used by the Member States of the European Union. Comparisons of Lithuanian regions with regions in the EU should therefore be made with caution.

## Names of all those who prepared text:

### Texts' drafting:

Rimvydas Ignatavičius,  
Danutė Murauskaitė,  
Judita Matulevičienė,  
Daiva Jurelevičienė,  
Virginija Eidukienė,  
Algimantas Misiūnas,  
Jūratė Šinkūnienė,  
Janina Zarembaitė,  
Salvinija Chomičienė (Statistics Lithuania-Lietuvos statistika),  
Eduardas Jančiauskas (The Academy of Law of Lithuania-Lietuvos teisės akademija),  
Leonas Rinkūnas,  
Vaidotas Marčėnas (The Ministry of Economy-Ūkio ministerija).

### Scientific editing:

Prof. Eduardas Jančiauskas (The Academy of Law of Lithuania-Lietuvos teisės akademija),  
PhD. Jonas Markelevičius (Statistics Lithuania-Lietuvos statistika).

### Data completion and editing:

Birutė Liberienė,  
Danutė Žilinskienė,  
Laima Burbienė,  
Tatjana Usmanova (Statistics Lithuania-Lietuvos statistika)

### Translation:

Daiva Norkevičienė (Statistics Lithuania-Lietuvos statistika)

### Photos:

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Lietuvos žemės ūkis. Agriculture in Lithuania. – Statistics Lithuania, Vilnius, 1995-1999

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Remark: all publications are available in English.

## Legend to maps

<u>TALLINN</u>	National capital
<u>ŠIAULIAI</u>	Regional capital
 Daugavpils	Town of over 100 000 inhabitants
 Kohtla-Järve	Town of over 50 000 inhabitants
 Ogre	Town of over 20 000 inhabitants
 Rakvere	Town of over 10 000 inhabitants
 Turba	Other locality

	State border
	Regional border
	Motorway
	Road
	Railway
	Frontier crossing
	Railway frontier crossing
	Port
	Airport
	National Park

# LEGEND

Regions of Estonia, Latvia and Lithuania

Maps designed by András Trócsányi and Zoltán Wilhelm

Janus Pannonius University, Faculty of Sciences  
Department of General Human Geography and  
Urban Studies - Pécs, Hungary - 2000

## 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**

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Fax (34-91)-579 71 20  
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Fax (358 9)-1734 22 79  
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UK-Durham DH1 3SW  
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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)

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