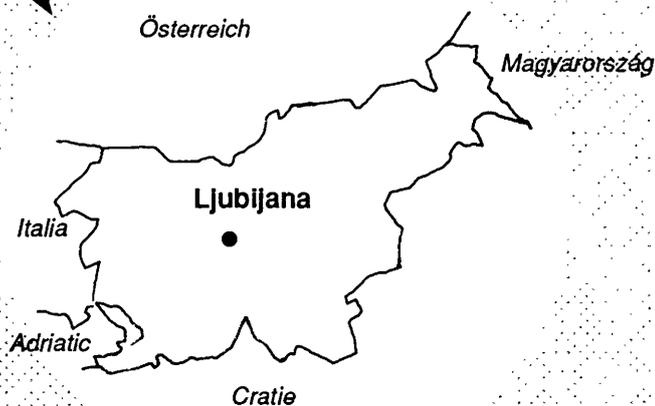


# Agricultural Situation and Prospects in the Central and Eastern European Countries



## Slovenia





**European Commission**  
**Directorate General for Agriculture (DG VI)**  
**Working Document**

**Agricultural situation and prospects in the**  
**Central and Eastern European Countries**

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| <b>Slovenia</b> |
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**The manuscript was prepared by Bruno Buffaria, with the assistance of Eric Willems. The authors accept full responsibility for any errors which could still remain in the text.**

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## Foreword

The European Union has expressed its intention to offer membership to those countries in central and eastern Europe with which it has an association agreement (see box below). Agriculture has been identified as an important issue for future accession, due to its relative size in some of the Central and Eastern European Countries (CEECs) and to the difficulties there might be in extending the Common Agricultural Policy in its current form to these countries.

A series of ten country reports on the agricultural situation and prospects in the CEECs has been prepared by the services of the European Commission in collaboration with national experts and with the help of scientific advisers. The ten countries covered are Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia, which are associated to the European Union through the Europe Agreements, and Estonia, Latvia, Lithuania and Slovenia, which are in the process of being associated.

The country reports attempt to provide an objective analysis of the current situation in agriculture and the agro-food sector in the CEECs and an assessment of the developments to be expected in the medium term.

The closing date for data was end of April 1995.

*Extract conclusions Copenhagen summit of 22-23 June 1993*

“The European Council today agreed that the associated countries in Central and Eastern Europe that so desire shall become members of the European Union. Accession will take place as soon as an associated country is able to assume the obligations of membership by satisfying the economic and political conditions required.

Membership requires that the candidate country has achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities, the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union. Membership presupposes the candidate's ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union.”

## About the data....

The data used in this country report are derived from a CEEC dataset established by DG VI in cooperation with other services of the European Commission and with external experts. Data have been selected after a number of analyses carried out by both external research institutes<sup>1</sup> and DG VI services. They originate from various sources: FAO, OECD, World Bank, United Nations, USDA, national statistics, economic institutes and the European Commission (DG II, Eurostat).

The main objective was to obtain a dataset which was as coherent as possible, offering a good comparability of data.

For the agricultural data, the starting point of the analysis was the work carried out by Prof. Jackson (Institute for Central and East European Studies, Katholieke Universiteit Leuven, Belgium), who compared figures from OECD, FAO and the national statistics of Poland, Hungary, the Czech Republic, Slovakia, Bulgaria and Romania. The conclusion of this study was that the FAO was the most reliable source because these data were standardized, which was not the case for the two other sources.

Moreover, DG VI services compared FAO and USDA data and although for the crop sector there were no important differences, this was not the case for the animal sector where big discrepancies were apparent. This is due to different methodological approaches and also to different coefficients used to transform live animal weight in carcass weight.

In general the FAO data for agriculture were used, but for certain countries and/or for certain products, and in particular for the most recent years, the figures were adjusted or replaced by data from other sources, after discussion with country specialists and with FAO statisticians. In such cases, FAO coefficients and standards were used to avoid a break in the time series.

Despite all efforts to create a coherent, reliable and up to date dataset, all figures presented in this report should be interpreted with care. Significant changes in data collection and processing methods have sometimes led to major breaks in historical series as the countries concerned have moved from centrally planned to market economies. One general impression is, according to some experts<sup>1,2</sup>, that these problems may have led to overestimate the decline in economic activity in general and of agricultural production in particular in the first years of transition, data from 1989 and before being somewhat inflated and data after 1989 underrecording the increase in private sector activity.

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<sup>1</sup> - M. JACKSON and J. SWINNEN (1995) : A statistical analysis and survey of the current situation of agriculture in the Central and Eastern European Countries, report to DG I, European Commission.  
- W.J. STEINLE (1994) : First Study on Data Collection on "Visegrad" Countries and ECO Countries, Empirica Delasasse, Eurostat.

<sup>2</sup> S. TANGERMANN and T. JOSLING (1994): Pre-accession agricultural policies for central Europe and the European Union, study commissioned by DG I, European Commission.

## Executive summary

1. The apparent economic importance of Slovenian agriculture is low since it consistently accounts for only 5% of GDP and 10% of employment. Nevertheless, during the phase of accession to independence it played and continues to play an important social buffer role.
- 2 This role of social absorber (occupation of the unemployed, urban/rural balance) at the time of economic crisis is dependent on the permanence of a land structure where small agricultural holdings are dominant.
3. The development of agriculture is confronted with the following elements:
  - 50% of Slovenia is covered by forest
  - less than 43% of its area is agricultural land of which 70% is in mountainous regions
  - at the moment, nearly 80% of the farmers are "part time".
4. In the period before independence, agricultural prices were fixed with respect to the most competitive holdings of the "socially owned" sector. This arrangement did not, paradoxically, lead to changes in agricultural structures and to a concentration of holdings. This structural inertia can be explained at least partly by the very high percentage of part-time farmers with off-farm income.
5. Confronted with this situation, the Slovenian government intends to encourage the development of agricultural holdings of a viable economic size. It is unlikely that the land situation could be resolved by the encouragement of a practically non-existent agricultural land market. The former "socially owned" holdings represent only 8% of total UAA and the privatization process will return around 50% of this area to its former owners.
6. Measures currently under discussion stress the development of a "multi-purpose agriculture": quality agricultural and food production, safeguarding the environment and landscapes, defence of ground water-tables, promotion of agri-tourism, etc.
7. Even with its proviso of minimal environmental impact, Slovenian agriculture has the potential to greatly increase productivity. Slovenia already has a well-developed extension service which is playing an important role in the modernisation process.
8. It is difficult to predict the outcome of the restructuring and privatization of the food-processing industry from the former "socially owned" sector. But the existence of dynamic and competitive companies will support the development of Slovenian agriculture in the short term, as well as exports of some products (milk, beef, poultrymeat, wine). In effect, the GATT commitments are not constraining, except for poultry, since most exports are unsubsidized.

9. **Outlook 2,000.** The growth of the Slovenian economy (+5% per year until 2,000) will have a strong impact on both farm structures and on production levels. However, changes in the price hierarchy of different agricultural products will also have an incidence on the production systems of agriculture holdings.

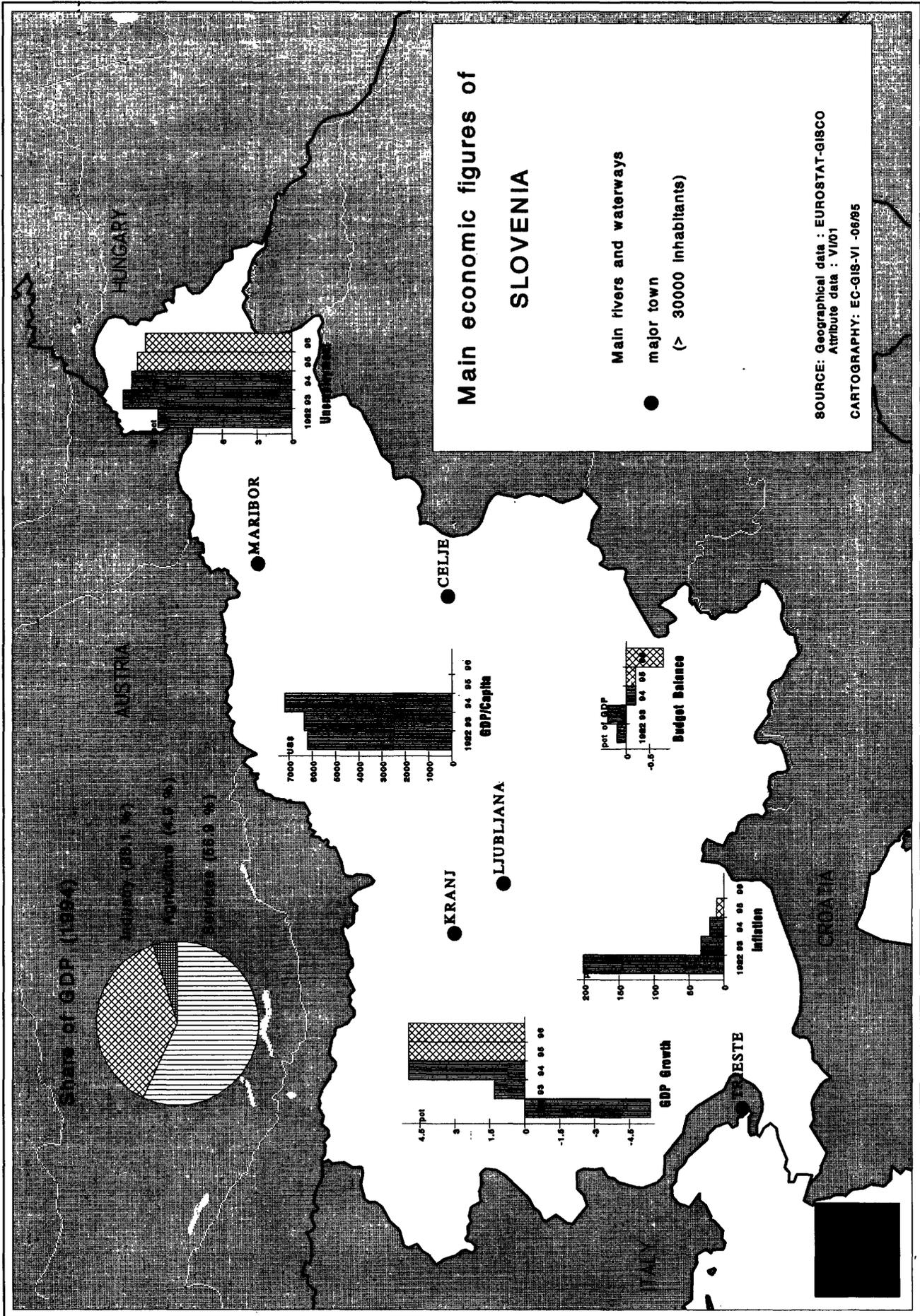
Milk production will soon plateau, self-sufficiency being reached and export opportunities being more and more limited. Animal production will partially switch to beef production.

Agri-food self-sufficiency will increase, but Slovenia will still remain a net importer of agri-food products.

### Slovenia in comparison with other CEECs and EU-15

|             | Population<br>(mio) | GDP<br>(bio ECU) | GDP pc<br>(ECU) | Total area |           | Agricultural area |         | Arable area |         | Agricultural production |      | Agricultural employment<br>(% tot. empl.) | Rainfall<br>(mm/year) |
|-------------|---------------------|------------------|-----------------|------------|-----------|-------------------|---------|-------------|---------|-------------------------|------|---|-----------------------|
|             |                     |                  |                 | (mio ha)   | (% total) | (mio ha)          | (ha pc) | (bio ECU)   | (% GDP) | (000)                   |      |   |                       |
| Bulgaria    | 8.5                 | 9.4              | 1110            | 11.1       | 6.2       | 55.9              | 4.0     | 0.47        | 1.131   | 12.0                    | 694  | 21.2                                      | 550                   |
| Czech. Rep. | 10.3                | 26.7             | 2586            | 7.9        | 4.3       | 54.3              | 3.2     | 0.31        | 0.871   | 3.3                     | 271  | 5.6                                       | 491                   |
| Estonia     | 1.6                 | 1.5              | 938             | 4.5        | 1.4       | 30.6              | 1.0     | 0.63        | 0.266   | 10.4                    | 89   | 8.2                                       | 600                   |
| Hungary     | 10.3                | 32.5             | 3150            | 9.3        | 6.1       | 65.8              | 4.7     | 0.46        | 2.068   | 6.4                     | 392  | 10.1                                      | 600                   |
| Latvia      | 2.6                 | 2.2              | 850             | 6.5        | 2.5       | 39.2              | 1.7     | 0.65        | 0.232   | 10.6                    | 229  | 18.4                                      | 680                   |
| Lithuania   | 3.8                 | 2.3              | 627             | 6.5        | 3.5       | 54.0              | 2.3     | 0.62        | 0.259   | 11.0                    | 399  | 22.4                                      | 625                   |
| Poland      | 38.5                | 73.4             | 1907            | 31.3       | 18.6      | 59.5              | 14.3    | 0.37        | 4.648   | 6.3                     | 3661 | 25.5                                      | 550                   |
| Romania     | 22.7                | 21.8             | 961             | 23.8       | 14.7      | 61.9              | 9.3     | 0.41        | 4.500   | 20.2                    | 3537 | 35.2                                      | 635                   |
| Slovakia    | 5.3                 | 8.7              | 1643            | 4.9        | 2.4       | 49.0              | 1.5     | 0.28        | 0.512   | 5.8                     | 178  | 8.4                                       | 611                   |
| Slovenia    | 1.9                 | 9.8              | 5018            | 2.0        | 0.9       | 42.7              | 0.2     | 0.13        | 0.250   | 4.9                     | 90   | 10.7                                      | 1350                  |
| CEEC-10     | 105.4               | 188.3            | 1786            | 107.7      | 60.6      | 56.2              | 42.3    | 0.40        | 14.7    | 7.8                     | 9540 | 26.7                                      |                       |
| EU-15       | 369.7               | 5905.1           | 15972           | 323.4      | 138.1     | 42.7              | 77.1    | 0.21        | 208.8   | 2.5                     | 8190 | 5.7                                       |                       |

All figures are for 1993. Rainfall long term average.  
Source : DGVI CEEC dataset.



# 1 General overview

## 1.1 Geography, climate and demography

Slovenia lies on the south eastern fringes of the Alps at the meeting point of the Alpine range, the Mediterranean and South-East Europe.

With a total area of 20,250 square kilometres, Slovenia is two thirds the size of Belgium. Though the territory is rather small, there is a great variety of natural conditions for agriculture: from Mediterranean, karstic and alpine to subpanonic. Less than 43% of the area (0.86 mio ha) is agricultural land, of which 0.25 mio ha is arable. Forests cover more than 50% of Slovenia, well above the European average, and around 70% of the total agricultural area is in unfavourable hilly and mountainous regions.

Slovenia's climate is quite varied going from sub-mediterranean to alpine (minimum average temperature range: -3°C to +5°C, maximum average temperature range: 17°C to 24°C). Average annual rainfall (1981-90) varies from 800 to 2600 mm, depending on the region.

The Slovenian population is relatively homogenous. Italian- and Hungarian-speaking minorities represent less than 1% and inhabitants from other former Yugoslavian Republics less than 10%. According to 1994 figures, 1.95 mio people live in Slovenia, with an average density of 97 per km<sup>2</sup> (similar to Austria). More than half the population live in the countryside; only 2 towns have more than 100,000 inhabitants, Ljubljana (280,000) and Maribor (110,000).

The population has been decreasing slightly for the last three years. Births in 1993 of 10.1 per 1000 (the same as Germany) are 30% lower than the 1980-84 average and 20% lower than the 1985-89 average. Life expectancy is 69.4 years for males and 77.3 years for females (average 1992-1993), against 67.2 and 75.1 respectively 10 years earlier. Causes of death are mainly circulatory diseases (45%) and cancer (23%).

Of the total population, 69% are of working age, 20% are under working age (15 years) and 11% over the retirement age. The structure of the Slovenian population is a little younger than EUR-15, where the figures are 67%, 18% and 15% respectively. However, if the recent trend continues, the structures will soon be the same. The age structure of family members on the farms is quite similar to that of the overall population.

## 1.2 Historical background

On the disintegration of the Austro-Hungarian empire, in 1918, the Slovenians joined with Serbia and Croatia to form an independent and single state which acquired the name of Yugoslavia in 1929. Two regions with a Slovenian-speaking population were not integrated into this whole:

- a part of Carinthia which became Austrian after a referendum in 1920;
- the west of Slovenia (400,000 inhabitants) which became Italian after the signature of the treaty of Rapallo with Italy in 1920.

During the Second World War Yugoslavia was occupied by Germany, Italy, Hungary and Bulgaria. This war, which combined the World War, a civil war with ethnic massacres in Bosnia and Croatia, and a national and social liberation war, caused more than 1 million deaths in the Yugoslav population (of about 16 million inhabitants). The resistance of the Yugoslav partisans, which brought together the aspirations of the various Yugoslav peoples, allowed the liberation of the country from nazism without any particular support from the Soviet army. At the end of the war, the communist resistance led by Tito proposed to give birth to a new concept of Yugoslavia: the Yugoslav Federation, whose constitution of 1946 embodied a completely original socialism<sup>3</sup>.

Slovenia became one of the six constituent republics of the Yugoslav Federation. The territorial relationship between Italy and Yugoslavia was complicated at a later date when in 1954, following the London treaty, 47 km of coast (including the Koper port) were conceded to Slovenia, while at the same time Trieste remained Italian. A community of around 50,000 Slovenians thus became Italian, whereas Istria, where an Italian speaking community resided, was incorporated into Slovenia and Croatia.

Slovenia was the most prosperous republic of Yugoslavia (it is generally agreed that, with 8.4% of the Yugoslav population, Slovenia contributed 18.2% of the former Yugoslav Federation's GDP) and the most orientated towards Western Europe. The democratization process started after Tito's death and accelerated after 1988, leading to the first free elections in April 1990. These gave rise to the victory of a straight centre coalition (DEMOS) and the election to the presidency of the republic of Milan Kucan, an ex-communist. In a referendum in December 1990 a resounding majority (88%) voted for independence. This was declared on 25 June 1991 and a new constitution adopted on 23 December 1991. All civil freedoms are guaranteed by the Constitution, including freedom of religion and of expression. Since then all Member States of the EU have recognized Slovenia.

After the adoption of the new Constitution, new institutions gradually evolved :

- a national Parliament of 90 delegates, democratically elected according to a

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<sup>3</sup> *But neither then, nor later, was the principle of multi-partism introduced, even if there was no Yugoslav Communist Party but a League of Yugoslav Communists and different mass and social organisations. However Yugoslav citizens were free to visit Western Europe and North America for tourism, higher education and work purposes.*

proportional system with a minimum threshold of 3.4%;

- a national Council of 40 members, representing the social and economic sectors as well as local authorities.

The latter assembly has the role of controlling legislative power by means of a suspensive veto (forcing the Parliament to re-discuss and revote) and by the possibility of organizing, under certain conditions, referenda on laws newly approved by the national Parliament.

The elections held on 6 December 1992 confirmed the presidency of Milan Kucan (with 63% of the votes) and led to the formation of a centre-left coalition government, which is still in place at the time of writing<sup>4</sup> (May 1995).

Slovenia aspires to being recognized as a reliable political and economic partner. It has initiated the process enabling it in the long term to become a member of the European Union. At the international level it has been admitted to the United Nations (18 May 1992) and become a member of the IMF (14 December 1992) as well as the EBRD (23 December 1992) and the World Bank (25 February 1993). Slovenia is also one of the signatory countries of the GATT agreement and founder member of the WTO.

### *1.3 Socio-economic background*

Natural resources are few (mainly wood and inefficiently exploited hydroelectric potential), so the country's development depends primarily on the skills and training of the population. Already before independence (arising from the rupture of Yugoslavia) Slovenia was characterized by two specifics:

- a largely open economy, a unique phenomenon for a country with a socialist state economy. Slovenia was considered the most developed republic of former Yugoslavia.
- a small proportion of its population was drawn from other Yugoslav republics. At the time of independence, it was enough to reside at least 2 years in Slovenia to gain Slovenian citizenship.

Moreover, Slovenia practised the most successful form of market socialism, an experiment very far removed from the authoritarian socialism of the other Central and Eastern European countries. Besides a private sector of micro-enterprises (farmers and craftsmen) there existed forty-six large "socially owned" companies which developed horizontal and vertical integration of their economic functions and occupied a major part of the Yugoslav economy.

Neither public-sector organisations, nor private companies, co-operatives nor charities, these economic associations, the "property" of civil society, were directed by managers responsible for the economic health of these groups. They could be composed of several

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<sup>4</sup> The next elections are planned for autumn 1996.

hundred companies or establishments. Although these "socially owned" associations had no right to buy others companies, there was always a certain competition among the forty-six. Thus, market forces had at least a limited impact in regulating companies.

The break-up of the Socialist Federation of Yugoslavia in 1991 was the result of the debilitating effect of the adoption at the beginning of the eighties of a project for political centralization and a liberal economic policy, under the influence of the IMF. For Slovenia, it represented the nadir of the economic crisis that had started at the beginning of the 80's. This was certainly the worst crisis Slovenia has faced since the Second World War.

Nevertheless, Slovenia presents numerous assets for the future of its economic development:

- a GDP per capita exceeding 7 000 US\$ and a GDP per capita at purchasing power parities of 9 500 US\$ in 1994;
- a low level of debt, weighing little on public finance;
- the existence of a developed banking system (able to collect savings and to supply loans and credits);
- the existence of networks of companies, mainly small and medium enterprises, with autonomous management (Yugoslav "self-management"), which are not dissimilar to those of a capitalist market economy;
- experience and knowledge of external trade;
- a dynamic economic structure for a long time open and orientated towards the exterior;
- a geo-economic situation, at the regional crossroads of economic flows between "East" and "West", favourable to the development of tourism.

#### 1.4 Macro-economic data

**Table 1 : Main macro-economic indicators**

|                                    |                | 1990  | 1991  | 1992  | 1993  | 1994(e) | 1995(f) | 1996(f) |
|------------------------------------|----------------|-------|-------|-------|-------|---------|---------|---------|
| <b>GDP (current prices)</b>        | mioUS\$        | 17381 | 12673 | 12365 | 12672 | 14037   |         |         |
| <b>GDP (real terms)</b>            | % change       | -4,7  | -8,1  | -5,4  | 1,3   | 5,0     | 5,0     | 5,5     |
| <b>inflation</b>                   | % change       | 549,7 | 117,7 | 201,3 | 32,3  | 19,8    | 10,0    |         |
| <b>unemployment</b>                | 000            | 44    | 75    | 118   | 130   | 128     | 123     | 117     |
| <b>unemployment (1)</b>            | % labour force | 4,7   | 8,2   | 11,5  | 14,5  | 13,8    | 13,3    | 12,6    |
| <b>budget balance</b>              | % GDP          |       | 2,6   | 0,2   | 0,4   | -0,2    | -0,2    | -0,8    |
| <b>exchange rate</b>               | SIT/US\$       |       | 55,6  | 81,3  | 113,2 | 128,8   | 140     | 145     |
| <b>exchange rate</b>               | SIT/ECU        |       | 70,3  | 105,3 | 132,7 | 151,2   | 175     | 181     |
| <b>trade balance (2)</b>           | mioUS\$        | -609  | -262  | 540   | -418  | -441    | -675    |         |
| <b>Current account balance (3)</b> | mioUS\$        | 530   | 221   | 720   | -108  | 170     | -75     |         |
| <b>foreign debt (4)</b>            | mioUS\$        | 1954  | 1866  | 1741  | 1873  | 2258    | 1700    | 1600    |

Source : Slovenian Institute of Macro-economic Analysis and Development

(1) Registered unemployed / (employees + self employed + registered unemployed)

(2) Only goods, 1990 & 1991 excluding transactions with former Yugoslav Republics

(3) Goods & non-factor services, 1990 & 1991 excluding transactions with former Yugoslav Republics

(4) Total foreign debt (only allocated debt) without reallocation of the Yugoslav debt

The Slovenian economy, which had entered a period of recession in the early eighties, suffered the full effects of the break-up of the former Yugoslav Federation. GDP fell by 17% in real terms between 1990 and 1992.

The reasons for this decline can be found in the transition process towards a market economy, and the collapse of economic flows in the direction of the other republics of the Yugoslav Federation, as well as the direct and indirect effects of the wars in Croatia and Bosnia.

The beginnings of a turn-around occurred in 1993, although industrial production continued to fall. The real growth rate was 1.3% in 1993, as foreseen by government forecasts. The current growth estimate for GDP is 5.0% for 1994, demonstrating an acceleration of this trend, which should be maintained over the next two years.

Similarly, investment has accelerated since 1993. Gross fixed investment became positive again in 1993, accounting for 18.3% of GDP and marking a growth rate of 12.8%. In 1994 it reached 19.8% of GDP, corresponding to a growth rate of 15%. In 1995 the share of investment in GDP should increase by 1%.

Industrial production (38.1% of GDP) grew in 1994 (+6.4%) for the first time in 4 years, supported by substantial internal and external demand. Metals, textiles, shoes and chemicals account for 45% of manufactured production. The timber industry and electrical and electronic components constitute the two other important sectors of manufactured goods production.

Accounting for more than 56% of GDP, services assume a leading importance in the Slovenian economy; financial services, trade, transport and communications are the principal sectors.

The growth in tourism is currently more than 9%, but as yet only 75% of the level reached in 1990.

**Table 2 : Evolution of GDP**

|                       |          | 1990  | 1991  | 1992  | 1993 | 1994(e) | 1995(f) | 1996(f) |
|-----------------------|----------|-------|-------|-------|------|---------|---------|---------|
| <b>GDP</b>            | % change | -4,7  | -8,1  | -5,4  | 1,3  | 5,0     | 5,0     | 5,5     |
| <b>agric GDP</b>      | % change | -1,6  | -3,4  | -5,9  | -3,7 | 1,6     | 2,5     | 3,0     |
| <b>industry GDP</b>   | % change | -10,2 | -11,3 | -11,6 | -2,6 | 6,4     | 5,1     | 5,6     |
| <b>services GDP</b>   | % change | -0,4  | -6,3  | -1,2  | 4,0  | 4,2     | 5,1     | 5,9     |
| <b>% agric/GDP</b>    | %        | 5,2   | 5,4   | 5,3   | 4,9  | 4,9     | 4,7     | 4,6     |
| <b>% industry/GDP</b> | %        | 41,8  | 44,6  | 40,5  | 38,4 | 38,1    | 38,8    | 38,8    |
| <b>% services/GDP</b> | %        | 53,0  | 50,0  | 54,2  | 56,7 | 56,9    | 56,5    | 56,6    |

Source : Slovenian Institute of Macroeconomic Analysis and Development

The restructuring of companies, which preceded the "privatization" process, resulted in a huge increase in unemployment between 1990 (4.7%) and 1993 (14.5%). However, the

existence of a network of dynamic small and medium enterprises made it possible to contain this phenomenon to a slight fall to 13.8% in 1994. Moreover, the unemployment rate based on ILO criteria was only 9% in 1994. In addition, the existence of an underground economy probably results in an over-estimation of the real unemployment rate and/or under-employment. With economic growth and restructuring of companies, this trend towards falling unemployment should continue in 1995 and 1996.

Slovenia already fulfils two of the Maastricht Treaty convergence criteria for participation in Economic and Monetary Union. The public debt accounts for only 30% of GDP and, until recently, the budget deficit was practically non-existent.

Since 1994, however, a small budget deficit has appeared as the consequence of increased budgetary expenditure. Public loans agreed in 1994 increased by 20%. During the last two years (1993, 1994) the rate of public debt has increased sharply and should increase again when the debt of the ex-Yugoslav Federation is distributed between the various Republics (in theory resolved at the meeting of the Paris Club in July 1993). According to some estimates this would have brought the level of the debt to 2,744 Mio US\$ at 31.12.94.

Having inherited extremely high inflation at the time of independence (550% in 1990, 117% in 1991, 201% in 1992), an inflation reduction policy brought it down to 32% in 1993. However, the declared objective of 13% for 1994 could not be achieved, inflation still reaching 20%. In 1995, inflation may go no lower than 10%.

Nevertheless, monetary policy remains indisputably a success for the Slovenian government. The new Tolar instituted in October 1991 on the basis of 1 Tolar for 1 Dinar appreciated quickly and became convertible, whereas central reserves reached 1200 million US\$ at the end of 1992. The Tolar has remained remarkably stable and lost only 5.8% in relation to the ECU in 1994.

After falling for three years, household incomes started to increase again in 1993. This had a strong impact on the revival of household consumption, which grew by more than 10%. In this context, the signature of a social pact between employers and employees, under the government's aegis, had great importance for the control of inflation. This agreement sanctioned the beginnings of an effective decoupling between the increase in wages and the rhythm of inflation. Inflationary tensions are nevertheless ongoing and will be reabsorbed only over several years.

The balance of payments on the current account reflects the deterioration of the economic situation in 1991 and the successive reorientation of economic trade flows (exports of goods, transport and tourism). As from the following year a reconstitution of the central reserves occurred. The weak surplus of 1993 reflected the trade deficit. The balance of payments on the current account thus depends directly on the competitiveness of the service sector. The satisfactory level of the central reserves arises from the low volume of industrial imports. However, this could be called into question either by a loss of relative competitiveness by the Slovenian economy or an increase in imports connected with the modernization of the Slovenian economy.

With debt servicing accounting for less than 8% of current payments (1993) and a debt

ratio on exports of less than 38%, Slovenia is in a more favourable situation than the majority of Central and Eastern European countries.

### 1.5 New economic framework

During the last two years Slovenia has adopted the principal laws (modelled on those of its western neighbours) allowing the economy to be liberalized and a market economy to flourish.

Nevertheless, a law on foreign investment is still in preparation; its adoption is foreseen for 1995. In the same way, the new "Customs Law" and the Combined Nomenclature is in stage of preparation. The new tariff system will align Slovenian external protection on that of the EU. A substantial legislative effort has already been made to adopt a tax system similar to that of EU members. However, value-added tax (VAT) will not be introduced before 1996.

A law on standardization was approved, to allow the adoption of Community standards before the end of 1995, and a coordination office for the integration of the "acquis communautaire" into Slovenian legislation should be operational at the end of 1995.

After a relatively slow start, the modernization programmes of the banking and privatization sectors is advancing apace. In October 1992 the largest companies (including 98 in a loss-making situation) passed under the control of the Agency for Restructuring and Privatization and the Development Fund. By the end of January 1995, 44 of these had been privatized and 15 had been closed down. The others are being restructured, to enable them to be privatized in 1995.

The other companies of the former "socially owned" sector, approximately 2,200 and mainly small and medium enterprises, have all presented their privatization plan to the Agency for Restructuring and the major portion of them should be able to be privatized by the end of 1995.

Thirty-four banks are currently present in Slovenia. The Ljubljanska Banka dominates the landscape, with almost 70% of the market. Far behind is the SKB Banka, a private bank which aims to occupy 15% of the banking market. The remainder of the sector is occupied by small provincial banks. It should be noted that four foreign banks (three Austrian and one French) are already installed in Slovenia.

### 1.6 Trade

Slovenia pursues a very active commercial policy, which led it to conclude free trade agreements with the countries of the Visegrad group<sup>5</sup> and finally to become a member of CEFTA, as well as to start negotiations with Romania and the Baltic States. Slovenia became a member of GATT in September 1994 and was the first of the new

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<sup>5</sup> *The agreement with Poland is still in negotiation.*

members of GATT to join the WTO as a founder member.

Trade has been entirely reoriented in less than 4 years, the EU replacing the ex-Yugoslav Republics as most important trading partner. The latter now occupies only a secondary place (15% of total trade). The European Union (EUR 15) accounts for 65% of Slovenian exports and provides the same percentage of imports to Slovenia (65% in 1994). The business sector generally expects only a weak development of trade with the CEEC and ex-Soviet Union, but thinks that a stabilization of the political situation in the Balkans would allow a redirection of trade towards that region.

The commodity structure of imports is dominated by investment goods (machinery and transport equipment), by intermediate goods and raw materials. Imports (consumer, intermediate and investment goods) are increasing rapidly and the trade balance for goods alone has been negative since 1993.

The trade surplus, although remaining clearly positive in 1994, is closely dependent on the services sector.

Exports tend to account for more than 50% of the GDP, confirming the degree of openness of the Slovenian economy.

**Table 3 : Direction of total Slovenian trade (% of Total)**

|                    | Exports |      |      |           | Imports |      |      |           |
|--------------------|---------|------|------|-----------|---------|------|------|-----------|
|                    | 1992    | 1993 | 1994 | 1994/1992 | 1992    | 1993 | 1994 | 1994/1992 |
| <b>TOTAL</b>       | 100     | 100  | 100  | 0,0       | 100     | 100  | 100  | 0,0       |
| <b>EU</b>          | 54,9    | 57,4 | 59,3 | 4,4       | 50,1    | 55,7 | 57,1 | 7,0       |
| <b>-GERMANY</b>    | 27,0    | 29,5 | 30,3 | 3,3       | 22,7    | 25,0 | 23,8 | 1,1       |
| <b>-ITALY</b>      | 13,2    | 12,4 | 13,5 | 0,4       | 13,7    | 16,2 | 17,3 | 3,6       |
| <b>-FRANCE</b>     | 9,2     | 8,7  | 8,6  | -0,6      | 8,0     | 8,0  | 8,3  | 0,3       |
| <b>EFTA</b>        | 6,9     | 7,0  | 7,5  | 0,6       | 11,2    | 12,0 | 14,8 | 3,5       |
| <b>-AUSTRIA</b>    | 5,1     | 5,0  | 5,5  | 0,4       | 8,1     | 8,5  | 10,4 | 2,2       |
| <b>Other OECD</b>  | 4,3     | 5,3  | 4,9  | 0,6       | 4,9     | 5,7  | 5,4  | 0,4       |
| <b>Former YUGO</b> | 22,6    | 15,8 | 15,1 | -7,5      | 19,8    | 10,7 | 8,0  | -11,9     |
| <b>Former USSR</b> | 3,4     | 4,9  | 4,6  | 1,3       | 4,1     | 3,3  | 2,3  | -1,8      |
| <b>CEECs</b>       | 3,9     | 5,4  | 5,0  | 1,1       | 5,3     | 5,7  | 7,0  | 1,7       |
| <b>Others</b>      | 4,0     | 4,2  | 3,5  | -0,6      | 4,5     | 6,9  | 5,5  | 1,1       |

## 2 Agriculture

### 2.1 *Agriculture in the Slovenian economy*

Agriculture, in the strict meaning of the term, occupies a limited place in the Slovenian economy (4.9% of GDP and 10.7% of employment in 1993) and its relative weight is decreasing. The balance of agrifood trade is traditionally negative. These few macro-economic data do not, however, properly illustrate the significant role played by the whole agrifood sphere of rural Slovenia (agriculture, forestry, food production, rural tourism and other services) in the economy and in the structure of Slovenian society.

**Table 4 : Importance of agriculture**

|                             |          | 1990  | 1991  | 1992  | 1993 | 1994(e) | 1995(f) | 1996(f) |
|-----------------------------|----------|-------|-------|-------|------|---------|---------|---------|
| <b>GDP</b>                  | % change | -4,7  | -8,1  | -5,4  | 1,3  | 5,0     | 5,0     | 5,5     |
| <b>agric GDP</b>            | % change | -1,6  | -3,4  | -5,9  | -3,7 | 1,6     | 2,5     | 3,0     |
| <b>industry GDP</b>         | % change | -10,2 | -11,3 | -11,6 | -2,6 | 6,4     | 5,1     | 5,6     |
| <b>services GDP</b>         | % change | -0,4  | -6,3  | -1,2  | 4,0  | 4,2     | 5,1     | 5,9     |
| <b>share agric/GDP</b>      | %        | 5,2   | 5,4   | 5,3   | 4,9  | 4,9     | 4,7     | 4,6     |
| <b>share ag/employ.</b>     | %        |       |       |       | 10,7 |         |         |         |
| <b>share agri-food/exp.</b> | %        |       |       | 6,4   | 4,6  | 4,7     |         |         |
| <b>share agri-food/imp.</b> | %        |       |       | 8,5   | 8,1  | 8,2     |         |         |

Source : Slovenian Institute of Macroeconomic analysis and Development

The Slovenian countryside seems to have succeeded in buffering the social tensions created by the economic crisis. Less than a quarter of the population resides in the four towns of more than 30 000 inhabitants, and more than half the population resides in rural communes.

Although the agricultural system seems to be changing slowly, Slovenia is actively preparing for the progressive integration of its agriculture and its food industry into a market economy. These macro-economic indicators measure both its degree of harmonization with the European Union and the distance between the two.

### 2.2 *Land use*

Woods and forests cover more than half the Slovenian territory, with 1,020,000 hectares. Of the 864 000 hectares of agricultural land, more than 70% is located in mountain and hill areas, with almost two-thirds being permanent pasture and less than 30% arable land. These data illustrate the difficult conditions which Slovenian agriculture has to contend with.

**Table 5-1 : Land use**

|                   |               | 000 HA      | % tot. area |        |       |
|-------------------|---------------|-------------|-------------|--------|-------|
| <b>total area</b> |               | <b>2025</b> | <b>100</b>  |        |       |
| <i>of which</i>   | inland water  | 5           | 0,2         |        |       |
|                   | forest        | 1020        | 50,4        |        |       |
|                   | util ag. area | 864         | 42,7        | 000 HA | % uaa |
| <i>of which</i>   | arable land   |             |             | 245    | 28,4  |
|                   | perm. crops   |             |             | 59     | 6,8   |
|                   | perm. pasture |             |             | 558    | 64,6  |

The use of arable land has been remarkably stable for more than ten years, being almost exclusively occupied by cereals (50%), fodder (30%) and potatoes (12%). The other arable crops are of lesser importance in land use terms.

**Table 5-2 : Allocation of Arable Area**

|                     |           | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---------------------|-----------|------|------|------|------|------|------|
| <b>Annual crops</b> | 000 ha    | 247  | 247  | 246  | 245  | 245  | 245  |
| <b>cereals</b>      | 000 ha    | 123  | 123  | 120  | 118  | 120  | 112  |
|                     | % arable  | 50,5 | 50,9 | 50,0 | 49,3 | 50,2 | 45,7 |
| - wheat             | 000 ha    | 43   | 43   | 42   | 43   | 44   | 42   |
|                     | % cereals | 34,3 | 34,6 | 34,3 | 35,2 | 35,5 | 38,4 |
| - maize             | 000 ha    | 65   | 66   | 64   | 62   | 62   | 51   |
|                     | % cereals | 52,5 | 52,2 | 52,2 | 51,1 | 50,3 | 53,6 |
| - barley            | 000 ha    | 7    | 7    | 8    | 8    | 9    | 8    |
|                     | % cereals | 5,6  | 6,0  | 6,4  | 6,7  | 7,4  | 7,0  |
|                     | % arable  | 1,0  | 1,0  | 1,0  | 1,0  | 1,0  | 0,8  |
| <b>fodder</b>       | 000 ha    | 72   | 72   | 71   | 71   | 73   | 73   |
|                     | % arable  | 29,1 | 29,1 | 28,9 | 29,0 | 29,7 | 29,8 |
| <b>potatoes</b>     | 000 ha    | 30   | 30   | 31   | 30   | 29   | 23   |
|                     | % arable  | 12,3 | 12,2 | 12,5 | 12,4 | 11,9 | 9,4  |
| <b>sugarbeet</b>    | 000 ha    | 4    | 4    | 4    | 3    | 3    | 5    |
|                     | % arable  | 1,4  | 1,5  | 1,5  | 1,3  | 1,4  | 2,0  |
| <b>oilseeds</b>     | 000 ha    | 2    | 3    | 2    | 2    | 2    | 3    |
|                     | % arable  | 0,9  | 1,1  | 0,9  | 0,9  | 0,8  | 1,1  |
| <b>dry pulses</b>   | 000 ha    | 8    | 7    | 7    | 7    | 5    | 3    |
|                     | % arable  | 3,2  | 2,8  | 2,8  | 2,9  | 2,0  | 1,2  |

| <b>Permanent crops</b> |        |    |    |    |    |    |    |
|------------------------|--------|----|----|----|----|----|----|
| <b>hops</b>            | 000 ha | 2  | 2  | 2  | 2  | 2  | 2  |
| <b>orchards</b>        | 000 ha | 36 | 36 | 36 | 35 | 35 | 35 |
| <b>vineyards</b>       | 000 ha | 20 | 20 | 20 | 20 | 21 | 22 |

### 2.3 Structure of agricultural output

While total agricultural output remained relatively stable between 1989 and 1993, there was a marked shift from the animal to the crop sector. Over the same period Gross Agricultural Output (GAO) was also stable, except for 1992 when it was affected by drought.

**Table 6 : Structure of agricultural output**

|                                  |            | 1989  | 1990  | 1991  | 1992  | 1993   |
|----------------------------------|------------|-------|-------|-------|-------|--------|
| GAO                              | vol. index | 99,3  | 103,5 | 100,4 | 89,9  | 97,4   |
| crops                            | vol. index | 108,1 | 106,6 | 101,8 | 79,0  | 100,3  |
| livestock                        | vol. index | 96,3  | 98,4  | 101,5 | 92,8  | 93,6   |
| <i>share crops/GAO</i>           | %          | 37,8  | 47,1  | 49,5  | 45,6  | 52,0   |
| <i>share livest./GAO</i>         | %          | 62,2  | 52,9  | 50,5  | 54,4  | 48,0   |
| <i>ag. tools prices</i>          | 1989 = 100 | 100   | 657   | 1,864 | 7,641 | 19,308 |
| <i>chemicals for agr. prices</i> | 1989 = 100 | 100   | 591   | 2,267 | 9,374 | 19,527 |
| <i>ag. producer prices</i>       | 1989 = 100 | 100   | 799   | 1,737 | 5,006 | 7,148  |
| <i>retail food price</i>         | 1989 = 100 | 100   | 517   | 1,103 | 3,370 | 4,237  |
| <i>agric. production index</i>   | 1986 = 100 | 95.7  | 99.7  | 99.6  | 94.1  | 90.8   |

Since 1989, input prices have increased much faster than producer prices. This cost-price squeeze will continue in future, mainly due to the increase of input prices. Moreover, the possibility for producer prices to increase is limited, because the upward trend of retail food prices has been - and is - much more gradual than that of producer prices.

### 2.4 Agricultural production and consumption

#### 2.41 Arable crops.

##### *Cereals*

The main cereals grown in Slovenia are wheat of bread-making quality, corn for animal feed and, to a lesser extent, barley.

**Table 7-1 : Cereals supply balance**

| Cereals              | 1981-85 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 (e) |
|----------------------|---------|------|------|------|------|------|----------|
| area (000ha)         | 127     | 125  | 123  | 120  | 118  | 120  | 111*     |
| yield (t/ha)         | 3.7     | 4.3  | 4.7  | 4.7  | 3.6  | 3.8  | 5.1      |
| production (000t)    | 475     | 527  | 578  | 558  | 426  | 455  | 564      |
| consumption          |         | NA   | NA   | NA   | NA   | 952  | 1041     |
| o.w. feed use        |         | 221  | 237  | 234  | 206  | 303  | 325      |
| exports              |         | NA   | NA   | NA   | NA   | 1    | 1        |
| imports              |         | NA   | NA   | NA   | NA   | 498  | 479      |
| self-sufficiency (%) |         |      |      |      |      | 48   | 54       |

\* The difference of area between 1993 and 1994 is due to a change in methodology

Yields, which increased progressively from 1970 to 1985, increased again by 15% between 1985 and 1990. After 1990, the combined effect of the reorganisation of agriculture and the repeated droughts of 1992 and 1993 led to a standstill in yield progression. Increased yields in 1994, however, show that the upward trend was only briefly interrupted, now averaging 0.1 t/ha/year. On the external side, it should be noted that imports are at a level comparable with production.

**Table 7-2 : Wheat supply balance**

| Wheat                | 1981-85 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 (e) |
|----------------------|---------|------|------|------|------|------|----------|
| area (000ha)         | 46      | 43   | 43   | 42   | 43   | 44   | 42       |
| yield (t/ha)         | 3.4     | 3.9  | 4.6  | 4.3  | 4.2  | 3.8  | 4.3      |
| production* (000t)   | 155     | 167  | 200  | 181  | 178  | 168  | 182      |
| consumption          |         | NA   | NA   | NA   | NA   | 330  | 307      |
| o.w. feed use**      |         | 25   | 30   | 27   | 27   | 49   | 50       |
| exports              |         | NA   | NA   | NA   | NA   | 0    | 0        |
| imports              |         | NA   | NA   | NA   | NA   | 162  | 140      |
| self-sufficiency (%) |         |      |      |      |      | 51   | 59       |

\* Production : almost exclusively for human consumption

\*\* Animal feed use : mainly imported wheat

**Table 7-3 : Maize supply balance**

| Maize                | 1981-85 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 (e) |
|----------------------|---------|------|------|------|------|------|----------|
| area (000ha)         | 61      | 65   | 66   | 64   | 62   | 62   | 51       |
| yield (t/ha)         | 4.5     | 5.0  | 5.1  | 5.2  | 3.4  | 4.0  | 6.3      |
| production (000t)    | 278     | 324  | 338  | 336  | 207  | 249  | 325      |
| consumption          |         | NA   | NA   | NA   | NA   | 453  | 527      |
| exports              |         | NA   | NA   | NA   | NA   | 1    | 0        |
| imports              |         | NA   | NA   | NA   | NA   | 205  | 203      |
| self-sufficiency (%) |         |      |      |      |      | 55   | 62       |

### *Fodder*

The following table gives a summary presentation of the fodder area (72,000 ha) and its location. With the intensification of dairy production systems the production of maize silage is increasing (+5,000 ha between 1989 and 1992).

**Table 7-4 : Structure of fodder crops in Slovenia (1993)**

| Crops                  | Harvested area | %   | Location in Slovenia |
|------------------------|----------------|-----|----------------------|
| Grass and clover       | 26,258         | 36% | Flat areas, hills    |
| Maize silage           | 36,358         | 50% | Flat areas, hills    |
| Fodder beet and carrot | 6,296          | 9%  | North-East flat      |
| Others                 | 3,792          | 5%  | -                    |
| TOTAL                  | 72,704         | 100 |                      |

## Potatoes

The relative importance of this crop is due to the special nature of Slovenian farms (which produce to a very large extent for own-consumption and/or for direct sales on local markets) and to the possible dual use of potatoes for animal feed and human consumption. Much easier to produce, collect and store (without any technical means) than feed grains, they are directly usable for feeding pigs on small holdings. The sharp decrease of potato area (-23% between 1992 and 1994) could be explained by:

- the fall in potato prices in 1992
- the fall in feed-grain prices in Slovenia due to the liberalisation of imports
- the on-going specialisation of Slovenian holdings.

But this did not lead to a fall in production. As with cereals, potato yields are on the increase again after the difficulties of 1992-1993, mentioned above.

**Table 7-5 : Potato supply balance**

| Potatoes             | 1981-85 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------|---------|------|------|------|------|------|------|
| area (000ha)         | 33      | 30   | 30   | 31   | 30   | 29   | 23   |
| yield (t/ha)         | 13,9    | 12,0 | 13,7 | 13,8 | 12,1 | 12,6 | 17,5 |
| production (000t)    | 461     | 365  | 412  | 425  | 368  | 367  | 402  |
| consumption          |         | NA   | NA   | NA   | NA   | 378  | 398  |
| o.w. feed use        |         | 73   | 83   | 85   | 74   | 108  | 130  |
| exports              |         | NA   | NA   | NA   | NA   | 1    | 13   |
| imports              |         | NA   | NA   | NA   | NA   | 12   | 9    |
| self-sufficiency (%) |         |      |      |      |      | 97   | 101  |

## Sugar beet and sugar

The area under sugar beet remained relatively stable, despite a cyclical change between 1989 and 1993. The increase in yield was significant between 1985 and 1990 (+29%). Yields peaked during the years '89, '90 and '91 and, though once more on the increase, have not yet reached this level again.

**Table 7-6 : Sugar supply balance**

| Sugar beet          | 1981-85 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---------------------|---------|------|------|------|------|------|------|
| area (000ha)        | 5       | 4    | 4    | 4    | 3    | 3    | 5    |
| yield (t/ha)        | 37,7    | 46,5 | 45,5 | 45,1 | 30,6 | 37,9 | 44,4 |
| production (000t)   | 170     | 164  | 167  | 166  | 97   | 133  | 222  |
| <b>Sugar</b>        |         |      |      |      |      |      |      |
| production (000t)   |         | 42.0 | 55.6 | 49.6 | 37.0 | 41.4 | 44.5 |
| consumption         |         |      |      |      | 75.2 | 72.0 | 72.0 |
| exports             |         |      |      |      | 3.9  | 2.8  | 0.2  |
| imports             |         |      |      |      | 42.1 | 33.4 | 27.7 |
| kg/per capita       |         |      |      |      | 37.7 | 36.1 | 36.1 |
| selfsufficiency (%) |         |      |      |      | 49   | 53   | 62   |

## 2.42 Permanent crops and horticulture

The area under permanent crops is mainly represented by hops, grapes for wine and fruit production. These crops are marginal in terms of utilized area but not in economic terms: hops and wine have an important place in agri-food exports and, along with fruit production, are located on modernised holdings.

### *Hops*

Traditionally produced for export, hop production has been organised since 1945 by the Hop Growers Co-operative Society from the Celje region, where production is located. This specialised co-operative was set up for the purpose of buying-in the hops produced, and their sale on domestic and foreign markets. During the last ten years, the quality of Slovenian hops has much improved. Exports have always been very important and represent nine-tenths of production. The USA was the biggest importer of Slovenian hops from 1948 to 1963 (1/3 of annual exports) and after 1963 West Germany took its place.

**Table 8-1 : Hops supply balance**

| Hops              | 1981-85 | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995(f) |
|-------------------|---------|-------|-------|-------|-------|-------|-------|---------|
| area (000ha)      | 2.388   | 2.489 | 2.485 | 2.456 | 2.398 | 2.450 | 2.420 | 2.400   |
| yield (t/ha)      | 1.66    | 1.31  | 1.41  | 1.53  | 1.41  | 1.43  | 1.44  |         |
| production (000t) | 3.959   | 3.256 | 3.510 | 3.771 | 3.395 | 3.510 | 3.500 | 3.500   |
| consumption       | 1.021   |       |       |       | 0.400 | 0.300 | 0.300 | 0.300   |
| exports           | 2906    |       |       |       | 2.995 | 3.210 | 3.200 | 3.200   |
| imports           | -       | -     | -     | -     | -     | -     | -     | -       |

### *Wine*

Wine production constitutes a particularly market-oriented sector, but benefits from structural support. Production (red and white wine), focused on quality, saw a continuous increase between 1989 and 1993: +35% for yields and +39% for production. Slovenian wine has excellent outlets both on the internal market and for exports. Until 1994, two-thirds of exports were not directed to the EU. Wine holdings benefit from the financing capacities of the family farmers, which enable them to develop.

**Table 8-2 : Wine supply balance**

| <b>Vineyards</b>    | <b>1981-85</b> | <b>1989</b> | <b>1990</b> | <b>1991</b> | <b>1992</b> | <b>1993</b> | <b>1994</b> |
|---------------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| area (000ha)        | 19             | 20          | 20          | 20          | 20          | 21          | 22          |
| yield (t/ha)        | 5.4            | 4.6         | 5.6         | 5.4         | 6.1         | 6.2         | 6.0         |
| production (000t)   | 104            | 92          | 112         | 108         | 124         | 128         | 131         |
| grapes for wine     | 71             | 74          | 76          | 74          | 83          | 93          | 95          |
| <b>Wine</b>         |                |             |             |             |             |             |             |
| production (hl) (*) | 709            | 629         | 769         | 749         | 832         | 877         | 893         |
| yield (hl/ha)       | 36,6           | 31,8        | 38,3        | 37,2        | 40.6        | 42.6        | 40.6        |
| Stock variation     |                |             |             |             |             | 194         | 47          |
| Utilisation         |                |             |             |             |             | 810         | 820         |
| Market prod. (hl)   | 485            | 506         | 521         | 516         | 554         | 635         | 685         |
| exports             |                |             |             |             |             | 150         | 139         |
| imports             |                |             |             |             |             | 278         | 123         |
| l/capita            |                |             |             |             |             | 40.6        | 41.1        |
| selfsufficiency     |                |             |             |             |             | 108         | 109         |

(\*) production = market production + "farm made & consumed" production

### *Fruit and vegetables*

Fruit and vegetable production is relatively marginal, in terms of both area and quantity produced. However, a distinction has to be made between fruit and vegetables. According to the Slovenian Statistical Office, the area planted to vegetables - mostly cabbages, carrots, tomatoes, onions, garlic - represents around 40,000 ha, mainly in small private gardens or on plots belonging to small farmers.

In contrast, the production of fruit - mainly apples, pears and to a lesser extent peaches - is market oriented, located on modernised holdings or holdings in which investments are being made. Production tends to cover consumption and the surplus is exported. The fruit sector has developed and become specialized in the same way as wine production, at least for apples and pears, which are the most important crops.

**Table 8-3 : Apple supply balance**

| <b>Apples</b>     | <b>1981-85</b> | <b>1989</b> | <b>1990</b> | <b>1991</b> | <b>1992</b> | <b>1993</b> | <b>1994</b> |
|-------------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| production (000t) | na             | 31          | 36          | 44          | 51          | 52          | 66          |
| consumption       |                |             |             |             |             | 39          | 46          |
| exports           |                |             |             |             |             | 13          | 17          |
| imports           |                |             |             |             |             | 6           | 5           |
| losses            |                |             |             |             |             | 5           | 9           |
| kg/capita         |                |             |             |             |             | 19.7        | 22.9        |

**Table 8-4 : Pear supply balance**

| Pears             |    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-------------------|----|------|------|------|------|------|------|
| production (000t) | NA | na   | na   | 6    | 9    | 5    | 9    |
| consumption       |    |      |      |      |      | 4    | 6    |
| exports           |    |      |      |      |      | 1    | 3    |
| imports           |    |      |      |      |      | 1    | 2    |
| losses            |    |      |      |      |      | 1    | 1    |
| kg/capita         |    |      |      |      |      | 2.2  | 3.0  |

**Table 8-5 : Peach supply balance**

| Peaches           |   | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-------------------|---|------|------|------|------|------|------|
| production (000t) | 6 | 7    | 5    | 7    | 9    | 10   | 11   |
| consumption       |   |      |      |      |      | 14   | 17   |
| exports           |   |      |      |      |      | 0    | 0    |
| imports           |   |      |      |      |      | 5    | 7    |
| losses            |   |      |      |      |      | 1    | 1    |
| kg/capita         |   |      |      |      |      | 7.1  | 8.6  |

### 2.43 *Meadows and pasture*

Meadows and pastures are of great quantitative importance. 310.000 ha of permanent meadows and 248.000 ha of pastures ensure stable fodder production, and occupy a central place in the production system of the small family holding, where mixed livestock-farming predominates. An increasing transfer of meadows and pastures to forest can be observed in the alpine region. This loss is only marginally compensated by a more intensive use of other fodder areas, as the clearing of small wooded plots is not authorized.

**Table 9 : Meadows and pastures**

|                       |      | Harvested meadows | Pastures and others meadows | TOTAL     |
|-----------------------|------|-------------------|-----------------------------|-----------|
| <b>Area</b>           | 1991 | 311,543           | 247,763                     | 559,306   |
|                       | 1993 | 309,002           | 248,972                     | 557,974   |
| <b>Hay Production</b> | 1991 | 1,282,964         |                             | 1,598,784 |
|                       | 1993 | 906,569           |                             | 1,121,252 |

### 2.44 *Livestock*

In contrast with the crop sector, where areas are remarkably stable, the livestock sector has experienced a considerable decline in animal numbers, an evolution (except for pigs) which is still in progress.

**Table 10-1 Evolution of livestock**

| Livestock (000) | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  |
|-----------------|-------|-------|-------|-------|-------|-------|
| cattle          | 546   | 546   | 533   | 484   | 504   | 478   |
| o.w. dairy cows | 243   | 255   | 231   | 220   | 211   | 210   |
| pigs            | 576   | 558   | 588   | 529   | 602   | 591   |
| o.w. sows       | 57    | 58    | 58    | 52    | 56    | 55    |
| horses          | 12    | 11    | 10    | 11    | 9     | 9     |
| sheep           | 24    | 23    | 20    | 28    | 21    | 20    |
| o.w. ewes       |       | 14    | 12    | 13    | 13    | 12    |
| poultry         | 13279 | 13521 | 12766 | 13134 | 11424 | 10592 |
| o.w. lay. hens  | 2429  | 2340  | 2440  | 2323  | 1858  | 1800  |

Red meat producing livestock (cattle) and the poultry sector have both seen big reductions, a result of the collapse of traditional exports to former Yugoslavia. The pig sector shows an opposite trend: the herd is increasing.

### *Milk and milk products*

Between 1989 and 1993, dairy livestock and production decreased (respectively by 13% and 8%), a combined effect of the lost markets of former Yugoslavia and the droughts of 1992 and 1993. This contraction was accompanied by a proportional fall in sales to dairies, which account for only 60% of net milk production. This figure reflects the importance of local sales and of own-consumption on the small individual holding. Milk yield per cow is increasing rapidly and deliveries to the dairies have grown substantially since the beginning of 1994, which suggests that this year marks the reversal of the downward trend. According to the regions, deliveries have increased by between 8% and 12%. Both bacteriological quality and fat protein content show remarkable improvement to levels close to the EU average. This is the result of the new development of specialisation in the dairy sector, a process supported by the extension service. Milk production is traditionally a surplus sector.

**Table 10-2: Milk supply balance**

|            |                         | 1989 | 1990 | 1991 | 1992 | 1993 | 1994(e) |
|------------|-------------------------|------|------|------|------|------|---------|
| Dairy cows | (000)                   | 243  | 255  | 231  | 220  | 211  | 210     |
| Yield      | kg/cow                  | 2475 | 2340 | 2789 | 2640 | 2610 | 2676    |
| Fluid milk | Net production* (000 t) | 601  | 597  | 643  | 581  | 550  | 562     |
|            | deliveries              |      | 355  |      | 354  | 331  | 365     |
|            | consumption             |      |      |      |      | 456  | 486     |
|            | exports                 |      |      |      |      | 110  | 90      |
|            | imports                 |      |      |      |      | 17   | 14      |
|            | kg/capita               |      |      |      |      | 229  | 244     |
|            | selfsufficiency (%)     |      |      |      |      | 120  | 116     |

\* Excluding non human consumption (for calves)

The 1991 census showed that 71.000 holdings (45%) had dairy cows, but fewer than 12.500 had a total production higher than 10 000 litres a year. Milk production is not a sector where the big holdings of the former "socially owned" sector occupy an important place (3% of dairy livestock and 8% of production), although here yields are definitely higher than on the individual holdings.

### *Beef*

Beef and veal production is primarily on family holdings, where more than 90% of the herd are located, and in general linked to milk production. Production constraints - soil and weather conditions, the holding's structure and potential profitability - strongly influence the choice of type of farming by the small individual holding, and this especially applies to beef production. The cattle population decreased by more than 12% between 1985 and 1993, and this trend accelerated in 1994. The greater attractiveness of pig production has led to an on-going process of decapitalisation of beef herds on some family holdings.

**Table 10-3 : Beef supply balance**

| <b>Beef/veal</b>    | <b>1989</b> | <b>1990</b> | <b>1991</b> | <b>1992</b> | <b>1993</b> | <b>1994</b> |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cattle (x 000)      | 546         | 546         | 533         | 484         | 504         | 478         |
| slaughters (x 000)  | 181         | 214         | 200         | 140         | 149         | 139         |
| average weight (kg) | 275         | 266         | 254         | 272         | 255         | 252         |
| production (000t)   | 50          | 57          | 51          | 38          | 38          | 35          |
| consumption         |             |             |             |             | 40          | 42          |
| exports             |             |             |             |             | 5           | 4           |
| imports             |             |             |             |             | 6           | 11          |
| kg/capita           |             |             |             |             | 20.3        | 21.4        |

### *Pigmeat*

The policy of the Ministry of Agriculture tends to encourage pig production on family holdings. In fact, pigmeat is important on both sides: production and consumption. This led to an increase in the pig population and of pigmeat production between 1992 and 1994. The growth of production was also due to the availability of cheaper animal feed in Slovenia and to the introduction of import levies on pigmeat in 1993, which led to price increases on the domestic market after the sharp fall in 1992. But the reprocessing of manure has already appeared as the factor hampering the development of pigmeat production. Most concerned are the relatively intensive family farms, whereas the holdings of the former "socially owned" sector have tried to solve this problem in a more or less convincing way.

**Table 10-4 : Pig supply balance**

|                     | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---------------------|------|------|------|------|------|------|
| Pig numbers (x 000) | 576  | 554  | 588  | 529  | 602  | 591  |
| slaughters (000t)   | 811  | 785  | 731  | 501  | 545  | 558  |
| average weight (kg) | 76   | 79   | 79   | 81   | 86   | 87   |
| production (x 000)  | 62   | 62   | 58   | 41   | 47   | 48   |
| consumption         | NA   | NA   | NA   | NA   | 71   | 73   |
| exports             | NA   | NA   | NA   | NA   | 0    | 0    |
| imports             | NA   | NA   | NA   | NA   | 24   | 25   |
| kg/capita           |      |      |      |      | 36.4 | 37.6 |

*Pig production illustrates well the structural duality of Slovenian agriculture. The 8 former "socially owned" holdings are responsible for around 45% of production and can produce up to 100.000 pigs a year. Small holdings fatten about fifteen pigs and, exceptionally, a hundred. Two-thirds of this family production supplies subsistence farming or direct sales, only one-third passing through the slaughterhouses to meet the traditional distribution chains.*

*While the Ministry tends to encourage pig production on family holdings, receiving public finance at subsidized rates is conditional on there being a minimum fodder surface for feeding the pigs and on the existence of a manure area.*

### *Poultry*

The drop in poultry numbers and in laying hens (respectively -20% and -25%) has had a direct impact on production : -37% for poultry meat.

This is mainly attributable to the collapse of the former Yugoslav markets.

**Table 10-5 : Poultry supply balance**

| Poultry             | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---------------------|------|------|------|------|------|------|
| slaughters (Mio)    | 56   | 55   | 53   | 40   | 32   | 28   |
| average weight (kg) | 1.3  | 1.3  | 1.4  | 1.4  | 1.5  | 1.6  |
| production (000t)   | 73   | 74   | 72   | 55   | 48   | 46   |
| consumption         |      |      |      |      | 30   | 33   |
| exports             |      |      |      |      | 20   | 14   |
| imports             |      |      |      |      | 2    | 1    |
| kg/capita           |      |      |      |      | 14.9 | 16.6 |
| hen eggs (000t)     | 24   | 24   | 27   | 26   | 25   | 26   |

*Poultry production appears to be even more concentrated than pig production: 90% of poultry meat and more than 60% of eggs come from companies in the "socially owned" sector. Production is mainly carried out by private farmers with an integrated relationship to that sector. Poultry represents an important source of income for the small farmer. Egg production is orientated towards export, the principal market being Austria.*

## 2.5 Wood and Forests

Forests cover more than half of Slovenia, i.e. 1,020 million hectares. Ownership is both public (38%) - state and local authorities - and private (68%). Small holdings prevail; there are some 290,000 private forest owners of whom around 60% are farmers. The average size of woodland property in private ownership is 2.7 hectare, with 85% being smaller than 5 ha and 50% less than 1 ha.

The steady growth in tree stock, as well as the annual increment in timber production, is due to a forest economy based on sustainable management (wood-clearance is forbidden) under public control.

The effect of the woodland restitution process will be a considerable increase in the number of private owners. Forests are environmentally important and key to the Slovenian eco-system. The wood industry (sawnwood, woodpulp and wood-based panel) depends on the forest sector.

During the eighties, timber consumption in Slovenia was 3.5 to 3.8 mio m<sup>3</sup> per year, with a self-sufficiency of 70%. The transition to a market economy and a new state (loss of former Yugoslav markets) has considerably affected the forest sector and the timber industry: the number of workers in forestry has declined and the sawmill industry is being restructured.

**Table 11 : Estimated average annual cutting for the period 1991-2000** 1,000m<sup>3</sup>

|                | Total | Coniferous | Broad-leaved |
|----------------|-------|------------|--------------|
| Total          | 3,018 | 1,732      | 1,286        |
| State forest   | 1,323 | 822        | 501          |
| Private forest | 1,695 | 910        | 785          |

In future, forest resources will continue to be managed in a sustainable way and be the main supplier of a restructured timber industry.

## 2.6 Environment and rural areas

The relationship between environment and rural areas is seen as a key issue for the future development of Slovenia.

The main environmental problems deriving from agriculture are confined to the areas producing the pollution. In those areas intensive agriculture is leading to ground water and surface water contamination by pesticides and fertilizers. This specifically applies to large pig holdings and the Celje region, where hops are grown.

Various typical and fragile eco-systems (e.g. karstic region, alpine valleys...) have in general been preserved from deterioration.

The Ministry of Agriculture and Forestry is promoting environmentally-friendly agriculture, for example through their program to encourage smaller-scale pig production. Nonetheless, environmental pressures on rural areas exist, mainly due to:

- pollution from industrial sites
- waste (mainly urban) treatment problems
- poor river water quality which will lead, in the long run, to a deterioration of ground and drinking water.

Surprisingly, Slovenia has one of the highest per capita emission rates in Europe of the key air pollutants, due to the presence of three lignite-fuelled power stations, to the use of lignite for domestic heating, and to badly controlled industrial sources. This air pollution is also causing damage to forests.

An Environmental Protection Act, covering all the aspects of the environment concerned, was adopted in 1993. Now there is an urgent need for the Act to be followed by an Action Plan, defining a programme of activities to ensure that environmental improvement and regulation proceed in an optimal manner.

### 3 Farm and agri-industry structure

In the immediate post-war period, the former Yugoslavia followed the Soviet-type command economy. This manifested in arrangements being made for a planned official socialist economy and the collectivization of agriculture.

However, the expulsion of Yugoslavia from the Cominform in 1948 led to an institutional reorientation from 1950. Construction began of a new model of decentralized socialist economy, based on "social property and self-management". In 1953, the collectivization of agriculture was officially given up.

Nevertheless, since 1948, the place of agriculture in the Slovenian economy and society has continued to decline. Its share in employment passed from 54% in 1948 to 10.7% in 1993.

*In Slovenia, farms belong either to the private sector - the family farms - or to the former "socially owned" sector - the "socially owned" holdings.  
In the upstream and downstream sectors there are co-operatives which are similar to Western European co-operatives and a social sector made up of fifty food-processing companies.*

#### 3.1 Farm structure

A particular feature of Slovenia is the dualistic land structure, where approximately 90% of the UAA is occupied by small private agricultural holdings and 8% of the UAA is exploited by big "socially owned" farms.

This is the result of the Land Property Law of May 1953, which limited the size of private farms to 10 hectares for arable land (or 15 hectares in other cases). The "socially owned" holdings were especially focused on the main arable crops, hops and intensive animal production (pigs and poultry), whereas private holdings were mostly involved in cattle and dairy production.

**Table 12-1 : Breakdown of private agricultural holdings by size class (UAA)**

|              | 1960           |      | 1969           |      | 1981           |      | 1991           |      |
|--------------|----------------|------|----------------|------|----------------|------|----------------|------|
|              | No             | %    | No             | %    | No             | %    | No             | %    |
| < 1 ha       | 40,657         | 20.9 | 37,903         | 21   | 62,467         | 32.5 | 44,428         | 28.4 |
| 1 - 5 ha     | 73,417         | 37.6 | 70,017         | 38.8 | 65,395         | 34.1 | 56,327         | 36   |
| 5 - 10 ha    | 39,130         | 20.1 | 36,306         | 20.2 | 32,746         | 17   | 28,112         | 17.9 |
| > 10 ha      | 41,651         | 21.4 | 36,002         | 20   | 31,482         | 16.4 | 27,682         | 17.7 |
| <b>Total</b> | <b>194,855</b> |      | <b>180,234</b> |      | <b>192,090</b> |      | <b>156,549</b> |      |

**Table 12-2 : Breakdown of holdings in the "socially owned" sector (1989)**

|                | Number     | UAA           | %          | UAA/Holding  |
|----------------|------------|---------------|------------|--------------|
| < 50 ha        | 149        | 757           | 1.2        | 5.1          |
| 50 - 100 ha    | 13         | 1,024         | 1.6        | 78.5         |
| 100 - 300 ha   | 36         | 6,607         | 10.7       | 183.5        |
| 300 - 500 ha   | 8          | 3,251         | 5.3        | 406.4        |
| 500 - 1000 ha  | 9          | 6,850         | 11.1       | 761.1        |
| 1000 - 2500 ha | 15         | 25,747        | 41.6       | 1,716.5      |
| 2500 - 5000 ha | 6          | 17,674        | 28.5       | 2,945.7      |
| > 5000 ha      | -          | -             | -          | -            |
| <b>Total</b>   | <b>236</b> | <b>61,910</b> | <b>100</b> | <b>262.3</b> |

The economic development of the private sector was, until 1970, blocked by a combination of elements, in particular :

- limited access to the inputs needed for the running of a modern holding (fertilizers, crop protection products and agricultural machinery)
- the absence of a market for agricultural land
- a poorly-developed training and education system for farmers
- the non-existence of a coherent system of remunerative prices for the private sector.

From the seventies, a movement of service cooperatives accessible to the private holdings was developed, alongside the "socially owned" sector. These multi-purpose cooperatives had the primary function of making available fertilizers, pesticides, seeds and new technology to the farmers, as well as organizing the concentration of cereals and milk supplies, running an extension service and distributing subsidized bank loans.

After thirty years of development, the co-operative sector and the "socially owned" sector have assumed a structure more and more comparable to that of the movements of agricultural cooperation in Western Europe. Before independence, approximately 65,000 Slovenian farmers, accounting for half of the UAA, had formed economic links with this co-operative sector and the "socially owned" sector. This means that more or less 40% of private Slovenian farmers used these channels to buy their inputs and to market at least part of their output. The other 60% of private farmers produced exclusively for own-consumption and for the local markets.

For many of the very small private farms, the income from agriculture is not - and has not been in the past - the main source of income. This is an essential characteristic of Slovenian agriculture, favouring the development of pluriactivity and keeping an important share of the population in rural areas. This balanced rural development, an important aspect of Slovenian society, has played the role of social buffer in certain periods. This role seems to have been very important between 1990 and 1993. As far as the "socially owned" holdings are concerned they were - and still are - clearly more productive than the private farms. In effect, they occupy an important share in apparent economic flows: 30% of the marketed production from less than 8% of the UAA.

After independence a reform of agriculture was launched, with the following main points:

- an end to the limitation on the maximum area of farms;
- the extension service was split from the co-operative sector and integrated into the Ministry of Agriculture and Forestry, henceforth financed by the Agricultural Budget;
- on 30 May 1993 the State Fund for Agricultural Land and Woodland was instituted, to which the land of the "socially owned" sector was transferred;
- currently, the Fund rents or grants concessions of land for which it has responsibility; generally the existing occupants are accorded leasing agreements if they can show that they exploit the land suitably. Agricultural holdings pay rent for this land. Nevertheless, after five years, 41% of this land will be returned to previous owners (i.e. farmers, church, etc.). Almost 59% of the arable land exploited by the "socially owned" sector will remain in the Fund at the end of the denationalization and privatization process, for which agricultural holdings will continue to pay rent.

The agricultural census of 1991 showed that the average private holding has an area of 5.9 ha, including 3.2 ha of agricultural land and 2.5 ha of arable land; the average herd is less than five head of cattle or three cows per holding. Less than 12% of farmers depend exclusively on farming for their income.

Any major change in the share of production between private farms and "socially owned" holdings is not yet visible.

The following table shows a comparison between the family farms sector and the former "socially owned" sector. For a better comparability, only holdings according to the EUROSTAT definition have been taken into account under the heading "family farms"; the smaller one are registered as "others".

**Table 12-3 : Comparison of "socially owned" and private sectors (1991 - 1993)**

|                          | <b>FAMILY FARMS</b><br>(*) | <b>SOCIAL SECTOR</b><br>(**) | <b>OTHERS (***)</b> | <b>TOTAL</b> |
|--------------------------|----------------------------|------------------------------|---------------------|--------------|
| <b>FARMS</b>             | 111951                     | 203                          |                     | 112154       |
| UAA (000 ha)             | 464                        | 62                           | 337                 | 862          |
| % of total UAA           | 53,8                       | 7,1                          | 39,1                | 100,0        |
| Average UAA (ha)         | 4,1                        | 303,0                        |                     |              |
| Arable land (000 ha)     | 166                        | 29                           | 50                  | 245          |
| % of total Arab. land    | 67,5                       | 11,9                         | 20,6                | 100,0        |
| wheat yield              | 3,9                        | 5,9                          |                     |              |
| Perm. pasture (000 ha)   | 279                        | 26                           | 253                 | 558          |
| % of total Perm. past.   | 50,1                       | 4,7                          | 45,3                | 100,0        |
| Cattle (000)             | 434                        | 43                           |                     | 478          |
| % Cattle                 | 91,0                       | 9,0                          |                     | 100,0        |
| Dairy Cows (000)         | 205,2                      | 6,5                          |                     | 212          |
| % of Dairy Cows          | 96,9                       | 3,1                          |                     | 100,0        |
| Milk Production (000 hl) | 492,6                      | 40,4                         |                     | 533          |
| % of Milk Production     | 92,4                       | 7,6                          |                     | 100,0        |
| milk yield               | 2,4                        | 6,2                          |                     | 2,5          |
| Pig population (000)     | 351                        | 241                          |                     | 592          |
| % Pig population         | 59,3                       | 40,7                         |                     | 100,0        |
| Sheep population (000)   | 18,8                       | 0,7                          |                     | 20           |
| % Sheep population       | 96,3                       | 3,7                          |                     | 100,0        |
| Poultry (000)            | 1206                       | 9386                         |                     | 10592        |
| % Poultry                | 11,4                       | 88,6                         |                     | 100,0        |
| % Hen eggs               | 39,2                       | 60,8                         |                     | 100,0        |

(\*) Family farms according to EUROSTAT definition of agricultural holdings.

(\*\*) Enterprises & cooperatives in socially owned, cooperative and mixed ownership.

(\*\*\*) Land ownership by other holdings below EUROSTAT standards, alpine pastures, set aside.

### 3.2 *Production costs*

The following tables present a comparison of production costs for maize and wheat between Slovenia and EU member states. Other tables for milk, beef and pigmeat appear in Annex 2. The Slovenian data come from the Department of Agricultural Economics of the Agricultural Institute of Slovenia, whereas EU data have been obtained through the FADN. Even if the methodology used is not exactly the same, this juxtaposition allows a rough comparison between Slovenia and different EU member states.

**Table 13-1 : Production costs for maize**

|  | COUNTRY  |         |        |        |         |
|--|----------|---------|--------|--------|---------|
|  | SLOVENIA | ITALIA  | ELLAS  | FRANCE | EU12    |
| NUMBER OF COMMERCIAL FARMS-TOTAL                       |          | 1204425 | 561343 | 516535 | 4157089 |
| -of which producing grain maize %                      |          | 20,9    | 19,6   | 32,7   | 20,2    |
| -of which grain maize specialists (output share>50%) % |          | 3,3     | 3,1    | 2,8    | 2,2     |
| Sample of grain maize specialists                      |          | 487     | 219    | 225    | 1095    |
| Area of grain maize -ha                                |          | 7       | 4      | 34     | 11      |
| YIELD (Kg/ha)  | 7900     | 10445   | 11524  | 9090   | 9548    |
| PRICE (ECU/qn)   | 9,64     | 17,33   | 18,39  | 20,58  | 18,24   |
| OUTPUT (ECU/ha)  | 762      | 1810    | 2119   | 1871   | 1742    |
| -seeds and plants                                      | 89       | 127     | 116    | 128    | 127     |
| -fertilisers   | 102      | 208     | 184    | 191    | 191     |
| -crop protection                                       | 107      | 79      | 71     | 104    | 89      |
| -other crop specific                                   | 336      | 16      | 19     | 4      | 11      |
| TOTAL SPECIFIC COSTS                                   | 634      | 430     | 390    | 427    | 418     |
| TOTAL FARMING OVERHEADS                                | 113      | 425     | 425    | 367    | 389     |
| TOTAL INTERMEDIATE CONSUMPTION                         | 747      | 855     | 814    | 794    | 808     |
| DEPRECIATION   | 112      | 393     | 253    | 296    | 299     |
| TOTAL INPUTS   | 859      | 1248    | 1067   | 1090   | 1107    |
| -family labour, opportunity cost                       | 247      | 523     | 448    | 396    | 629     |
| -family capital opportunity cost, excl. land           | 24       | 28      | 19     | 12     | 18      |
| TOTAL FAMILY OPPORTUNITY COST                          | 271      | 551     | 467    | 408    | 648     |
| TOTAL COSTS  | 1130     | 1800    | 1534   | 1498   | 1755    |
| GROSS MARGIN excl. grants (ECU/ha)                     | 15       | 955     | 1305   | 1076   | 934     |

**Table 13-2 : Production costs for wheat**

|   | COUNTRY  |         |        |        |         |
|---|----------|---------|--------|--------|---------|
|   | SLOVENIA | ITALIA  | ELLAS  | FRANCE | EU12    |
| NUMBER OF COMMERCIAL FARMS-TOTAL                        |          | 1204425 | 561343 | 516535 | 4157089 |
| -of which producing common wheat %                      |          | 18,4    | 20,3   | 58,4   | 26,0    |
| -of which common wheat specialists (output share>50%) % |          | 0,6     | 1,3    | 3,9    | 1,5     |
| Sample of common wheat specialists                      |          | 62      | 64     | 308    | 940     |
| Area of common wheat -ha                                |          | 7       | 10     | 78     | 38      |
| YIELD (Kg/ha)   | 5300     | 5556    | 3317   | 6707   | 6080    |
| PRICE (ECU/qn)  | 15,40    | 19,70   | 17,12  | 16,37  | 17,41   |
| OUTPUT (ECU/ha)   | 816      | 1095    | 568    | 1098   | 1059    |
| -seeds and plants                                       | 91       | 69      | 49     | 66     | 66      |
| -fertilisers  | 105      | 107     | 68     | 152    | 115     |
| -crop protection  | 58       | 28      | 28     | 151    | 115     |
| -other crop specific                                    | 157      | 10      | 6      | 4      | 12      |
| TOTAL SPECIFIC COSTS                                    | 410      | 214     | 150    | 373    | 308     |
| TOTAL FARMING OVERHEADS                                 | 117      | 275     | 120    | 217    | 219     |
| TOTAL INTERMEDIATE CONSUMPTION                          | 527      | 489     | 270    | 590    | 527     |
| DEPRECIATION  | 51       | 289     | 109    | 217    | 173     |
| TOTAL INPUTS  | 578      | 778     | 379    | 807    | 700     |
| -family labour, opportunity cost                        | 162      | 195     | 99     | 151    | 265     |
| -family capital, opportunity cost, excl. land           | 22       | 26      | 5      | 3      | 16      |
| TOTAL FAMILY OPPORTUNITY COST                           | 184      | 221     | 103    | 153    | 281     |
| TOTAL COSTS   | 762      | 999     | 482    | 960    | 981     |
| GROSS MARGIN excl. grants (ECU/ha)                      | 289      | 605     | 298    | 508    | 532     |

Source: FADN, KIS

### 3.3 Land market

The market for agricultural land is practically non-existent. The price of arable land is estimated at between 10,000 ECUs and 30,000 ECUs per hectare, i.e. similar to Austria, where the land market is also not very active. The public authorities do not foresee the creation of any incentive to developing a land market in the short term.. The privatization of land in the "socially owned" sector will not affect the situation much, as relatively little of that land is in reality eligible for privatization<sup>6</sup>. Moreover, the "socially owned" holdings are not spread throughout the country, but concentrated in central and north-eastern plains.

Land restitution will nevertheless have two short-term effects:

- an increase of the UAA of the private holdings which underwent a forced reduction of their land base in 1948
- the appearance of a market for renting arable land.

The development of a functioning land market, and price formation within it, will have to take account of the financial capacities of the potentially viable holdings, in particular if, despite the emerging policy to encourage the restructuring of land use, there is no short or medium-term prospect of direct financial intervention from the agricultural budget.

### 3.4 Recent evolution of the "socially owned" and "co-operative" sectors

The development of the "socially owned" sector and of the co-operative sector is characterized by their different ownership structure. The undistributed capital of the companies in the "socially owned" sector belongs to the workers of these companies, as well as to civil society as a whole. In contrast, farmer members of the cooperatives are formally the holders of the authorized capital.

Cooperatives therefore do not have to be privatized, since they are already private companies close to the Western European model. The law of March 1992 (amended in February 1993) regulating cooperatives thus aimed to remove existing rigidities and to allow their transformation and reorganization to perform in a market economy.

The new legal framework requires a contribution of capital to become a member of the cooperative or to confirm membership. In many cases this brought about a change in membership profile and helped the co-operatives restart on a more solid capital footing. This recapitalisation will not be sufficient to solve the problem of financing future development.

Thus, their structure seems fragile at the present time. Although, from a more optimistic point of view, the co-operative movement linked with the Slovenian rural world could constitute, at the end of the privatization process, a coherent whole made up of :

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<sup>6</sup>The "socially owned" sector accounts for less than 10% of UAA and only less than half of this area was transferred to the "socially owned" sector by expropriation; the other half was bought by the "socially owned" holdings and therefore will not be reattributed to the previous landowner.

- 106 agricultural cooperatives,
- a network of 62 bank deposit and savings cooperatives serving 200,000 members
- 1 agricultural co-operative bank for business and investment
- 1 purchasing co-operative supplying inputs (fertilizers, pesticides, seeds and agricultural machinery)
- financial participation (which can be majority holdings) in about fifty agri-food processing and marketing companies of the former "socially owned" sector.

Furthermore, the co-operative law of 1992 stipulated that 45% of the capital of 46 agri-food companies of the former "socially owned" sector be distributed to those cooperatives having economic links with these companies. This share of capital would be allotted according to the volume of business that each co-operative maintains with these processing industries.

The remaining 55% of capital can either be sold as shares or distributed according to the methods defined by the law of privatization. This second solution would appear to be the more likely one. In this case, 20% of the capital is distributed internally to company employees (by an exchange of certificates) and 35% is sold at a preferential price to the employees of the company and to members of the cooperatives.

Moreover, four agri-food companies in difficulty were transferred to the Development Fund and their privatization carried out under its aegis and that of the Agency for Restructuring. Three of these companies (1 dairy, 1 poultry slaughterhouse, 1 meat processing company) were acquired by cooperatives, with a participation of the employees in the capital of the company (10% of the capital).

Lastly, the law on the privatization of companies will apply to all those companies (agricultural and agri-food) of the former "socially owned" sector which were generally integrated into regional organisations (the main ones in Slovenia being Emona, Mercator, ABC Pomurka and three other smaller ones). This law lays down the following allocation of capital:

- 10% to the Pension Fund
- 10% to the Compensation Fund
- 20% to the Development Fund for subsequent handing over on the market by means of permitted investment funds
- 20% to the employees of the company in an exchange of certificates
- the 40% remaining can be distributed in various ways: either partial or total acquisition by the employees, spread out over several years and at 50% of their nominal value, or public sale (partial or total) according to either a restricted or open procedure.

### 3.5 *Up-stream and down-stream industry*

The network of up-stream and down-stream companies - the former "socially owned" sector - had a socio-economic role in the agri-food sector similar to that of agricultural cooperatives in Western Europe. Independence and economic reform marked the end of this system of economic relations. The networks were transformed, companies are being restructured and economic flows between companies reorientated.

### *Upstream Industries and Services*

Slovenia has one large agricultural equipment company (tractors & farm implements) and several much smaller firms. COMECON countries were not very important trading partners in the past, while former Yugoslavia was.

Private agricultural holdings are very often over-equipped; a major proportion have at least one tractor. In 1985, there were 12 tractors/100 ha of agricultural land, a higher ratio than Austria for the same period (10 tractors/100 ha of agricultural land).

The major holdings of the former "socially-owned" sector were also well equipped (although at a lower rate: 3 tractors / 100 ha of arable land).

In addition to a small Slovenian output, fertilizers and crop protection products came from Croatia and to some extent Serbia. Seeds were imported from Voivodina (North Serbia) and from companies located in Belgrade and Zagreb. Some fertilizers still come from Croatia, but crop protection products are now bought from the German and Swiss chemical industries. The supply of seed is much more diversified and has not stabilized. These inputs are now distributed by, on the one hand, the agricultural cooperatives (40% of fertilizers, 35% of pesticides and 30% of seeds) and, on the other, by the small independent distributors which have developed since 1991.

Use of these inputs is very weak, as the table of intermediate consumption in Slovenian agriculture shows. Data drawn up over the period 1986-88 indicate a consumption of nitrates at 34 kg/ha of arable land on family holdings and 130 kg/ha of arable land on farms of the former "socially owned" sector.

### *Downstream Industry and Services*

The cooperatives, which have only a small role in the processing and/or marketing of agricultural products (10%), are an interface between individual producers and the processing industries (of the former "socially owned" sector) and mainly have the role of concentrating supply.

The processing industries for agricultural products (made up of the 46 + 4 companies from the "socially owned" sector) benefit for the most part from the same technological methods and technical facilities as used in the EU. Output norms are also of a level equivalent to those found in the EU.

In the mid-seventies, the slaughter houses promoted vertical integration in the meat production sector (poultry, pigmeat and veal). This system of economic relationship has proved particularly successful in the prosperous north-east of Slovenia. Its development can be explained by the availability of labour on the family farms and the fact that no capital is required.

## 4 SUPPORT SYSTEMS

In Slovenia the different mechanisms used to support domestic agriculture are:

- a price-fixing policy by central government for wheat, milk and sugar;
- a credit policy, input support and farm investment policy;
- export aid and border protection.

### *Price policy*

Agricultural prices in Slovenia are in general closer to those of the EU than in other CEECs. However, one can distinguish two different levels:

- products for which market prices are significantly lower than in the EU: beef, poultry-meat, maize
- products for which prices are close to EU prices: pigmeat, wheat.

The following table gives an idea of the price hierarchy in the Slovenian livestock sector and a comparison with EU prices.

**Table 14 : Comparison of producer prices**

|                 | Slovenia (1993-1994) |       | EU (1994)         |       |
|-----------------|----------------------|-------|-------------------|-------|
|                 | Price (Ecu/100kg)    | Index | Price (Ecu/100kg) | Index |
| Beef            | 122.6                | 100   | 378               | 100   |
| Calves          | 234.0                | 191   | around 460        | 122   |
| Pigs            | 120.0                | 98    | around 130        | 34    |
| Lambs and sheep | 192.2                | 157   | 320               | 85    |
| Poultry-meat    | 83.8                 | 68    | 130               | 34    |
| Milk            | 23.1                 | 19    | 31.31             | 8     |
| Butter          | 109.0                | 89    |                   |       |
| Wheat           | 1750                 | 14.3  | 1340              | 3.4   |

Since the end of 1991, selling prices have been established at farm gate level, and at retail level for dairy products and wheat of bread-making quality.

Administrative control of the prices of these crucial products was used to keep inflation under control and for social reasons.

For *milk* the farm gate price is complemented by a direct aid for producers in the less-favoured areas.

For *wheat* a "protection" price was introduced in 1991 and until the 1994/95 marketing year the price for rapeseed was derived from this wheat price.

According to quality, a fixed coefficient system exists linking the price of wheat to the sale prices of wheat-flour and bread. But this ratio no longer influences the market.

Public support has a very significant impact on the sugar market: the price of sugarbeet is derived from the wheat price, to which a coefficient is applied - currently 4.

### *Credit policy*

The agriculture budget intervenes with interest repayments, directed to different types of production and investment, with the aim of restructuring agriculture and the food industry. This credit policy is not limited to one sector, but has a significant impact, mainly on beef production, sugar and wine. In the past, this policy was very important in maintaining output and viability of the co-operative and "socially-owned" sectors.

A special programme to improve pig production on private farms - with some ecological stipulations - should also be mentioned.

### *Input support*

Input support for livestock and crop production is an important measure used to orientate production, improve productivity and reduce production costs. Such input support exists for breeding cattle, for seeds (sugarbeet and wheat) and for vines and fruit trees.

The following table of page 34bis gives a breakdown, by commodity, of the 1993 agricultural budget. The 1994 total is similar, amounting to 62,335 Mio US\$.

## **5 Agricultural trade**

### *5.1 Evolution of agricultural trade flows*

While the current account is in surplus, the agricultural trade balance is in deficit. If agriculture represents only a tiny share (5%) of exports, agricultural imports are nearly 10% of Slovenian imports. The deficit is increasing and amounted, in 1994, to 74% of the global trade balance deficit.

Traditional exports are those in which self-sufficiency has been reached or for which an export-oriented food-processing industry exists: hops, eggs and poultry, dairy products, beef, ham, potatoes, quality wine and apples. However, since independence, the structure of exports has partly changed following the reorientation of agricultural production and new consumption patterns. In particular, the beef and veal sectors have moved into deficit and imports of live animals and carcasses have sharply increased over the last two years. On the other hand, the liberalization of the economy has led to a rise in quality wine exports.

The last, but not least, particularity of Slovenian agricultural trade that should be noted is the importance today of the former Yugoslav export markets, which represent more than 50% of all agricultural exports.

**Table 15-1 : Agricultural trade within external trade**

| (Mio ECU)            | 1992 | 1993 | 1994 |
|----------------------|------|------|------|
| <b>IMPORTS</b>       |      |      |      |
| all                  | 4742 | 5532 | 6122 |
| agriculture          | 426  | 465  | 568  |
| % agric.             | 9.0  | 8.4  | 9.3  |
| <b>EXPORTS</b>       |      |      |      |
| all                  | 5160 | 5191 | 5749 |
| agriculture          | 336  | 248  | 285  |
| % agric.             | 6.5  | 4.8  | 5.0  |
| <b>TRADE BALANCE</b> |      |      |      |
| all                  | 417  | -341 | -373 |
| agriculture          | -89  | -217 | -283 |

**Agricultural Budget by kind and product in 93 (in 000 US\$)**

|  | TOTAL  | WHEAT | FEED GRAIN | MAIZE | SUGAR BEET | OILSEEDS | MILK  | YOUNG FAT CATTLE | PIGS | EGGS | POULTRY MEAT | POULTRY SHEEP & GOAT | POTATO | VEGS | HOPS | FRUITS | GRAPES | OTHER ANIMALS |     |
|--|--------|-------|------------|-------|------------|----------|-------|------------------|------|------|--------------|----------------------|--------|------|------|--------|--------|---------------|-----|
| <b>1. NON-POLICY INTERVENTION FUNDS</b>  |        |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - administration costs   | 6164   |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - forestry   | 12293  |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - other  | 5485   |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| <b>2. PRICE SUPPORTS</b>   |        |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - price differences  | 3947   |       |            |       |            |          | 3861  |                  |      |      |              |                      |        |      |      | 86     |        |               | 75  |
| - aggravated production conditions   | 9181   |       |            |       |            |          | 6813  | 1776             |      |      |              | 417                  |        |      |      |        |        |               |     |
| <b>3. INPUT SUBSIDIES</b>  |        |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - subsidies given for seeds and animals which are bred for reproduction purposes   | 4231   | 732   |            |       | 776        |          | 827   | 4171             | 1051 |      | 824          | 33                   | 91     |      | 220  | 352    | 308    | 68            |     |
| - interest rates   | 7240   | 267   |            | 636   | 119        | 8        |       |                  |      |      |              |                      | 2      |      |      |        | 986    |               |     |
| - investment policy  | 4425   | 17    | 3          | 18    | 4          | 1        | 389   | 334              | 25   | 5    | 2515         | 295                  | 30     | 358  | 8    | 14     | 25     | 384           |     |
|  | 132    |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               | 132 |
| <b>4. PROMOTION OF GENERAL ACTIVITIES</b>  |        |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - scientific research projects   | 1269   | 77    | 12         | 81    | 16         | 5        | 263   | 226              | 114  | 23   | 58           | 2                    | 138    | 40   | 34   | 63     | 112    | 5             |     |
| - applied research analyses  | 9974   | 105   | 16         | 111   | 22         | 7        | 3985  | 2756             | 622  | 94   | 184          | 263                  | 230    | 143  | 108  | 347    | 602    | 379           |     |
| - education, extension services  | 6681   | 428   | 66         | 455   | 91         | 20       | 1468  | 1261             | 636  | 14   | 36           | 12                   | 779    | 225  | 192  | 350    | 622    | 26            |     |
| - agricultural operations  | 5194   | 288   | 70         | 360   | 24         | 19       | 827   | 710              | 77   | 3    | 7            | 15                   | 204    | 807  | 201  | 788    | 743    | 31            |     |
| - other  | 0      |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| <b>5. OTHERS</b>   |        |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| - Special research project intended to promote rural development in Slovenia (CRP) | 624    | 38    | 6          | 40    | 8          | 2        | 129   | 111              | 56   | 11   | 29           | 1                    | 66     | 20   | 17   | 31     | 55     | 2             |     |
| - "part-time farming activities"   | 153    | 3     | 0          | 3     | 1          | 0        | 105   | 9                | 4    | 1    | 2            | 0                    | 5      | 10   | 1    | 2      | 4      | 3             |     |
| - other  | 1251   | 116   | 18         | 123   | 25         | 8        | 154   | 132              | 51   | 9    | 24           | 2                    | 208    | 61   | 52   | 95     | 169    | 4             |     |
| <b>6. EXPORT SUBSID. &amp; OTHER RELATED SUPP.</b>                                 | 7942   |       |            |       |            |          | 2279  | 1665             |      |      | 1149         |                      |        |      | 879  | 913    | 590    | 467           |     |
| <b>7. FOOD CONSUMPTION SUBSIDIES</b>   | 13885  |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| <b>8. TOTAL</b>  | 100071 |       |            |       |            |          |       |                  |      |      |              |                      |        |      |      |        |        |               |     |
| <b>9. TOTAL FOR AGRIC. POLICY INTERVENTIONS</b>                                    | 62244  | 2071  | 191        | 1847  | 1086       | 70       | 21200 | 13151            | 2636 | 160  | 4828         | 1040                 | 1755   | 1664 | 1712 | 3041   | 4216   | 1576          |     |

Source : REDNAK et al, KIS



**Table 15-2 : Agricultural trade for key products (1994)**

| (Mio ECU)                  | IMPORTS    | % Imports    | EXPORTS    | % Exports    |
|----------------------------|------------|--------------|------------|--------------|
| Fruit & veg unprocessed    | 77.4       | 13.6         | 18.3       | 6.4          |
| Meat                       | 63.2       | 11.1         | 38.1       | 13.4         |
| Cereals                    | 51.7       | 9.1          | 0.8        | 0.3          |
| Animal fodder              | 38.3       | 6.8          | 11.4       | 4.0          |
| Fats (an. & veg.)          | 31.5       | 5.6          | 5.0        | 1.8          |
| Sugar                      | 29.8       | 5.3          | 14.5       | 5.1          |
| Beverages                  | 21.2       | 3.7          | 33.0       | 11.6         |
| Preparation of meat & fish | 10.6       | 1.9          | 40.2       | 14.1         |
| Dairy products & eggs      | 6.7        | 1.2          | 25.3       | 8.9          |
| Others                     | 237.1      | 41.8         | 98.3       | 34.5         |
| <b>TOTAL</b>               | <b>568</b> | <b>100.0</b> | <b>285</b> | <b>100.0</b> |

**Table 15-3 : Agricultural trade by partner (1994)**

| (Mio ECU)         | IMPORTS    | % Imports  | EXPORTS    | % Exports  | Balance     |
|-------------------|------------|------------|------------|------------|-------------|
| EUR-12            | 226        | 39.8       | 74         | 25.9       | -152        |
| EFTA              | 94         | 16.6       | 15         | 5.2        | -79         |
| Former Yugoslavia | 74         | 13.1       | 151        | 53.1       | 77          |
| CEFTA             | 70         | 12.2       | 7          | 2.6        | -62         |
| OTHERS            | 104        | 18.3       | 38         | 13.2       | -66         |
| <b>TOTAL</b>      | <b>568</b> | <b>100</b> | <b>285</b> | <b>100</b> | <b>-283</b> |

## 5.2 GATT Agreement

As from the end of the eighties, non-tariff barriers (quotas, timetable of imports etc) were gradually dismantled to make way (from 31 July 1993) for a threshold price system and variable levies on imports of live animals (cattle and pigs), beef and veal, pigmeat, milk and dairy products, eggs and poultry, wine and cereals.

With the conclusion of the Uruguay Round negotiations, Slovenia will need to carry out "tariffication" of its system of import regulation.

Slovenia has a very specific position within the GATT Agreement because:

- it is the only CEEC<sup>7</sup> to have made its commitments in ECU
- they have not tabled any offer in the field of export competition. During the basic period Slovenia had a low volume of export refunds. It is intended to use this small amount to finance internal measures, namely for marketing and promotion.
- they consider the tariff equivalent as a ceiling. Under the ceiling level they intend to apply variable levies.

Moreover, minimum tariff quotas have to be opened for wheat (80,000t), barley (70,000t) and maize (120,000t).

As shown by the following table, which presents an overview of tariffs and levies, except for poultry the tariffs and levies applied are under the maximum allowed.

<sup>7</sup>Poland made it in US\$ and the others CEECs in national currencies.

**Table 16 : Tariffs, levies and tariff equivalents**

|              | Tariff (1.01.95) | Base rate of Duty* | Variable levies (in force until 1.01.95) | Tariff equivalent (1st year of Gatt) | Tariff equivalent (year 2,000) |
|--------------|------------------|--------------------|--|--------------------------------------|--------------------------------|
| Beef carcass | 12               | 14                 | 400 - 600                                | 1998                                 | 1443                           |
| Pig carcass  | 15               | 17                 | 150                                      | 418                                  | 356                            |
| Poultry meat | 15               | 17                 | 630                                      | 237                                  | 201                            |
| Milk         | 10               | 12                 | 257                                      | 253                                  | 215                            |
| Eggs         | 5                | 3                  | 332                                      | 274                                  | 233                            |
| Durum Wheat  | 5                | 5                  | 0  | 0                                    | 0                              |
| Others wheat | 5                | 7                  | 24                                       | 102                                  | 87                             |
| Maize        | 11               | 13                 | 0  | 94                                   | 81                             |
| Raw Sugar    | 17               | 19                 | 304                                      | 405                                  | 344                            |
| Wine         | 25               | 27                 | 503                                      | 513                                  | 436                            |

\* according to GATT Schedule

### 5.3 Association Agreement

The Association Agreement negotiated between Slovenia and the European Union was initialled on the 15 June 1995. Negotiation guidelines were the following:

- consolidation of the advantages resulting from the Cooperation Agreement and of the concessions resulting from the GSP for products which Slovenia exports
- concessions for products which Slovenia has traditionally exported to the Community.

Within the tariff quotas the reduction rate was set at 80%.

Both parties agreed to negotiate a separate reciprocal wine agreement and to conclude it before the entry into force of the Interim Agreement on 1 January 1996.

## 6 Outlook, prospects and problems

### *Policy scenarios for the future*

Medium term strategies for the main economic and social fields have been discussed and adopted by the Slovenian Parliament. The document defining the strategy for Slovenian agriculture (March 1993) highlights four objectives:

- "stable production of cheap, quality food and food security in Slovenia
- maintenance of population density, cultural regions and agricultural land (preservation of production potential in case of interrupted supply), protection of agricultural land and water from pollution and misuse
- an increased competitiveness
- a guaranteed parity income for above-average producers."

Within this context, three policy scenarios to achieve these objectives have been defined: a "protectionist" scenario, a "liberal" scenario and a "target" scenario. All three take account of a number of internal and external constraints: budget costs, food prices, liberalisation of trade and GATT commitments.

The basic characteristic of the first scenario would be the intensification of production, especially of cattle breeding. This development strategy would lead to huge milk surpluses and to ecological problems. The "liberal" scenario would lead to a drastic reduction of arable land and agriculture would practically vanish from the highland regions. The "target" scenario assumes a moderate intensity of production which enables quite a regulated food balance and cultivation of all agricultural land. This scenario should have no detrimental effect on the environment.

### *Medium-term development prospects*

Adopted by Parliament as a policy scenario to be followed in future, the "target" scenario illustrates the consensus for continuing existing policy along the same lines.

The political background for our assessment is the continuation of the relatively moderate policy of the last few years, an assumption which would appear to be compatible with the "target" scenario.

The economic background for our assessment is an overall economic growth of 4-5% per annum until the year 2,000 and the assumption that domestic demand will be stimulated by the expansion of tourism. This likelihood is integrated in the increase of apparent per capita consumption.

In addition it assumes an acceleration of the trend towards specialization of Slovenian agricultural holdings and an alignment of farm price hierarchy<sup>8</sup> (not levels) to that of the EU. Under these circumstances we expect that Slovenian agriculture will achieve physical yields similar to those of holdings located in the bordering regions (of Austria and Italy) within 5 years. Furthermore, it was assumed that, in accordance with its GATT commitments, Slovenia will not use any refunds in the future.

### *Land use*

As far as *land use* is concerned the main constraint is physical. A large part of the land is in hill and mountain areas with poor soil quality, so that any massive switch from meadows to arable land would not make sense. We therefore see only a smooth evolution in this

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<sup>8</sup> In the case where Slovenia prepares itself for integration with EU.

respect. Within arable crops, increasing specialisation will lead to a reduction in some marginal types of production ("others" e.g. rapeseed) in favour of cereals and fodder crops.

**Table 17-1 : Land use projections**

| LAND USE (000 ha)  |              | 1993-1994 | 2000 |
|--------------------|--------------|-----------|------|
| arable land        |              | 245       | 256  |
| of which           | cereals      | 115       | 132  |
|                    | fodder crops | 73        | 80   |
|                    | potatoes     | 27        | 25   |
|                    | others       | 30        | 19   |
| orchards           |              | 35        | 36   |
| vineyards          |              | 22        | 24   |
| permanent pastures |              | 558       | 540  |
| total              |              | 860       | 856  |

### *Livestock production*

The key sector to understanding and predicting the evolution of Slovenian agriculture is the *dairy sector*. In effect, this sector would appear to be moving, more than other sectors, and more rapidly, towards specialisation. This tendency is reinforced by the important productivity reserve still existing in the dairy herds. An evolution of yields similar to that seen in northern Italy between 1989 and 1994 could be expected (even with this hypothesis yields would be 10% lower than actual Austrian yields). On the other hand the limited budget available to subsidize milk production will rapidly become a major constraint on a further increase of production, self sufficiency already having been reached. Increasing surpluses are expected to press internal market prices downwards, at least in real terms, and lead progressively to a new market balance, with a reduction in the number of cows, an increase in human consumption and an increase in the availability of milk for export (fresh milk or dairy products).

**Table 17-2 : Milk\* projections**

| milk balance sheet     |       | 1994 | 2000 |
|------------------------|-------|------|------|
| cows                   | 000   | 210  | 195  |
| yield                  | t/cow | 2,68 | 3,45 |
| production             | 000 t | 562  | 673  |
| imports                | 000 t | 14   | 25   |
| exports                | 000 t | 90   | 203  |
| utilization            | 000 t | 486  | 495  |
| per capita utilization | kg    | 244  | 252  |
| self-sufficiency       | %     | 116  | 136  |

\*This milk balance table takes first transformation into account

The evolution of the *livestock sector* will follow the process of specialisation. Whereas the number of dairy cows decrease slightly, the overall number of beef cattle is expected to increase.

In fact, many dairy farmers will see in beef production a new opportunity which they can add to their milk activity. However, all these developments will be relatively smooth and anticipated cattle numbers by the end of the nineties will still be lower than actual numbers at the end of the eighties. The number of pigs will increase as a result of the governmental programme to encourage pig production on small family farms and because there is a strong market demand.

However, here again, we do not expect any spectacular development: with 650,000 pigs by the year 2,000, the herd size is far below its peak in the eighties.

**Table 17-3 : Livestock projections**

| livestock |     | 1994  | 2000  |
|-----------|-----|-------|-------|
| cattle    | 000 | 478   | 510   |
| o.w. cows | 000 | 210   | 195   |
| pigs      | 000 | 591   | 650   |
| poultry   | 000 | 10592 | 11928 |

For *beef* important changes are expected due to:

- the growth of domestic demand for beef
- an expected increase in beef price, resulting in a beef/pigmeat price ratio similar to that currently found in the EU
- the switch from milk to beef production as a result of an increase in the beef/milk price ratio; this being a consequence of the increasing milk surplus with its price reducing effect.

At present coming from the dairy herd, beef production will in future come increasingly from a suckler herd, a development which has already started. Total beef production could reach 57,000 t but it will partially be based on imported live animals, mainly from Hungary. The calculated self-sufficiency includes these imports.

As far as exports are concerned, the existence of a modern food processing industry which is already exporting will have a stimulating effect on the development of the whole beef sector.

**Table 17-4 : Beef/veal projections**

| beef/veal balance sheet |       | 1994 | 2000 |
|-------------------------|-------|------|------|
| production              | 000 t | 35   | 57   |
| imports                 | 000 t | 11   | 2    |
| exports                 | 000 t | 4    | 12   |
| utilization             | 000 t | 42   | 47   |
| per capita utilization  | kg    | 21,1 | 24,0 |
| self-sufficiency        | %     | 84   | 121  |

*Pigmeat* is the main product in the meat sector in terms of both production and consumption (overall and per capita). Because of the policy to encourage production it will continue to play a crucial role. Production is expected to increase more rapidly than

demand. Nevertheless, the pigmeat market will still be in deficit in 2,000 and environmental problems could well limit the possibility of faster development.

**Table 17-5 : Pigmeat projections**

| pigmeat balance sheet  |       | 1994 | 2000 |
|------------------------|-------|------|------|
| production             | 000 t | 48   | 65   |
| imports                | 000 t | 25   | 13   |
| exports                | 000 t | 0    | 2    |
| utilization            | 000 t | 73   | 76   |
| per capita utilization | kg    | 37.6 | 38,5 |
| self-sufficiency       | %     | 66   | 86   |

The *poultrymeat sector* was a traditional export sector which is now suffering from the instability of the former Yugoslavia. Its future development will be demand-driven. By the end of the century a positive evolution could be expected. A resolution of the political problems in the Balkans would certainly have a strong impact on this sector.

**Table 17-6 : Poultrymeat projections**

| poultrymeat balance sheet |       | 1994 | 2000 |
|---------------------------|-------|------|------|
| production                | 000 t | 46   | 50   |
| imports                   | 000 t | 1    | 2    |
| exports                   | 000 t | 14   | 13   |
| utilization               | 000 t | 33   | 39   |
| per capita utilization    | kg    | 16,7 | 20,0 |
| self-sufficiency          | %     | 139  | 127  |

### *Arable crops*

The slight extension of cereals area and the on-going increase in yields (+0.1 t/ha/year) will lead to a growth in production, with imports slightly decreasing. This development will bring the rate of self-sufficiency to more than 70%, despite an expected continuous increase in animal feed demand.

**Table 17-7 : Cereals projections**

| TOTAL CEREALS    |        | 1994 | 2000 |
|------------------|--------|------|------|
| area             | 000 ha | 111  | 132  |
| yield            | t/ha   | 5,08 | 5,60 |
| production       | 000 t  | 564  | 739  |
| imports          | 000 t  | 479  | 279  |
| exports          | 000 t  | 2    | 2    |
| feed use         | 000 t  | 325  | 355  |
| seed             | 000 t  | 6    | 6    |
| other uses       | 000 t  | 710  | 655  |
| self-sufficiency | %      | 54   | 73   |

*Sugar* beet production is expected to go up, following a 19% increase in area. Sugar beet yields are already relatively high. Sugar production will increase even more due to imports of raw sugar, mainly from Hungary and the former Yugoslavia. Slovenia can benefit from the processing capacity of its modern sugar industry, a large refinery situated in the north-east of the country, close to the river Drava. However, by the end of the century self-sufficiency will still not be achieved.

**Table 17-8 : Sugarbeet projections**

| <b>SUGAR BEET</b> |        | <b>1994</b> | <b>2000</b> |
|-------------------|--------|-------------|-------------|
| area              | 000 ha | 5,0         | 5,9         |
| yield             | t/ha   | 44,4        | 44,9        |
| production        | 000 t  | 222         | 265         |
| <b>SUGAR</b>      |        |             |             |
| production (1)    | 000 t  | 45          | 65          |
| imports           | 000 t  | 28          | 11          |
| exports           | 000 t  | 0           | 3           |
| utilization       | 000 t  | 72          | 73          |
| kg/capita         |        | 36,1        | 37,0        |
| self-sufficiency  | %      | <b>62</b>   | <b>89</b>   |

(1) includes imports of raw sugar

*Wine* is already in a very special situation.

Vineyard area will expand slowly over the next five years. A large part of the existing area has been replanted in recent years in order to switch from table wine to quality wine production. All in all, plants are therefore still relatively young and no major yield increases are expected in the coming years. Nonetheless, the combined effect of both area and yield increases will be significant. Production will overtake 1 mio hl in 2,000 and could grow ever further subsequently.

Apparent consumption is also expected to rise sharply, mainly due to tourist demand.

**Table 17-9 : Vineyard projections**

| <b>VINEYARD</b> |        | <b>1994</b> | <b>2000</b> |
|-----------------|--------|-------------|-------------|
| area            | 000 ha | 22          | 24          |
| yield           | t/ha   | 6.0         | 6.7         |
| production      | 000 t  | 131         | 161         |
| <b>WINE</b>     |        |             |             |
| production (2)  | 000 hl | 893         | 1096        |
| ending stock    | 000 hl | 57          | 573         |
| imports         | 000 hl | 123         | 80          |
| exports         | 000 hl | 139         | 210         |
| utilization     | 000 hl | 820         | 875         |
| hl/capita       |        | 41,2        | 44.5        |
| selfsufficiency | %      | <b>109</b>  | <b>125</b>  |

(2) includes "farm made" wine

## **GLOSSARY / ABBREVIATIONS**

|              |   |
|--------------|---|
| <b>CEECs</b> | <b>Central and Eastern European Countries</b>   |
| <b>CEFTA</b> | <b>Central European Free Trade Agreement between Poland, Hungary, Czech Republic and Slovakia, also known as the Visegrad four, with Slovenia in the process of joining</b> |
| <b>EBRD</b>  | <b>European Bank for Reconstruction and Development</b>   |
| <b>EU</b>    | <b>European Union</b>   |
| <b>FADN</b>  | <b>Farm Accountancy Data Network</b>  |
| <b>GDP</b>   | <b>Gross Domestic Product</b>   |
| <b>GSP</b>   | <b>General System of Preferences</b>  |
| <b>ILO</b>   | <b>International Labour Organisation</b>  |
| <b>o.w.</b>  | <b>of which (in tables)</b>   |
| <b>p.c.</b>  | <b>per capita</b>   |
| <b>SIT</b>   | <b>Slovenian Tolar</b>  |
| <b>WTO</b>   | <b>World Trade Organisation</b>   |

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## Annex I

### Phare assistance to Slovenia 's Agriculture

#### 1. General framework and background

The PHARE programme has so far mainly contributed in Slovenia to the transformation process of local economy, with large scale interventions in the sphere of privatisation and restructuring, on the one hand, and the finance and banking sector, on the other hand.

A total of 44 MECU have been allocated over the 1992/1994 period, including 4 MECU from the 1994 Cross Border Cooperation Facility.

PHARE assistance to Slovenian agriculture has been so far very limited: half a million ECU only.

#### PHARE agricultural commitments for Slovenia (in MECU)

| 1992 | 1993 | 1994 | 1995 |
|------|------|------|------|
| /    | 0.25 | 0.2  | 0.5  |

#### 2. Specific actions

The 1993 General Technical Assistance Facility includes a project whose mid-term objective is to establish at Jable Estate (suburbs of Ljubljana) a centre of excellence for agricultural research, z-education, training, extension activities as well as for official testing at the country level in Slovenia. In the shorter run, the aim is to elaborate and implement the institutional, organisational and managerial structures of Jable Estate. The center is to be linked with the Biotechnical Faculty, the Agricultural Research Institute and the Ministry of Agriculture.

The 1994 Cross Border Programme foresees a small project for the development of apple orchards in the Tolmin Municipality.

The envisaged 1995 Programme for Economic Reform\* includes, inter allia, the setting up of a policy advisory Unit, whose main objectives will be:

- to assist the Ministry of Agriculture in reviewing and formulating the agricultural policy, which will facilitate gradual restructuring of the sector;
- to assist and advise the Ministry on the implementation of the agricultural components of the European Agreement;
- to assist and advise the Ministry on the identification of projects that might be financed by PHARE in the following years.

\* to be submitted at the Management Committee of July 5 1995

## Annex II

### Supplementary tables to different paragraphs of the text

#### §1.2

#### Composition of the National Parliament elected 6.12.1992

|  |          |
|--|----------|
| LDS (Liberal Democratic Party)                             | 22 seats |
| SKD (Slovene Christian Democrats)                          | 15 seats |
| SDP (Party of Democratic Renewal - former Communist Party) | 14 seats |
| SNS (Slovene National Party)                               | 12 seats |
| SLS (Slovene People's Party)                               | 10 seats |
| DS (Democratic Party)                                      | 6 seats  |
| ZS (Greens of Slovenia)                                    | 5 seats  |
| SDSS (Social Democratic Party of Slovenia)                 | 4 seats  |
| Hungarian minority   | 1 seat   |
| Italian minority   | 1 seat   |

The coalition government comprises the following parties:

LDS, SKD, SDP, SDSS, ZS.

#### §3.2

#### Production costs in Slovenia for milk, beef and pigmeat

|                                     | Milk         |  | Beef          | Pigmeat       |
|-------------------------------------|--------------|--|---------------|---------------|
| Yields                              | 4,000 kg/cow |  |               |               |
| Farm size                           | 18           |  | 30            | 100           |
| Production                          | 26.48        |  | 165.90        | 134.00        |
| <i>Conc. feed+coarse fodder</i>     | <i>3.41</i>  |  | <i>20.42</i>  | <i>53.96</i>  |
| <i>Specific costs for grass (1)</i> | <i>0.98</i>  |  | <i>7.48</i>   |               |
| Total feed                          | 4.40         |  | 27.90         | 53.96         |
| Animal purchased for fattening      |              |  | 61.56         | 34.40         |
| Oth. specif. livest. costs          | 0.86         |  | 2.01          | 1.26          |
| Total farm. overheads               | 3.43         |  | 21.62         | 13.23         |
| Total Intern. consumption           | 8.69         |  | 113.08        | 102.85        |
| Depreciation                        | 7.31         |  | 19.65         | 7.07          |
| <b>TOTAL INPUTS</b>                 | <b>16.00</b> |  | <b>132.73</b> | <b>109.92</b> |
| <i>family labour opp. cost</i>      | <i>9.92</i>  |  | <i>28.15</i>  | <i>5.73</i>   |
| <i>family capital opp. cost</i>     | <i>2.00</i>  |  | <i>14.92</i>  | <i>4.19</i>   |
| Total family opp. cost              | 11.92        |  | 43.07         | 9.92          |
| <b>TOTAL COSTS</b>                  | <b>27.92</b> |  | <b>175.80</b> | <b>119.84</b> |

Source: KIS

§ 3.5

**Consumption of inputs (1992)**

|                                    | 1992*        | 1993*         |
|------------------------------------|--------------|---------------|
| <b>Total consumption of inputs</b> | <b>67553</b> | <b>105720</b> |
| Seeds and reproductive materials   | 5391.5       |               |
| Animal feed                        | 31575.8      |               |
| Fertilizers and soil improvers     | 2217.8       |               |
| Crop protection products           | 2098.3       |               |
| Pharmaceuticals                    | 787.9        |               |
| Energy & lubricants                | 7646.3       |               |
| Farm implements, repairs           | 4205.5       |               |
| Services                           | 13630.1      |               |

\* in Mio national currency

§4

**Guaranteed milk prices (3,6% fat content) farm-gate**

|                  | Price (SIT/Lit) | Direct Aid (SIT/Lit) |
|------------------|-----------------|----------------------|
| 1 April 1992     | 21.40           | -                    |
| 1 May 1992       | 22              | 0.60                 |
| 1 June 1992      | 21.40           | -                    |
| 1 March 1993     | 21.40           | 1.50                 |
| 1 April 1993     | 23.50           | 1.50                 |
| 20 June 1993     | 25.50           | 1.50                 |
| 1 July 1993      | 26.50           | 1.50                 |
| 1 August 1993    | 28.50           | 1.50                 |
| 3 September 1993 | 30.10           | 1.50                 |
| 1 April 1994     | 31.86           | 1.04                 |
| 1 July 1994      | 32.80           | 1.04                 |
| 1 November 1994  | 34.45           | 1.04                 |

**Guaranteed wheat price and coefficient for rapeseed, flour and bread**

|                  | Guaranteed wheat price (SIT/kg) |          |           | Coefficient<br>Rapeseed |
|------------------|---------------------------------|----------|-----------|-------------------------|
|                  | Class I                         | Class II | Class III |                         |
| 1 Aug. 1991      | 5.50                            | 5.20     | -         | 1.6                     |
| 4 July 1992      | 18.00                           | 17.00    | -         | 2.0                     |
| 7 Nov. 1992      | 18.30                           | 17.30    | -         | 2.0                     |
| 24 June 1993     | 24.00                           | 23.00    | 12.00     | 2.0                     |
| 2 September 1994 | 27.13                           | 25.90    | 22.40     | 50.50 SIT/kg            |

|               | Guaranteed<br>Price | Price ratio between flour and bread |                   |                   |                          |
|---------------|---------------------|-------------------------------------|-------------------|-------------------|--------------------------|
|               |                     | Flour type<br>850                   | Flour type<br>500 | Flour type<br>400 | Special quality<br>flour |
| 1 Aug. 1991   | 5.20                | 2.2                                 | 2.5               | -                 | -                        |
| 1 Oct 1991    | 6.00                | 2.5                                 | 3.0               | 3.5               | -                        |
| 1 Dec 1991    | 7.00                | 2.5                                 | 3.0               | 3.5               | 4.0                      |
| 1 Feb 1992    | 8.00                | 2.7                                 | 3.3               | 3.8               | 4.4                      |
| 17 April 1992 | 12.00               | 2.32                                | 2.84              | 3.27              | -                        |
| 29 June 1993  | 17.00               | Maximum price control               |                   |                   |                          |

Achévé d'imprimer en juillet 1995  
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