

The background of the cover is a collage of black and white photographs. It includes images of a covered walkway with people, a construction site with excavators, a person working in a field, a group of people in a field, a person working in a field, and a group of people standing in front of a building with arches.

INEA

ITALIAN AGRICULTURE 1999

*An abridged version of the
“Annuario dell’Agricoltura Italiana”*

Istituto Nazionale di Economia Agraria

ITALIAN AGRICULTURE 1999

**An abridged version of the
«Annuario dell'Agricoltura Italiana» Vol. LIII**



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Foreword

This volume is an abbreviated version of the fifty-third edition of the *Annuario dell'Agricoltura Italiana* (Yearbook of Italian Agriculture), the annual publication of the INEA, the Italian National Institute for Agricultural Economics.

The first edition of the *Annuario* was published in 1948, in social and economic circumstances very different than those found in Italy today. Beginning with this first edition, and continuing over the years, it has benefited from the collaboration of experts drawn from professional, administrative and academic backgrounds, as well as from that of numerous important public and private bodies operating in the agro-food sector; it is recognised as a unique and authoritative source of information on all aspects of rural life in Italy.

The successive editions of the *Annuario* trace the history of the remarkable social and economic changes which have taken place in Italy during the last half of the twentieth century, and witnessed the decline of the agricultural sector from its primary position as source of employment and household income, but, instead, saw the development of a flourishing agro-food sector, noted for the high quality of its final products, as well as for that of its technical equipment.

The form and content of the *Annuario* have been adapted over the years to take into account the changing circumstances. The radical restructuring of the format undertaken three years ago has been followed by further adjustments in this edition, with the continued intention of making the volume more synthetic and “user friendly”, but without reducing the subject coverage.

This abbreviated English edition has now reached its thirteenth year. It replaces the summaries in English which followed each chapter in editions of the *Annuario* prior to 1987. The idea which inspired the publication of a separate volume in English was that of making available to a wider group of readers, information on some of the key factors affecting the Italian rural and agro-food sectors – an objective which seems all the more relevant nowadays, considering the increased trend towards globalisation and the importance of the size Italian agro-food sector within the EU.

The Introduction to this volume explains the format of the *Annuario*, Italian version, and provides an overview of the main issues and events affecting the rural and agro-food sector in 1999. It is followed by summaries in English of the twenty six chapters which are published in full in the Italian edition. A series of statistical tables are provided, selected from the 250 tables in the original volume. In the process of selection, which is obligatory for reasons of space but difficult to implement, priority has been given to tables documenting newly available information and information on events of particular interest in the year in question. Several tables which recur each year have been included in the English version on a two-year rotating basis. This year, statistics on production have been included, substituting the tables on foreign trade published in last year's edition.

INEA, the Italian National Institute of Agricultural Economics, was established in 1928 and is a public body, an organ of the State, with autonomous administrative and legal status. The statutory task of the Institute is to undertake surveys and studies on the economic aspects of agriculture and forestry, with special reference to requirements for legislation, rural administration, farmers' and workers' organisations. Since 1965 it has acted as liaison organ of the Italian State to the EU Farm Accountancy Data Network. Sixteen Regional Offices and eighteen Farm Accounting Offices are maintained and coordinated by the Headquarters, which are located in Rome. The Library of the INEA, also situated in Rome and open to the public, houses a collection of more than 27,000 volumes and 600 scientific journals, representing publications from most parts of the world.

Introduction

Since its first edition in 1947, the *Annuario dell'Agricoltura Italiana* (Yearbook of Italian Agriculture) has been an invaluable tool for understanding the changes in the Italian agricultural sector, highlighting the significant events and identifying the gradual structural transformations in progress.

Volume LIII, referring to events in 1999, is divided into six sections, as in the previous year:

- the first section, as usual, offers an analysis of economic events at national and international level;
- the second section deals more specifically with trends in the various components of the agro-food system;
- the third section presents the chapters dealing with factors of production. It includes a chapter on employment in agriculture, where the results of the INEA survey on employment of non-EU immigrants is also reported. It contains a chapter on the land market, with data on the average value of land and land rents, the result of another survey traditionally carried out by INEA;
- the fourth section refers to policies for the agricultural sector, with chapters organised to deal with public intervention and expenditure in agriculture separately, at Community, national and Regional level. In this section a great deal of the statistical information presented is the result of specific surveys carried out by INEA, such as those on Regional expenditure, on taxation and on public research in agriculture; the latter was carried out in collaboration with the National Research Council;
- the fifth section deals with the relationship between agriculture and the environment and agro-environmental policies. There are two chapters: the first deals with nature conservation and the second examines the pressures on the agro-ecosystem and sustainable agriculture;
- the sixth section includes economic results for production in the agricultural, forestry and fishing sectors.

An appendix of statistics with tables referring to Regional results completes the volume, as always, and this year, additional information on the area cultivated for the main crops is included.

This edition also contains two important new themes: fiscal policy in agriculture, a subject already dealt with in previous yearbooks but to which greater attention is given this year, with specific analysis of the structure and quantity of taxation; and water and soil protection, which are dealt with in the chapter on conservation of natural resources.

The edition is accompanied by a CD-Rom containing the time series for 1990-1999 and the tables from the 1999 edition.

* * *

As regards policies, there were several important moves on the part of the European Union in 1999, with wide-ranging implications:

- the introduction of the euro marked the sealing of economic and monetary union between eleven of the European partners and will lead to the adoption of the single currency in 2002;
- in order to improve the European economy's competitiveness, some measures were adopted to modernise Community legislation on competition, promotion of enterprise and innovation; the Fifth Framework Programme for research and technological development and new educational and professional training programmes were approved;
- as regards sustainable development, the EU strengthened legislation on air quality and on waste management, thus, in an international context, supporting the coming into effect of the Kyoto protocol;
- for the process of EU enlargement, in 1999 procedures for preparing twelve candidate countries for entry were drawn up (Central and Eastern European Countries, Cyprus and Malta) and Turkey's candidature was also recognised as legitimate.

As regards agriculture, Agenda 2000 marked an important landmark in 1999 in the process of reform of methods for regulating markets and of structural and rural development. In March, during the Berlin Council, the Heads of EU Member States approved the reform of the CAP and the new financial plans for the Structural Funds programming period 2000-2006. During the year there was approval of the main regulations on the Common Organisation of Markets involved in the CAP reform (arable crops, beef, dairy and wine), on measures on rural development and Structural Funds and, lastly, on the so-called "horizontal

regulation”, which gives Member States the right to intervene, within discretionary limits, in direct subsidy regimes by defining constraints linked to respect for the eco-system for the erogation and modulation of aid.

Respecting the compatibility of international trade agreements on the one hand, and budget limits within the EU on the other, the CAP reform redefined its objectives on the basis of the multi-functional role accorded to agriculture, placing emphasis on the competitiveness of European agriculture, on the enhancement of the quality and healthiness of agricultural and food products, on the consolidation of environmental sustainability in agricultural production and on the administrative and managerial simplification of the CAP.

Turning to national policies, in 1999 there was intense legislative activity, including significant steps forward in the process of reform towards a Federalist state, initiated with Law no.59/97. Indeed, several provisions were made for putting it into direct effect which significantly modified the organisational framework of important sectors of administrative organisation in agriculture:

- the establishment of the AGEA, the Agency for Payments to the Agricultural Sector, which substitutes AIMA, the Intervention Board, marked a fundamental step in decentralising responsibilities in agriculture. The most important element of the provision concerns the transfer to Regional bodies of responsibilities for making payments ;
- the redefinition of the Ministry for Agricultural and Forestry Policies (MIPAF) and its responsibilities, by the legislative decree no.300/99, “Reform of government organisation”: the loss of its mandate for agro-industry, transferred to the Ministry for Industry, Trade and Crafts; the partial loss of responsibilities in forestry policy, passed on to the Ministry for the Environment;
- the structural reorganisation of the agricultural research sector (legislative decree no.454/99) which provides for the union of agricultural research institutes reporting to MIPAF in a single body renamed Council for Research and Experimentation in Agriculture, placed under the authority of MIPAF but with the active participation of the Regions in the phases of planning and management of its activities.

The most significant provisions for the agricultural sector regarded the long-awaited pluri-annual law for the agricultural sector (law no.499/99), passed 13 years after the previous law no.752/86. It defines a common procedural framework for programming for all the public bodies which are involved in the agricultural sector for the period up to

2002. The main agricultural programming instrument is the Document on Agricultural, Agro-food and Forestry planning, which sums up all the different programming documents of the various institutions involved.

In 1999, the implementation of legislative decree no.173/98 on limiting production costs and strengthening farm structures was also initiated.

Amongst the other provisions approved during the year were the reorganisation of the Consorzi Agrari (Agricultural Consortia) and the guidelines for planning and intervention in the Italian citrus sector.

As regards output and economic performance, Italian agriculture achieved good results in real terms (+3.3%) in 1999, but negative results in basic prices (-2.6%). Agricultural production amounted to 85,797 billion lire, reflecting the highest rate of growth in the last decade, due to generally favourable weather conditions.

The increase was due particularly to the results in the tree crops sector, especially olives, in the up-swing of the usual two-year cycle, citrus (about +30%), fresh fruit, and to a lesser extent, vegetable production. In contrast, results for other products and sectors were unsatisfactory, in particular, for wheat (-6.9%), industrial crops (-5.9%) and dried fruit and nuts (-5.9%).

As regards the different geographical areas, all recorded growth: 2.5% in the North-west, 4% in the North-east, 3.8% in Central Italy and 3.4% in the South, which, in contrast with the others, had to recover from the negative effects of the previous season. The similarity of results between areas is very unusual and it is attributable to different combinations of production results in the four areas: cereals, vegetables, grapes and fruit in the two northern areas; cereals, industrial crops and all tree crops in central Italy, and vegetables, grapes, citrus and fruit in the South.

Basic prices of agricultural products fell, due to a further reduction in production subsidies (-2.1%) and to a general fall which affected the prices of most agricultural crops, and particularly hard wheat, soya, sugar beet, flowers and pork. Only the price increases for some vegetables and livestock production managed partially to offset the negative impact of basic prices.

The trend in basic prices for agricultural products was much worse than that of prices for technical inputs (-0.5%). As a result, the agricultural terms of trade in 1999 were once more unfavourable and the sector continues to play an important role within the national economy in the process of limiting inflation, contributing, as always, to the general brake on consumer prices.

Agricultural value added increased significantly in 1999 (+5.3% in real terms), due to the positive trend in agricultural production and the slight reduction in intermediate consumption. As a result of the fall in producer prices, value added, amounting to 56,133 billion lire, showed a much smaller increase at current prices (+1.4%). Although the agricultural sector's contribution to GDP continues to fall, in 1999 agricultural value added recorded the highest rate of increase of all sectors in the national economy, representing the most dynamic growth component of the GDP.

The increase in value added and the simultaneous fall in the number of employed persons in agriculture (-5.6%), caused a significant increase in the per capita value added (+11.5% as compared with 1998), which, as a national average, rose to 50 million lire at constant prices. In the North-west value added was considerably higher than the national average, about 50% more at 74 million lire per person employed in agriculture (+8.4% as compared with the previous year); in the North-east and Centre, levels were around 55 million lire per head, an increase of 7.1% and 15.4% respectively. The South was the only area where per capita value added was below the national average, as usual (39.5 million lire), even though it increased 13.4% in 1999.

With few exceptions, the whole agricultural system in the South is struggling in a state of crisis where old established structural problems, which negatively affect the sector's competitiveness, are exacerbated by a policy which assigns far lower levels of subsidy to Mediterranean crops than to continental crops, and, in addition, does not take into account the area's specific needs. This state of affairs obviously has an impact on the level of profitability of agriculture in the South, which is lower than that of central and northern Italy with their more protected crops. It is also reflected in the continuing trend to make substantial cuts in manpower in the sector, with obvious repercussions on employment levels in the overall economy in the South.

As regards the traditional surveys carried out by INEA at its various regional offices, the survey results on the land market reveal that for 1999 there was an increase in land values of 2.5% as compared with the previous year, and they rose to just over 25 million lire per hectare as a national average. This average price, however, conceals marked differences in land prices, between geographical areas and altimetric areas: there were greater increases in land value in the Po valley basin in the North (in the Po valley land for arable crops can cost between 60-80 million lire per

hectare) and smaller increases or even contractions in price in the Centre and South, particularly in Abruzzo and Calabria and in the disadvantaged mountainous areas. As usual, in contrast to that for urban localities, demand outstrips supply, especially for highly fertile land, with good access and infrastructure. The rate of purchase is still quite low and led by requests from owner-operator farmers who wish to extend the area they own.

The survey on the employment of non-EU immigrants revealed that in 1999 there were just over 92,000 employed in agriculture, an increase of 8% as compared with the previous year. Taking into account the overall reduction in the numbers employed in agriculture, this increase confirms the ever increasing presence of immigrants in agricultural work. About half the non-EU immigrants work in the South. As regards the Centre, Lazio stands out, with more than 8,000, due to the attraction of the capital city. In the North, Trentino-Alto Adige leads, with 12,000 employees. These workers are mainly employed in short-term, labour-intensive crop farming (harvesting), in the tree and vegetable crops sector and in livestock production. There is also an increasing number of immigrants employed in other activities such as agri-tourism and processing of agricultural products. The non-EU workers in agriculture are mainly from north Africa, but an increasing number come from Eastern Europe.

* * *

Thanks go to all the experts, Institutions and bodies that, with their invaluable contributions, have made this new edition of the *Annuario* possible.

President
Prof. Francesco Adornato

PART I

THE NATIONAL
AND INTERNATIONAL SETTING

Chapter 1

The global economy in 1999

In 1999, the global economy recorded quite a rapid recovery from the effects of turbulent financial markets of the previous two years. World economic growth amounted to 3.3%, with 3.1% growth in developed countries and 3.8% growth in developing countries. As regards industrialised countries, the USA's sustained growth continued, while in Europe, both the European Union (EU) and the Euro area recorded an overall contraction in the rate of growth, of 2.2% and 2.3% respectively. In contrast, Japan's overall rate of growth was still poor (+0.3%).

As regards the economic situation in Europe, the EU economy slowed in 1999, recording 2% growth. The rate of growth for the Euro area matched that of the previous year, due to an improved performance by France (+2.7%) and even better results in Ireland, Holland, Spain and Portugal, offset by more modest results in Germany (+1.5%) and Italy.

There were encouraging signs in the employment market, despite critical conditions in many countries. The average rate of unemployment in the Euro area was 10%, a reduction of nine percentage points as compared with 1998. In 1999, the process towards integration of the system of Central Banks was also consolidated; the Central European Bank passed its first monetary policy manoeuvres in the spring. In April, the official interest rate was lowered half a percentage point, following signs of weakness in the economy.

As regards the global food situation, in 1999, markets for the main products recorded variable results, but they were reasonable overall. As in previous years, the demand for imports was led by the Asian markets and those of the countries of the ex-Soviet Union, as well as developing countries in general.

The index of overall production increased both for developed and developing countries, but particularly for the latter, with growth amounting to just under 2%. Overall agricultural production in 1999 was static, however, as compared with population size, mainly because of population growth in developing countries. Production per capita in Africa, for example, remained unchanged while in Central America and the Caribbean it fell by nearly 2.5%.

In 1999, the trend of the previous year continued in European agri-

cultural markets, with slight growth in overall production, but with more varied results between sectors as compared with 1998. Internal demand was relatively unchanged. Farm prices fell further as compared with the previous year, by 4.6% in real terms overall. Despite a contraction in prices of intermediate goods, agricultural income also fell, on average by 3%.

An analysis of trends for real producer prices in EU countries revealed a widespread contraction overall although in differing degrees. In most countries, the fall in prices in real terms was much more marked for livestock production than for crops.

There was a significant reduction in 1999 in prices of intermediate goods used in agriculture, although the contraction was less marked than the previous year. The overall results for 1999 can be attributed to a fall in the prices of fertilisers (-4.8%) and feedstuffs (-7.3%), which more than offset the increase (+0.6%) in energy prices, since the change in market conditions for the latter had not yet had a significant influence on the overall cost of agricultural intermediate goods.

The agricultural terms of trade, which measure the variation in the ratio between the evolution of prices received by producers from sales and that of prices paid in the purchase of technical inputs outside the agricultural sector, reflected the generally unfavourable trend of previous years for the sector. Indeed, in recent years the index has fallen as compared with the average for 1990-91.

Value added and agricultural income both declined in 1999. Measured in real terms, sector value added fell by over 6% in 1999. Agricultural income, measured in terms of value added at factor cost divided by labour units employed in the sector overall – the so-called Eurostat indicator no. 1 – fell by nearly 4% in real terms in 1999. The overall figure for the EU increased as compared with the average for the early 1990s.

In 1999, the framework of European agreements for association was concluded between the EU and the ten countries of Central and Eastern Europe, the CEECs, when the agreement with Slovenia came into force on 1st February 1999.

As regards the 1993 agreement on wine between the EU and Hungary, Bulgaria and Romania, negotiations revising existing concessions were concluded in 1999, following the latest enlargement of the EU. The new agreement modified the preceding one, providing for reciprocal modification of tariffs for some types of wine and an extension until the 31st December 1999 of the reciprocal preferential treatment conceded by the EU to the three countries.

The conclusion of numerous agreements for partnership and co-operation strengthened relations between the EU and countries belonging to the CIS. In 1999, agreements came into force with Azerbaijan, Armenia, Uzbekistan, Georgia, Kazakhstan and the Kyrgyz Republic, which are in addition to other important agreements already concluded with Russia, the Ukraine and Moldavia.

The agreements for partnership and co-operation are part of the EU's global strategy aimed principally at better co-ordinating and integrating the various political and economic instruments implemented to strengthen relationships between the EU and CIS countries. The European Council approved a common strategy in 1999 for Russia and, subsequently, for the Ukraine. It aimed to strengthen the strategic partnership between the EU and each of the two countries and to create means for implementing and developing that partnership. It is the first example of implementation of the common foreign policy and security measures created by the Amsterdam Treaty (art.13).

In April 1999, the third Euro-Mediterranean conference was held in Stuttgart and it underlined the priority objectives defined at the 1995 Barcelona conference. It was decided that the partnership should be given a new impetus in each of the three sectors identified (political dialogue and security; economic and financial co-operation; social, cultural and human issues), above all by improving intra-regional and sub-regional co-operation. The Euro-Mediterranean framework defined at the Barcelona conference included the following agreements: 1st March 2000 the agreement between the EU and Morocco came into force (the third after those with Tunisia and the Palestinian Authorities); the agreements concluded with Israel and Jordan were still being ratified by the national parliaments of EU member states; in contrast, the Euro-Mediterranean agreements with Algeria, Lebanon and Syria were still under negotiation, while Egypt had concluded negotiations in June 1999.

Following the start of negotiations for the admission of Cyprus in March 1998, in 1999 the European Commission decided to propose a partnership for admission of Malta, asking Malta to prepare a national programme to adopt the Community acquis.

Among the numerous measures of political, economic and commercial co-operation initiated by the EU around the world through the negotiation and conclusion of various kinds of agreement, there were three of particular importance in 1999: the free trade agreement between the EU and the Republic of South Africa, reached after more than four years of bilateral negotiations; the intensification of negotiations between

the EU and ACP countries (Africa, the Caribbean and the Pacific), aimed at achieving a new twenty-five-year partnership agreement for the development of these countries and thirdly the conclusion of the inter-regional co-operation framework agreement between the EU and Mercosur (Argentina, Brazil, Paraguay and Uruguay), signed in December 1995. More specifically, the agreement with the Republic of South Africa (a new country participating in the Revised Fourth Convention of Lomé) is the first agreement negotiated by the EU with a third country which, on the basis of the requirements imposed by the World Trade Organisation, includes trade relating to all productive sectors. The essential core of the agreement is the agricultural sector, for which a freeing of trade is planned between the parties, variable according to the different lists of products considered, on the basis of their commercial sensitivity and export interests.

As regards the agreement with Mercosur, one of the essential components on which it is based is the creation of a free trade area which takes into consideration the sensitivity of certain products, namely agricultural, whilst fully respecting the rules of the WTO. The decision taken by the European Commission is important because it forms the basis for liberalising trade with Latin America. This agreement is accompanied by another important agreement for co-operation with the Andes Communities (Bolivia, Colombia, Ecuador, Peru and Venezuela), which came into force on 1st May 1998. In addition, the EU intends to initiate negotiations for an agreement for political and economic association with Chile. On the basis of the agreement for economic partnership, political co-ordination and co-operation between the EU and Mexico, signed in December 1997, further negotiations were initiated in 1999 to define preferential measures on which the liberalisation of trade will be based, also for agricultural products, between the two areas.

Chapter 2

The Italian economy in 1999

In 1999 the Italian economy grew at a rate similar to that of the previous year. GDP had increased by 1.4% at constant prices at year end, as compared with a 1.5% increase in 1998. During the year, positive results in the reordering of public accounts were consolidated, with a reduction both in the ratio between deficit and GDP and that between public debt and gross product.

Price increases accelerated in the second semester, due both to the dynamics of international prices of energy products and to domestic causes. The return to price rises, however, did not affect salaries, and there were positive results in 1999 also for employment.

Value added in industry increased in real terms by 1.7%, slightly less than in 1998.

Domestic demand overall slowed as compared with previous years. The annual average increase was 2.3% in real terms.

The slowing in domestic demand was accompanied by a markedly negative trend in foreign trade, which was one of the major braking factors for the Italian economy in 1999. Exports fell by 1.8% at current prices, recording the lowest level in real terms since 1992; in contrast, total imports increased by over 4% at current prices in lire. As regards imports, the greatest rise was in those from non-EU countries. In Europe, Holland and Germany recorded substantial increases, but there was a reduction in purchases in Spain. There was a significant contraction in the overall trade surplus with EU countries, which fell from almost 7,500 billion lire in 1998 to just over 1,000 billion lire the following year. As regards trade with the rest of the world, there were notable increases, although their absolute value is more limited. This was the case for purchases in Russia, non-EU European countries and oil-producing countries. The overall balance with these areas in 1999 was positive, amounting to just under 25,000 billion lire, although this represents more than a 33% fall as compared with the previous year.

The negative trend in the balance of trade contributed to the significant reduction in the surplus on the current account of the balance of payments, which fell by over 20,000 billion lire, as compared with 1998.

The surplus has continued to fall, however, after the peak reached in 1996. In contrast, the balance of services suffered less, although in this case too, the surplus was lower.

The slow improvement in the employment market continued in 1999. Employment increased by 1.3%, just under the average for the Euro area. Once again, the increase was mostly due to atypical, part-time and temporary contracts, a phenomenon linked in part to the flexibility needed for the development of new technologies.

As regards earnings, increases were generally in line with programmed inflation rates. Salaries overall increased less than the previous year, rising by 2% (+2.4% in 1998).

The overall index of consumer prices rose by 1.7%, while that for families of manual and office workers fell by 1.6%.

The ratio between budget deficit and gross product fell by 1.9%, one base point below the objective indicated by the Paper on Economic and Financial Programming. At the same time, the ratio between budget deficit and GDP fell from 116.3% in 1998 to 114.9%, a greater reduction than the programmed objective.

National agricultural output increased slightly in 1999 (0.6%), just less than the increase for 1998; the overall figure conceals a substantial rise in quantity (+3.3%) accompanied by a fall in prices (-2.6%).

A further reduction in value of intermediate inputs for agriculture was recorded, in line with the trend of recent years and due, above all, to the contraction in quantities used. This contraction is, in turn, the result of a contraction in agricultural activity in many sectors, along with the incentives to adopt methods of extensive agriculture and those with low environmental impact.

Agricultural value added at base prices increased significantly more at constant prices than that in other productive sectors (+5.3%), representing a considerable acceleration as compared with 1998, when sector growth was in line with the overall average. In contrast, the share of production subsidies on value added was much higher in agriculture than the other productive sectors, amounting to over 11% in 1999, as compared with less than 1% for the latter. The incidence was, however, reduced as compared with 1998, when it stood at more than 15%.

Value added per unit of labour in agriculture, forestry and fishing was much lower than in other sectors; valued at 1995 prices, it was about half the average for the industrial and services sectors. However, as compared with the previous year, it increased significantly, by over 11% and was over 50% higher as compared to the 1992-93 average, showing a significantly greater increase than that recorded for the other sectors.

As in previous years, the number employed in agriculture fell; during 1999, about 67,000 jobs were lost in the sector, mostly in the self-employed category and in southern Regions. In 1999, as previously, retirement represented a considerable portion of the contraction. Movement in the index of official wages was generally in line with other productive sectors in 1999, whereas the incidence of social security contributions on the income of employees was lower, equivalent to 12% in agriculture, as compared with an average of 27% in the rest of the economy.

PART II

THE AGRO-FOOD SYSTEM

Chapter 3

Production and value added in agriculture

In 1999, production at basic prices in the agricultural, forestry and fishing sector amounted to 85,797 billion lire at current prices, a slight increase as compared with the previous year (+0.6%). The increase was the result of a 3.3% growth in production accompanied by a negative trend in basic prices, which fell on average by 2.6%.

Among the different sub-sectors, forestry recorded a 13.7% rate of growth), although this was offset by a considerable contraction in prices (-8.6%). In contrast, the negative trend for the fishing sector continued, caused by a state of crisis which has been affecting it for some time. The more marked contraction (-5.5%) as compared with the previous year was the result of further restrictions on fishing in the Adriatic sea, alongside the usual ones, as a consequence of the war in Kosovo. However, the loss in production was entirely compensated by a good recovery in prices (+6.2%).

As regards agricultural production, the positive results were achieved due to generally favourable weather conditions, but they are worthy of note as they represent the highest increase in growth in the last decade. The increase was mainly due to tree crops, particularly the olive sector in an up-swing year, citrus fruit (about +30%) and fresh fruit. The vegetable sector also contributed, to a lesser extent, thus managing to offset the unsatisfactory results from other sectors, including the reduced harvests of wheat (-6.9%), industrial crops (-5.9%) and, although of lesser importance, dried fruit and nuts (-5.9%).

There was no differentiation between geographical areas. The rate of growth was uniform throughout the country: 2.5% in the North-west, 4% in the North-east, 3.8% in Central Italy and 3.4% in the South. In contrast with the other areas, the South had to recover from the negative effects of the previous season. This uniformity of results is unusual, although it can be attributed to different combinations of production results in the four geographical areas: cereals, vegetables, grapes and fruit in the two northern areas; cereals, industrial crops and tree crops in the central regions and vegetables, grapes, citrus and fruit in the South.

Despite the oscillations characterising agricultural production in the South in the last decade, a longer-term analysis reveals that the average

annual rate of growth of agricultural production in the South amounted to about 0.4%, highlighting a small but positive growth, just as for the Centre-North, although in this case results were characterised by greater stability over the seasons.

Overall expenditure by agricultural producers for intermediate inputs in 1999 amounted to 26,170 billion lire at current prices, a slight reduction as compared with the previous year, reaffirming the downward trend which began at the beginning of the 1990s. Some items of expenditure contracted (fertilisers, anti-parasitic treatments, feedstuffs, electricity, credit and insurance) in line with the general trend to cut production costs and rationalise the use of technical inputs. Items used to a greater extent in 1999 were irrigation water, which recorded the highest rate of increase (+4.2%), due to the well-known problems of drought which are increasingly affecting Italy, with consequent problems in water supply for some areas.

Prices of technical inputs fell slightly (-0.5%). All items contributed to this result except for electricity (+5.8%), affected by the marked increase in the price of agricultural diesel in the last months of the year, and other goods and services (+1%).

Basic prices of agricultural products also fell (-2.7%) because of the further reduction in product subsidies (-2.1%) – in particular those for the cereals sector (-6.6%) – and because of a general downward trend affecting most agricultural crops and particularly hard wheat, soya, sugar beet, flowers and pork. Only the price increases for some fresh fruit and vegetable crops and livestock managed partially to reduce the negative impact of basic prices.

The within-sector terms of trade between prices in agriculture were unfavourable for the sector in 1999; there were once more repercussions on producer income, creating a climate of growing dissatisfaction. Nonetheless, agriculture continues to play an important role in the process of limiting inflation in the national economy, contributing, as always, to the general brake on consumer prices.

The favourable trend in agricultural production and the slight reduction in the use of intermediate goods resulted in significant growth in agricultural value added in 1999 (+5.3% in real terms). As a result of the contraction in producer prices, value added at current prices, 56,133 billion lire, recorded a more modest increase (+1.4%). Although agriculture's contribution to GDP continues to fall, agricultural value added in 1999 recorded the greatest increase (+5.3%) in the national economy, representing the most dynamic component of growth of the GDP.

All four main geographical areas recorded a significant increase in value added in real terms: about 6-6.5% for the North-east and Central Italy and just under 4.5% for the North-west and the South.

Growth in value added and the usual contraction in the number employed in agriculture (about 5.6%) caused a significant increase in per capita value added (+11.5% as compared with 1998), which rose to 50 million lire at constant prices, as a national average. In the North-west, value added was considerably higher than the national average (about 50% more), equivalent to 74 million lire per person employed in agriculture (+8.4% as compared with the previous year); in the North-east and Centre, levels were around 55 million lire per capita, an increase of 7.1% and 15.4% respectively. In the North-east the increase in value added per person employed generally reflects the positive results of a favourable agricultural season, given that the number employed hardly changed (-0.4%). In contrast, in central Italy the excellent results were also accompanied by a substantial reduction in agricultural labour of around 8.7%. Only in the South was per capita value added below the national average, as usual (39.5 million lire), even though it increased by 13.4% in 1999. In this case, too, the increase was due both to good results for agricultural production and to a further reduction in manpower in the sector.

With few exceptions, the whole agricultural system in the South is struggling in a state of crisis where old established structural problems affecting the sector's competitiveness are exacerbated by a policy which assigns far lower levels of subsidy to Mediterranean crops than to continental crops, and does not take into account the area's specific needs. This state of affairs obviously has an impact on the level of profitability of agriculture in the South, which is lower than that of central and northern Italy with their more protected crops. It is also reflected in the continuing trend to make substantial cuts in manpower in the sector, with obvious repercussions on employment levels in the overall economy in the South.

Chapter 4

The food industry

1999 was a positive year for the Italian food industry, with better results as compared with previous years and as compared with other sectors of the manufacturing industry, and it again demonstrated the traditional anti-cyclical tendencies of the food industry.

The increase in production had a limited effect in terms of value added, which showed a 0.4% reduction overall as compared with 1998, due to falling producer prices. Indeed, value added at factor cost at constant prices increased by 4.2%, fully reflecting the growth in production, consolidating and improving the upward trend which began in 1997. In contrast, value added at factor cost at current prices, amounting to about 42,500 billion lire, increased by only 2.2%, representing slower growth as compared with 1996 and 1997 (+4.2%), and 1998 (2.8%). As regards value added at market prices, growth in the food industry amounted to 4.7% at current prices, a fall as compared with the 7.2% increase of 1998. In absolute terms the increase amounted to about 2,500 billion lire; as a result, value added at market prices for the food industry rose to 57,527 billion lire.

The positive trend in production was due to expansion in several sectors: fish, dietary and infant foods and distilled alcoholic beverages; in the latter case, the recovery was so marked in 1999 that levels rose more than 20% as compared with 1995.

Several sub-sectors expanded between 1995 and 1999 but at slower rates than the food industry as a whole; the best results were from the aggregate category "various food products" (+5.1%) and meat (4%). The coffee processing sector also expanded, whereas the prepared soups category was in marked decline (-25% as compared with 1995) along with frozen food. In contrast, there were good signs of recovery for the meat processing sector: salted meat production (salame, prosciutto etc.) continued to expand in the late 1990s while the crisis for canned meat continued, with levels of production 20% down as compared with 1995.

Production in the sugar industry showed signs of recovery following a substantial contraction in 1998; in contrast, the recovery in both the dairy and beer sectors stagnated.

In 1999, turnover for the Italian food industry increased by 1.2%, representing slower growth than the previous year (+1.6%) and slower growth than the manufacturing industry as a whole (+2.2%). The increase in turnover was lower than that of production due to the contraction in producer prices. As a result, the dynamic of domestic turnover slowed, increasing by 1.1% as compared with 2.8% for the manufacturing industry. As regards the foreign component, the increase amounted to 2.3%, representing a contraction as compared with the average for the period 1995-99.

At the level of sub-sectors, the index of turnover recorded significant increases in the case of drinks (+5.4%), preserved fruit and vegetables and the aggregate category "other food products" (+3.5%), due to the positive trend for both domestic and foreign components. In contrast, there were substantial contractions: in the fish sector (-3.4%) in domestic turnover; in the pasta and milling sector (-5.7%) which suffered a particularly marked reduction in foreign turnover due to the collapse in exports of pasta to Russia; in the oil sector (-7.5%), where the sustained increase in foreign turnover did not offset the losses on the domestic market.

There was little change in the list of top twenty companies in the Italian food industry, where Acqua S. Benedetto rose to 19th position and Segafredo-Zanetti dropped out of the top twenty. Despite sales of some plants and branches of activity, Nestlé Italiana was confirmed top of the leading group, while Ferrero was overtaken by both Barilla, which continues to rise in the rankings, and by Unilever Italia. Galbani remained in fifth position while Eridania consolidated its position by incorporating the its partially-owned subsidiary Cerestar Italia. It is likely, however that the rankings will change considerably following the acquisition of Cirio's dairy branch by Parmalat, which was in seventh position in 1998 with a turnover of just under 1,700 billion lire.

Data from balance sheets show a further increase in the overall turnover of the top twenty companies in 1998, amounting to about 1,200 billion lire; in contrast there was a further fall in employment, of just over 1,000 employees. The greatest increases, both in percentage terms and in absolute terms, were those of San Pellegrino and Eridania, and derive from the incorporation of companies either partially-owned or newly purchased. Significant internal growth, of between about 100 and 200 billion lire, was also recorded for two of the leading companies (Barilla and Unilever Italia) and for three other companies in the top twenty (Plada Plasmom, now Heinz Italia, Heineken Italia and Acqua San Benedetto).

An examination of the top ten food groups operating on the Italian

market for food products reveals a noticeable change. The Barilla group rose to the top position in the national table, with turnover rising to about 3,800 billion lire, thus confirming its position as one of the few groups able to develop internal growth in a period (1995-98) not particularly positive for the food industry as a whole.

In 1999, new developments emerged in the reorganisation of the dairy sector, and particularly in the drinking milk sector, with the purchase of Cirio's dairy activities by Parmalat, the main national group in this sector and one of the leading groups internationally. The sector is set to undergo further radical changes in 2000 following the planned sales of significant municipal enterprises and, in particular, the Centrale del Latte di Milano.

At the end of 1996 there were 69,090 enterprises operating in the food industry, employing about 432,616 employees and with an average size of 6.3 employees per enterprise. There was, therefore, a 12.6% increase in the number of enterprises as compared with 1991, accompanied by a 5.1% fall in employment. In reality, the increase in the number of enterprises can be almost entirely attributed to a rise in very small businesses, as revealed by the intermediate ISTAT Census, i.e., enterprises with one or two employees. This category increased by more than 33% between 1991 and 1996, from 26,207 to 35,345 units, and the increase was accompanied by similar expansion of over 25% in employment. This anomalous increase may be attributed to the various criteria for classifying enterprises, but above all to the way data was collected for the intermediate Census.

The sectors recording the greatest increase in the number of employees (along with an increase in the number of enterprises) are those of bread and fresh cakes and of ice cream production, two sectors which always include a large number of micro-enterprises (bakers, ice cream makers, etc.). Growth was particularly marked in the bread and cakes sector, with an increase of over 4,000 employees and of enterprises (+3.4% and +12.7% respectively), while in the ice cream sector there was an increase of over 2,700 employees and nearly 2000 enterprises (47.4% and 252%).

The North West is the geographical area with the greatest number of food enterprises (more than 15,000) and employees (about 140,000); it is also the area which suffered the lowest percentage fall in the number of employees (-1.8%). The North-east is still the second most important area, with a slight fall in the number of employees (almost 125,000) and just under 15,000 enterprises. In contrast, there were significant falls in

the number of employees in Southern Regions, and above all in the Centre, where employment numbers fell nearly 10% between 1991 and 1996. Southern Italy remained the area with the greatest number of enterprises (more than 18,000, or 27% of total). The more stable situation regarding employment levels in northern areas slightly emphasised the geographical concentration of the food industry in terms of employees, which amounted to over 61% for the whole of northern Italy.

Chapter 5

Organisations for improving the economic position of agricultural producers

In 1999 there were a number of programmes and legislative initiatives which, although so far only at the level of general principles, are likely to bring about significant changes to the types of economic organisations for agricultural producers and to the relationships between them.

The Programming Document on agriculture, agro-food, the food industry and forestry (DPAF) for the period 2001-2003, drawn up in compliance with art.2 of law 499/99, identifies negotiated programming (territorial pacts, and programme contracts) as the support measure for projects of economic association and interprofessional coordination and it stresses the need for legislative reorganisation regarding economic organisations of producers. The draft law presented in 1999 by the Government regarding “Dispositions for opening and regulating markets” delegates to the Government responsibility for modernising the agricultural, fishing and aquaculture sectors and also sets out several important reforms to modify and support interprofessional coordination and forms of concentration of supply.

In 1999, the debate over the reform of company law also intensified, dealing also with the model of the cooperative enterprise and the redefinition of practical ways of implementing the principles of cooperation, in line with the objectives of economic feasibility and solidarity associated with this type of enterprise. Particular attention was paid to the idea of introducing two types of cooperative firms, distinguishing between “market” and “protected” cooperation (the latter receiving public subsidies).

In 1999, the reform of the system of Consorzi Agrari (Agricultural Consortia) was finally approved (law 410/99), and the Consortia became cooperatives, to all intents and purposes. The law sets out important provisions for Consortia currently in a state of declared bankruptcy and for the payment of credit they hold with the State for the management of obligatory buying into intervention. The approval of law 410/99 represented an intensification in the process of restructuring Consortia and agree-

ments between them and between the Consortia and cooperatives, particularly in the services sector.

In contrast, the implementation of legislative decree 173/98 has met with numerous difficulties, as has the implementation of programme contracts regarding agriculture, agro-industry and fishing.

The process of reorganising and restructuring the cooperative system is proceeding fast: at the end of 1999, there were over 7,300 enterprises associated with the national Unions of cooperatives, with just under one million members and turnover of more than 37,000 billion lire. As compared with 1995, there was a marked reduction in the number of cooperatives (-30%) and in the number of members (-25%, or 330,000 units less in absolute terms), and turnover was also slightly lower (-4%). In terms of average value, turnover per cooperative amounted to just over 5 billion lire in 1999 (as compared with 3.7 billion lire in 1995), with an average of 135 members.

The abrogation of Regulation (EC) 952/97, regarding the regime of subsidy for producer associations and their unions, in the form of funding for establishment and running costs, put an end to the type of association based on Regulation (EEC) 1360/78, and by the corresponding Italian law 674/78 at the end of 1999. Intervention from national legislators is, therefore, urgently required to set out the new normative and operative framework for associations (or organisations) of agricultural producers, with particular reference to their legal status and to the responsibilities accorded them. Prevailing opinion identifies the need for associations to take on a company role and to take physical possession of their members' product and direct responsibility for its marketing. While waiting for the new national normative framework, the opportunities offered by the new orientation of the European Union regarding state subsidy also permit the Regions to define the requirements for producer associations and to provide the relative regimes for support: Law 59/2000, recently approved by the Emilia-Romagna Region, is significant in this respect, relating to the "Discipline of producer organisations and inter-professional organisations for agro-food products".

The problems in interprofessional contracts i.e. contracts which determine prices and conditions for transactions along the filière, continue, due not only to the growing openness of the markets to mass production but also to the new orientation of common agricultural policy in the support of prices and markets and to agricultural associations' historically poor ability to represent and organise themselves, as they struggle to appear as the exclusive and credible spokesperson at the negotiating table.

There is, however, greater dynamism as regards production with specific quality features, and production associated with a limited geographical area, in particular for products which have received Community DPO or PGI recognition.

It is therefore even more urgent that the norms regarding interprofessional agreements and bodies be fully reformed, particularly considering the poor implementation of law 88/88 and the lack of implementation of legislative decree 173/98.

Interprofessional agreements were reached in the sectors of tomatoes and of potatoes for processing, for sugar beet and seed-beet, tobacco, cow's milk and hard wheat. Interprofessional agreements and organisations are under consideration for the olive oil and fresh fruit and vegetable sectors.

Chapter 6

Italian foreign trade in agro-food products

In 1999, Italy's overall balance of trade worsened significantly, for the third consecutive year, although it still recorded a surplus. The surplus was reduced from 46,090 billion lire in 1998 to just over 31,000 billion lire in 1999, while the normalised balance (ratio between the difference in value between exports and imports and the sum of their combined values) lost nearly two points, amounting to 3.9%.

The agro-food sector's share of overall trade contracted further for imports, from 11.9% to 11.2%, while the share for agro-food exports slightly increased, rising to 7.1%. As a result, for the second consecutive year, agro-food trade, in contrast with total trade, registered a positive trend. Indeed, agro-food exports increased (+3.5%), while overall exports fell and for imports the opposite was true, with an overall increase contrasting with a reduction (-3.2%) in agro-food imports. Consequently, the agro-food deficit contracted significantly, by about 2,500 billion lire in absolute terms, from nearly 16,000 billion lire in 1998 to 13,540 billion lire in 1999. There was also a further slight improvement in Italy's agro-food normalised balance, which gained nearly one and a half points as compared with the previous year and amounted to -18.6%, about half that recorded in the early 1990s.

In 1999, Italy achieved a positive balance of trade for all the main geographical areas world-wide, with the exception of "other Eastern European countries", where the marked reduction in exports in 1999 caused a deficit, although modest in size. The share of the agro-food component on trade, considerably higher for imports than for exports, varies greatly depending on the area under consideration. As regards trade with EU member states, the share is much higher than average both for imports, where it is considerable, (12.6%) and for exports, where it is lower but still significant (8.4%). These differences are even more marked for "the rest of the world", where the agro-food share reaches 15% for imports and just 3.3% for exports, and for Mediterranean countries, where agro-food trade represents 8.2% of imports and only 4.1% of total exports.

An analysis of the Italian agro-food trade by geographical area reveals that the improvement in the normalised balance in current lire for

1999, equivalent to 3.2 points overall, is due entirely to trade with developed countries. Indeed, the normalised balance improved with the EU (+2.9%) and especially with "other developed countries", where it gained 13.6 points, while it worsened for all the other areas, particularly with Mediterranean countries and with "other Eastern European countries".

The improvement in the agro-food normalised balance with the EU is due mainly to a positive trend in exports, in value terms (+5.5%), boosted by a substantial increase in volume (+13.6%), which more than offset the reduction in the "price" component (-7.1%).

The marked differentiation in trade trends in 1999 contributed to the significant modification in the share of the various geographical areas as sources or market outlets for Italy's overall foreign trade. The EU share of Italian foreign trade increased for the second consecutive year, and to a greater extent as compared with 1998, gaining between one and two percentage points, both in overall trade and in the agro-food component. The EU's share for Italian imports amounted to 62% of total imports and to over 69% of agro-food imports, while Italian exports to EU countries rose to 57.4% of its total export trade, and to 67.7% for the agro-food component.

As regards imports, a study of individual agro-food sectors reveals that the citrus sector recorded significant growth in purchases in current lire (+26.1%), followed by cereals derivatives (+19.4%); in both cases there was a marked increase in the "quantity" component (+17.5% and +17.1%, respectively). In contrast, for the pulses and fresh vegetables sectors the increase in the "price" component (+9.9%) was the main influence on the rise in imports (+13.3%). Other sectors which recorded above average increases in value were drinks (+9.4%, due, above all, to an increase in quantity), flowers and ornamental plants (+7.7%), processed fruit (+5.8%) and oils and fats (+6.3%). In contrast, reductions in value were recorded for: coarse fibrous crops (-24.4%), due both to a fall in quantity and in price; oilseeds (-18.1%); coffee, tea and spices (-15.2%) and oilseed cake and flours (-12.5%), above all due to a fall in relative prices.

As regards exports, the sectors which recorded the greatest increases were: flowers and ornamental plants (+8%, due to rises both in quantities exported and in prices); processed vegetables (+6.1%, due to increased quantities); cheese (+7.6% also due to increased quantity) and above all, wine (+8.9%), for the third consecutive year, the rise being due entirely to a substantial increase in quantity (+14.4%) which compensated for a fall in prices (-4.7%). In contrast, the sectors which recorded the

greatest falls in export levels in 1999 were dried vegetables (-11.5%), citrus fruit (-11.9%), uncured tobacco (-4.8%) and oilseed cake and flours (-9.8%).

It is worth noting that nearly 85% of Italian exports are made up of products destined for final consumption, of which 16.9% come from the primary sector and 67.7% from the food industry. It is obvious, therefore, that Italy is specialised in the production and export of agro-food products, as its trade position confirms for these categories, the only ones with a positive normalised balance: +6.2% for agricultural products and +22.2% (which is constantly rising) for processed products.

As regards imports, it should be noted that purchases of inputs for the food industry represent a third of Italian agro-food imports, of which 11.9% are primary agricultural products and 23.7% are semi-processed products.

In 1999, there were contrasting trends regarding products for final consumption, the most dynamic component of the agro-food trade balance. As regards non-processed agricultural products, imports increased quite significantly (+6.1%), while exports fell slightly (-0.9%), resulting in a worsening of the normalised balance. In contrast, as regards processed products for consumption, exports (+5.8%) increased more than imports (+3%), due to considerable rises in quantities (+11.4%). Nearly all the other items of the trade balance recorded a reduction in the absolute value of trade, which was particularly marked for imports of primary agricultural products (-10.9%), food industry products re-utilised in the primary sector (-12.5%) and other food industry products (-13%), as well as for exports of reutilised agro-food industry products, whether reutilised within the agro-food industry (-6.8%) or in the primary sector (-9.8%).

Chapter 7

The domestic market

New official statistics show that there was a slight increase in the number of food retail outlets as compared with 1998 (224,251 outlets, or +0.1%), due to an increase in the South. In contrast, there was a fall in the number of mobile outlets, particularly marked in the food sector (12,900 units, or -12%). The number of wholesale outlets also fell (31,825, or -0.7%).

The latest statistics confirm the trend, already apparent in recent years, towards a static situation, in which modern retail distribution (self service, supermarkets and hypermarkets) accounts for about 66-67% of overall grocery sales; a further 8-9% is accounted for by discount stores (2,531 outlets). In 1999, the share of the category "self-service" outlets fell to about 17% of grocery sales in modern retail distribution, that of supermarkets remained stable at about 34-35%, whereas that for hypermarkets rose three percentage points, reaching a 12.9% share. The hypermarket category (251 stores) recorded a 4-4.5% expansion, with sharper increases in overall sales area and in the average number of employees per outlet. The greatest increases in the number and size of hypermarkets was recorded in the South and the North-west. The number of supermarkets also increased (5,892 outlets, or +8% as compared with 1998), with an accompanying increase in overall sales floor area, particularly in the South, although the highest concentration was still in the North, with 54% of outlets and 58% of sales area. After the stationary situation in 1998 (+0.2%), department stores also expanded significantly (7.4%) and 164 stores out of a total 971 had a food department. The number of cash and carry outlets remained static (283) but both sales area and the number of employees fell.

As regards food consumption, the change in patterns of consumption has not been matched by a similarly marked change in quantity of consumption, already in an evidently mature phase. Indeed, after a gradual contraction throughout the period 1992-96 in real terms, food consumption levels were almost stationary in 1997 (+0.4%) followed by only a very slight recovery in 1998 (+0.8%), despite food price increases well below the rate of inflation. Nonetheless, this slight recovery was not main-

tained in 1999. The stationary situation stems from a contraction of 0.3% in food products in the narrowest sense, and increases, of 3.4% and 1.3% respectively, for soft drinks and alcoholic beverages. In short, the share of expenditure for food fell from 16.2% in 1998 to 15.8% in 1999.

The new lifestyles and types of consumption have had a significant impact on daily eating habits, with growing emphasis on the evening meal, on eating outside the home, which has become more frequent, and on diet itself, which tends to be lighter. The most recent ISTAT data (1998) confirm this growing preference to consider the evening meal as the main meal of the day (from 17% in 1993 to 21% in 1998), especially in cities. Diminishing emphasis on lunch is accompanied by a more widespread habit of a substantial breakfast, especially among young people. As eating out becomes more frequent, the structure of family food expenditure is also changing. It is estimated that in 1999 expenditure for eating out amounted to around 102,000 billion lire, just over a third of total food expenditure for Italians (home and eating out). As regards diet, ISTAT data from 1998 show that there is a continued national trend with no notable differences in types of food expenditure between the various geographical areas. Average expenditure for Italian families on food and drink amounted to about 782,000 lire per month. According to different estimates for 1999, pasta has been substituted as the Italians' preferred food by milk and cheese, thanks to some "trendy" products such as yoghurt and fresh cheese. Furthermore, these estimates also confirm the contraction in consumption of fresh products such as fruit and vegetables, already noted by ISTAT for the period 1993-98. In contrast, meat consumption appeared to be recovering.

In accordance with Regulation (EC) no. 2081/92, which established protected denomination of origin (PDO) and protected geographical indication (PGI), 105 Italian products have received official recognition. The latest products to receive recognition were: Extra Virgin Olive Oil from Lametia, Balsamic Vinegar from Modena, Balsamic Vinegar from Reggio Emilia, Olives from Bella di Daunia, Chestnuts from Monte Amiata. Italy has the greatest number of products recognised, except for France and its leading sector is cheese, with 30 PDO and PGI, followed by fruit, vegetables and cereals, with 26, salted meat with 24 and olive oil with 21. Similar recognition has rarely been accorded for fresh meat, bread and cakes, honey and other agro-food products. As regards geographical location, the main share goes to the North (53), followed by the South (33) and Centre (14) three products have been recognised for the Centre-North (mushroom from Borgotaro, Mortadella from Bologna and Vitel-

lino Bianco (white veal) from the central Apennines) and 2 for the Centre-South (Mozzarella di Bufala Campana (made from buffalo milk), and Pecorino Romano cheese. In contrast, Certification of specificity, in accordance with Regulation 2082/92, has been less successful: just one recognition obtained by Italy, for Mozzarella made from cow's milk.

Recognition of Denomination of Origin has also been accorded at national level for some products. The decree of 20th July 1999 accorded transitory protection for the geographical indication of Sorrento Lemon while waiting for Community registration; on 28th March 2000 the same protection was obtained for Amalfi Coast Lemon. Essential bergamot oil from Reggio Calabria obtained Denomination of Origin (law no. 39 of 25th February 2000), aiming to protect, strengthen and improve the filière of a traditional Calabrian production destined mainly for the perfume industry.

As regards wine, 6 new DOC were recognised: Atina in Lazio, Valpolicèvera in Liguria, Sovana, Capalbio and Cortona in Tuscany and Collina Torinese in Piedmont; in early 2000 the vino d'Orcia in Tuscany and Merlara in Veneto were also accorded DOC. The number of DOC wines in Italy amounted to 317, of which 21 are DOCG. IGT wines numbered 117, the latest of which to be recognised was the Grottino di Roccanova, in Basilicata.

During 1999 and early 2000 several legislative provisions and plans were developed at national level in favour of typical products. The aims were: to promote the marketing of typical products with measures which encourage a greater link between the various parts of the filière; to strengthen the structure of processing enterprises and to introduce a system of certification of products. At the same time, these measures aimed to safeguard the traditional and typical nature of Italy's agro-food heritage. The system of aid for strengthening and developing processing and marketing enterprises in the agricultural sector (implementation of art.13 of legislative decree no. 173/98) is undoubtedly the most interesting and most welcomed by operators. The three-year intervention programme, set out in regional and multi-regional operative programmes, provides aid to carry out initiatives aimed at improving the commercial value of agricultural production, and particularly of so-called typical or quality products in areas where these products have not been adequately promoted. The aid, worth 140 billion lire, benefited enterprises and associative forms in companies. The CIPE deliberation of 6th August 1999 accorded 105 billion lire for the "Special project for inland areas in the South to promote typical products", aimed at improving marketing, pro-

motion of typical products and the modernisation of plants in line with health and hygiene norms in inland areas of the Marche, Lazio, Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicily and Sardinia. The main sectors affected are: olive oil, dairy, forest products, processed fruit and vegetables and organic products. The "Regulation introducing norms to identify traditional products" issued with MIPAF decree no. 350 of 8th September 1999 (implementation of legislative decree 173/98, article 8), established a national list of traditional agro-food products and allows enterprises producing them to obtain exemption from the food hygiene norms set out in legislative decree no.155/97 in compliance with Community regulations. The decree requires Regions and Provinces to provide lists of its traditional agro-food products by 12th April 2000, supplying information on each product regarding its features, methods of production, material and equipment used and the place of production, conservation and maturation. The aim of the initiative is to document Italy's rich food heritage, protecting tradition and typical features linked to production and conservation methods that are no longer in line with Community hygiene standards.

As regards checks on food fraud in Italy, the Central Inspectorate for the repression of fraud issued the following data: in 1999, 15,276 firms were checked, and 24,858 inspections were made; there were 2,469 firms which had infringed norms, of which 414 were penal infringements and 3,657 were administrative. There were once again a substantial number of violations in the wine sector.

PART III

FACTORS OF PRODUCTION
IN AGRICULTURE

Chapter 8

The industry for production of technical inputs

In 1999 Italian farmers spent around 18,300 billion lire for the purchase of industrially produced technical inputs, equivalent to 21.3% of total value of production in the primary sector: This represented a very modest increase and confirmed the general stagnation of demand in the late 1990s. Expenditure was mainly on the purchase of feedstuffs, which took 44% of the total, but the share of agricultural machinery also increased, rising from 27% in 1995 to 34% in 1999, while purchases of agrobiochemical products fell.

The declining use of fertilisers continued, in line with an almost constant trend in the late 1990s. In contrast to the contraction in traditional fertilisers, there was a further increase in the use of organic and specialist fertilisers (bio-stimulant, culture substrates, slow release) favoured by the growth in demand linked to the expansion in organic or low environmental impact agriculture.

Overall use of phyto-pharmaceuticals in Italian agriculture fell both in value (-4.1%) and in quantity (-4.3%) in 1999. The fall represents a continued reduction in quantities employed, which fell by over 40,000 tons in the last decade, and by 12,000 tons from 1995 to 1999, and an increase above the rate of inflation in average unit prices, which was also higher than that for agricultural prices.

There was a slight increase in the quantity of seeds sold, for the fifth consecutive year. There were particularly marked reductions for soya in 1999 (-28.2%) and for the oilseed sector in general, where the area cultivated contracted by about 130,000 hectares, falling from 645,000 ha in 1998 to 512,000 ha in 1999. Significant increases were again recorded in the area under durum wheat (+3.7%), a crop which has enjoyed continued expansion in recent years, whereas the area under soft wheat and rice remained generally unchanged.

Overall availability of compound feedstuffs did not alter significantly in 1999, amounting to around 12 million tons.

The domestic market for agricultural machinery expanded in 1999, with an overall increase of 8.4% in value and 5.2% in quantity. The figure for apparent absorption on the domestic market, which in practice, coincides with that for the effective market, given the increasing tendency of

firms not to hold stock, amounted to well over 6,000 billion lire, due to the incentives provided for in the legislative decree of 25th May 1998 for the so-called “scrapping” of obsolete machinery. The domestic market for tractors was worth over 2,000 billion lire, equivalent to about 36,000 tractors sold, and an overall weight of about 114,000 tons, putting levels on a par with the late 1980s.

National production of technical inputs for agriculture in 1999 recorded an overall contraction of 3.7%, following the negative trend of 1998. The disaggregated indices of industrial production, however, showed a considerable growth in national production of phyto-pharmaceuticals (+6.5%) and a slight contraction in that of feedstuffs. Overall industrial production of technical inputs in 1999 was 2% lower than that for 1995.

National seed production recorded a very positive year, with growth equivalent to 6.3% as compared with 1998, rising to a new peak of 638,988 tons of certified seed.

As regards foreign trade, the positive trade balance for industrially produced technical inputs for agriculture fell slightly, from 2,630 to 2,495 billion lire, due to a contraction in value both for imports (-1.1%) and exports (-2.6%). The overall trade balance continues to be determined by the trend in trade of agricultural machinery, which alone represents over 60% of total value of trade and more than 80% of exports. In 1999, the trade surplus for the agro-mechanical sector fell once again, by about 300,000 billion lire, due to the reduction in exports and the increase in imports; in contrast, the trade deficit in the other sectors improved slightly, with the exception, of feedstuffs.

The positive trend in the domestic market, encouraged by incentives to substitute obsolete machinery, contributed to the increase in imports, which rose by 100 billion lire. In the tractor sector a 7.5% increase in imports and a 5% decrease in exports resulted in an overall reduction in the trade surplus of 131 billion lire, while in the case of harvesting machinery, a 14.3% increase in imports and a 10.1% decrease in exports resulted in a reduction in the trade surplus of 99 billion lire. All sectors, however, with few exceptions recorded a contraction in exports in value terms.

The evolution of the sector in terms of enterprises producing technical inputs for agriculture in the early 1990s can be studied by comparing the main results published in the 1991 Census of industry and services with the corresponding intermediate Census carried out by ISTAT referring to 31 December 1996.

At the end of 1996 there were 6,288 industrial units, representing a 7% increase as compared with 1991, while the number of employees amounted to 52,386, equivalent to a reduction of over 5,000 employees, as compared with 1991. As regards geographical location of enterprises, the intermediate Census confirmed the concentration of the industry in northern Italy. The increase in the number of enterprises, however, affected the Centre and South to a greater extent, while the reduction in the number of employees was particularly noticeable in the North-east, where employment fell by around 4,500 employees in five years, due to the closure of some large fertiliser plants and to a fall in the number of employees in the agro-mechanical sector. Southern regions experienced the greatest change in the composition of employment, with a fall of around 2,000 employees in fertiliser production and a rise of 800 employees in the feedstuffs sector.

In 1999, the area under transgenic crops world-wide (excluding tobacco) rose to 39.9 million hectares, representing an increase of 12.1 million hectares, equivalent to almost the entire agricultural land utilised in Italy; this increase was matched by a rise in sales of transgenic seed, of about 900 million dollars, bringing the total value of the market to nearly three billion dollars. The rate of growth, at 44%, was therefore substantial, but was lower than that recorded in the early years of cultivation of genetically modified plants, due to the first signs of effects of saturation of potential land for cultivation in the main producer countries. As regards cultivated species, expansion is restricted to a very limited number of crops, seven in all, with a predominance of soya (54%), followed by maize (28%), cotton and rapeseed (both with 9%).

The debate over the safety of genetically modified plants and food derived from them intensified in 1999, during preliminary talks for the new WTO negotiations.

In January 2000 the EU issued two new Regulations which modified and further clarified the existing norms on labelling: Regulation (EC) 49/2000 introduced a tolerance allowance of 1% for the presence of genetically modified ingredients, below which products need not be labelled specifically; Regulation (EC) 50/2000 which, in contrast, obliges labelling for foods containing additives and aromas derived from genetically modified organisms and not equivalent to conventional products.

Chapter 9

Agricultural credit

Since any hope of continuing to operate in short-term subsidised credit had been completely eliminated, a new and permanent legislative norm was needed, reflecting the orientation of the EU Commission on State subsidy permissible in the agricultural sector.

Although the Commission had already expressed its opinions in several communications on the subject, the adoption of Agenda 2000 meant that a stable normative framework was required dealing with State subsidy in the agricultural sector. The Commission drew up the paper “Community orientation for State subsidy in the agricultural sector” in late 1999, published in Communication (2000/C 28/02), to be applied for the entire 2000-2006 period of programming. In this Commission paper, criteria governing admissibility or otherwise of each type of subsidy were revised or confirmed, sector by sector, in the light of articles 37, 51 and 52 of Regulation (EC) no. 1257/99. The incompatibility between some of the provisions set out in legislative decree no. 173/98 (the so-called “cost cutter” decree) and the Commission’s approach on the admissibility of State subsidy have slowed down the implementation of that decree.

Faced with this uncertainty in implementing some of the most recently approved national laws, which even the Ministry has proved unable to resolve, many Regions have tried to cope through their own draft laws, where one common theme is the introduction of *Consortia fidi* in agriculture. Following the initiative of the Region of Emilia Romagna, similar provisions were approved by Veneto, Tuscany, Umbria, Marche, Basilicata, Sicily, Abruzzo, Liguria, Lombardy and Campania.

At the end of 1999, law no. 499 was approved: “Rationalisation of measures in the agricultural, food, agro-industrial and forestry sectors”, known as the “mini pluri-annual law”. Legislative decree no. 342 of 4th August 1999 modified the 1993 Single Text, on laws governing banking and credit matters, and in particular, article 44, “Guarantees regarding credit for agriculture and fishing”.

During 1999, reference rates for agricultural credit, both for working capital and for the improvement of farm structures continued to fall, until August, when a slow inversion in trend began, leading to an end of year rate of over 6%.

In 1999, the number of operations in agricultural credit increased further (+1.99%), although the increase was entirely due to a rise (+12.02%) in operations of more than 18 months duration, while the number of short-term operations fell by the almost the same percentage (-12.58%). The contraction in short-term credit operations was undoubtedly influenced by the conclusion of the prorogation of subsidised agricultural credit for working capital after mid 1998, and also by easier access to ordinary, non-subsidised credit due to the fall in interest rates recorded in the last two years.

Considering credit commitments by branches of economic activity, including all operations of credit destined for agriculture, forestry and fishing, a significant increase in the number of operations was recorded between 1998 and 1999 (+6.98%).

It is also evident that the trend between the two years is not uniform in all areas: for example, credit for the purchase of machinery and equipment increased substantially in the North-east and North-west, while increases were far more modest in central and southern Regions.

An analysis of the share of current operations of agricultural credit as part of the total amount of credit for the sector "agriculture, forestry and fishing" (65% of total) shows that agricultural credit still represents an important tool in supporting development in the sector. If, on the other hand, both short and long-term credit concessions over the last few years are considered, and above all the contraction in operations at a subsidised rate (now 24% of all credit erogated for the "Agriculture, forestry and fishing" sector and 37% of total operations of agricultural credit), the role of agricultural credit needs to be reassessed.

Chapter 10

Agricultural employment

The slight increase in employment in 1998 as compared with 1997 was consolidated in 1999, due to an upturn in the economy: the number employed increased by 256,000 units (+1.3%). The improvement in numbers employed was due entirely to wage earners (+1.9%), whereas in contrast the number self-employed fell(-0.3%); the increase was associated mainly with the more flexible types of contracts.

As regards the different sectors of the economy, although services continue to be the main pillar of employment, with an increase of 303,000 units (2.4%), the industrial sector also showed signs of recovery in 1999 (+20,000 units, +0.3%). In contrast, the contraction in employment in agriculture accelerated, with a loss of 67,000 employees (-5.6%), as compared with -2.3% the previous year.

Agricultural employment in 1999 represented 5.5% of total employment. This percentage is much higher in the South (9.6%) than in the Centre-north (3.9%).

The rise in employment is due mainly to the female component: +188,000 employees, with 2.6% growth as compared with 1998, in contrast to +68,000 males (+0.5%). The new trend in female employment is concentrated entirely in the tertiary sector (+237,000 units, or +4.4%), while there were reductions both in agriculture and in industry (-36,000 and -13,000 employees respectively in absolute terms; -9.2% and -0.8% in relative terms). As regards male employment, growth was also recorded, mainly in the service sector (+66,000; +0.9%), but also in industry (+33,000; +0.6%), whereas the fall in agricultural employment is relatively less marked than for females (-33,000, equivalent to -3.8%).

In contrast to previous years, employment increased more than the work force, evidence of an improved economic climate, so the number of unemployed fell by 180,000 units, reducing the unemployment rate from 11.8% in 1998 to 11.4% in 1999.

In 1999, the number of foreigners resident in Italy increased significantly as compared with 1998, according to figures from the Ministry for Internal Affairs. Indeed, the number rose to just under 1.5 million, an increase of nearly 20% as compared with the previous year. More than

half the foreigners were resident in northern Regions, just under a third in the Centre and the remaining 16% in the South and Islands.

As regards the employment of non-EU citizens seeking work, there was substantial stability in the total national data (about 190,000) as compared with 1998, with a geographical distribution similar to that for residence. There are, instead, strong contrasts between the sectors: nearly three quarters were for the service sector, just under 20% for industry and only 6.2% for agriculture. The sectoral divisions are similar over the country, although the percentages of industry in the North (25%) and of agriculture in the South and Islands (15%) are higher than the national average, reflecting the kinds of production associated with those areas. In contrast, as regards the number starting work, the relationship between areas and sectors changes radically. There were about 218,000 starting work, and these were concentrated in the North (70%), while numbers in the South and Islands fell significantly. As regards sectors, there was a slight leaning towards industry (about 40%) as compared with services (37.3%), while there was a higher share for agriculture (22.6%) as compared with its share of those seeking work.

An analysis of the data reveals the strong focus on seasonal and temporary work for non-EU workers in agriculture (in the North the ratio is 1:10 between those registered as unemployed and those starting work), while this type of opportunity in the services sector seems to be more limited. The situation for industry is different, as those seeking work, especially in the North, sometimes started more than one job; in contrast, the registered unemployed in the South and Islands were called only in part.

Non-EU immigrants employed in agriculture in 1999 amounted to just over 92,000. The figure represents an increase as compared with the previous year of about 8 percentage points, an upward trend which contrasts with the overall negative trend for agricultural employment in Italy.

As regards geographical location of non-EU immigrant labour in agriculture, the greatest share was in southern Italy (just under 53% of total) and, more specifically, Calabria (20,000 units) followed by Puglia, Campania and Sicily. About 29,000 units were employed in the North, of which 12,000 in Trentino-Alto Adige. There was a smaller share for central Regions (about 16%), the main Region being Lazio.

As regards country of origin, although the majority of workers are still from north African countries, in 1999 numbers from Eastern and Central-Eastern European (ex-Yugoslavia, Albania, Poland and Romania) increased, whereas there was a smaller number of Asian immigrants (India and Pakistan) and very few from Latin America.

Social policy and policy to promote employment became an explicit and integral part of European policies with the Treaty of Amsterdam, signed by the Heads of State and Government of the member states on 2nd October 1997 and in force from the 1st May 1999. The Treaty sets out a series of priorities regarding social orientation at Community level, amongst which are the following: the fight against social emargination; guarantee of equal treatment for men and women; policy for the development of employment.

The EU's main focus for employment is that of integrating the objectives in this field within other EU policies. Witness to this approach is the reform of structural funds and the associated reorganisation of the role of the European Social Fund.

The Territorial pacts for employment, previously initiated in 1996 as pilot projects, are given a more precise position within the framework of reform of the structural funds. As they are currently defined, the Territorial pacts for employment (PTO) represent the integration of employment policy into structural policies. The objective of the PTO is to create a broad, local partnership base which enables all resources to be made available for an integrated strategy to implement measures which promote employment.

The most important issues regarding social security in 1999 were the conclusion of the amnesty for contributions and the renewal of concessions for the South.

Applications for the amnesty had to be made by 2nd November 1999. The amnesty was very successful, with around 170,000 applications and contributions recuperated for about 1,000 billion lire, paid to INPS, the State pensions body. The largest amount paid was in the South (about 70%), while the North and Centre paid about 15% each.

Finally, practical implementation began of the norms to encourage new employment, as provided for under law 448/98: implementation circular no. 188 of INPS, issued on 14th October 1999, defined the sectors involved, including agriculture, commerce and credit. On this basis, agricultural enterprises operating in Campania, Basilicata, Puglia, Calabria, Sicily and Sardinia will be able to benefit from all the subsidies for social security payments for new permanent employees recruited by the end of 2001, where their employment represents an overall increase in manpower; for Abruzzo and Molise the benefits only apply to recruitment carried out in 1999. The benefits do not apply if, in the period stated, there is a reduction in the number of farm employees; in these cases, the farms are also required to pay back the total sum of subsidy, plus costs and interest.

Chapter 11

The land market

In 1999, land prices in Italy increased by 2.5% as a national average, reaching just over 25 million lire per hectare. This average price, however, conceals marked differences in land prices, due not only to the intrinsic features of the land market but also to contrasting Regional economic situations. The lack of homogeneity makes any attempt to summarise price trends quite difficult.

As in previous years, the average price rise is the result of differing price dynamics in the various geographical areas; increases of between 3-5% were recorded in northern Regions whilst in the Centre and South they were much lower (0% - 1%). Two Regions recorded decreases in nominal terms: Trentino-Alto Adige, because of the crisis in the apple sector which had a negative impact on orchard prices, and Calabria, where the precarious economic and structural situation in the agricultural sector caused a fall in land prices for the second consecutive year.

A comparison between increases in land prices and in the cost of living in 1999 (+1.7%) reveals that land prices rose in real terms for the third consecutive year. Land investment maintained – and in some cases, increased – its purchasing power, especially in northern and central Regions.

Fertile land, well-located, and land in certain areas continued to attract greater interest, causing increasingly marked differences between land prices in the plains (which increased 3-4% per year on average in the late 1990s) and those in hilly or mountain areas. In contrast, the difference in land prices between the North and South is due primarily to two factors: the kind of public subsidy provided for the main types of agricultural production in the areas, and their overall economic situation.

The general economic recovery was confirmed by figures for the urban property market, which appears at last to have emerged from the long depression of the early 1990s. Expansion was evident from a marked increase in the number of transactions and from price increases above the rate of inflation, although prices were still lower than those recorded in the early 1990s. The positive influence on the land market of trends in other property markets is clear – both markets show increased prices in real terms over the last two or three years.

It is more difficult to estimate the influence of non-agricultural purchasers who invest in the land market to diversify their investment portfolio, transform liquidity and seize opportunities arising from a favourable economic situation. There is also continued demand from purchasers interested in land with buildings in areas renowned for their panoramic value. As usual, requests for land outstripped supply, especially for fertile land with adequate infrastructure and easy access. Although demand exceeded supply in most Regions, the number of transactions remained quite low. In Lombardy, for example, around 12,000 hectares have been sold annually in recent years, equivalent to only about 1% of agricultural land in that Region. Over 75% of land purchases were by owner-operator farmers mostly to expand their holdings. Data reveal similar trends in other Regions, where the main purchasers are farmers seeking new land to enlarge their property, to expand their productive base and achieve economies of scale.

Increases in land prices were also recorded in other European countries such as France, Holland, Ireland and the United Kingdom; in contrast, prices fell in Germany, where the supply of land at very competitive prices in the Eastern Laender continued to depress prices in the rest of the country.

According to the survey on farm structures carried out by ISTAT in 1998, rented land amounted to 3,965,000 hectares, representing an increase of over 200,000 hectares, as compared with 1997. There appears to be a gradual increase in land renting, which is rising at an annual rate of around 2% and more where land is partly owned and partly rented. The transformation is slow, however, and unlikely to make a significant impact on the share of rented land as part of total utilised agricultural land at 20%, this is well below the European average.

There was, once more, considerable demand for rented land in 1999, especially in the plains and in areas where profitable crops caused demand to increase.

In the new form of contracts for land management, the role of the landowner varies from straight forward landlord to that of a business partner. In the former, the owner rents out the land without assuming any formal written duties towards the tenant or contractor; in the latter, the owner shares in the management and assumes part of the risk connected with the agricultural activity. In the latter case, if the agreement is satisfactory for both parties, it is unlikely they will revert to traditional renting agreements. In both cases, the profitability of this kind of land use is particularly high and the cost of utilisation of agricultural land therefore rises

substantially, resulting in increases in the rented land market. Many informed observers point to the difficulties traditional agricultural enterprises constantly experience in competing in the land market with these dynamic operators.

According to operators, the share of black market rent agreements has fallen due to the need to regularise farm records in order to take advantage of direct income support connected with the Common Organisation of the Market and of incentives for rural development (agro-environmental premia, indemnities for disadvantaged areas, etc.). The new European Community policies seek to encourage the use of rented land, through new income opportunities in marginal areas.

As regards policies to encourage land consolidation and land mobility, 1999 saw some changes, although the subject does not enjoy priority status on the part of the Government or in Parliament. This is the case for the law regarding young entrepreneurs in agriculture (n° 441/98), which was warmly welcomed by sector operators but is currently suffering from difficulties in interpretation of norms and from other operative problems. Among the public measures for promoting farm ownership, the Budget for the year 2000 extended until 31st December 2001 financial subsidies for the purchase of agricultural land by owner-operator farmers and entrepreneurs whose main source of income is from agriculture

The legislative decree n. 419/99 approved the unification of the Cassa per la formazione della proprietà contadina (Bank for the Formation of Peasant Property) and ISMEA (Institute for the Study of Agricultural Markets); this merger reflects the objective of reorganising and redefining the services aimed at increasing the efficiency and competitiveness of agricultural enterprises.

In the meantime, the Cassa continued its activities, purchasing 5,879 hectares in 1999 on behalf of 189 owner-operator entrepreneurs and 9 agricultural cooperatives, with an overall expenditure of 114 billion lire. Unfortunately, because of limits on financial resources, the number of applications exceeded the number of operations the Cassa was able to undertake.

The 2000 Budget brought to the forefront the privatisation of communally held agricultural land. The measure only regards land for cultivation and according to some estimates it should involve around one million hectares, valued at around 10,000 billion lire.

PART IV
POLICIES

Chapter 12

The policy framework

In 1999, during the Berlin Council, the Heads of EU Member States approved a further important reform of the CAP. In March 1999, moreover, an overall agreement had been reached on new financial prospects for the period. 2000-2006. Maximum expenditure for agriculture was fixed at 40.5 billion euros per year.

As regards national legislation, legislative decree no.165 of 27th May 1999 provided for the suppression of AIMA, the Intervention Board, and the establishment of the Agency for Payments to the Agricultural Sector (AGEA). After tough negotiations between the Government and the Regions, the reform of the most important financial instrument in the sector represents a fundamental step forward in decentralising responsibilities in agriculture. Within this context, the Regions are to establish appropriate services and offices for making payments. They must carry out checks on the applications (for subsidy, contributions, compensatory payments, requests for quotas, etc.) presented by producers, making use of the national agricultural information system, in accordance with article 15 of legislative decree no.173/98, and they must also manage relations with users and with farmers' organisations, including complaints.

Legislative decree no. 300 of 30th July 1999, entitled "The reform of Government Organisation", in accordance with article 11 of law no. 59 of 15th March 1997, redefined the Ministry for Agricultural and Forestry Policies – MIPAF, stipulating its responsibilities and structure. The loss of responsibility for the agro-industrial sector, passed to the Ministry for Industry, Trade and Crafts, was particularly significant, as was the partial loss of forestry policies, attributed to the Ministry for the Environment.

Legislative decree no. 419 of 29th October 1999, entitled "Reorganisation of national public bodies", in accordance with articles 11 and 14 of law no.59 of 15th March 1997, provided for the incorporation of the Cassa per la formazione della proprietà contadina (Bank for the formation of peasant property) established as part of a long tradition of consolidation of land holdings, with ISMEA, the Institute the Study of Agricultural Markets. Legislative decree no.449 of 29th October 1999 provided for the reorganisation of UNIRE, the official national body for horse breeding.

The new organigram of the agricultural research sector was set out in legislative decree no.454 of 29th October 1999.

The Italian Parliament approved the long awaited pluri-annual law for the agricultural sector at the end of 1999 (law no.499 of 23rd December 1999), thirteen years after the preceding pluri-annual law. It defines the programming procedures in the agricultural sector until 2002. The objective of the law is not so much to bring additional resources to the sector as to define a common procedural framework for programming for all the public bodies which are involved in the agricultural sector.

In 1999, legislative decree no.173 of 30th April 1998 entitled "Provisions to limit production costs and strengthen farm structures" was partially implemented. The 1999 financial budget and subsequent law no. 499/99 provided for funding of 550 billion lire for the 1999-2002 period.

Other provisions also affected the agricultural sector in 1999: the Inter-ministerial Committee for Economic Planning (CIPE) approved the guidelines and measures for the Italian citrus sector, with deliberation no.191 of 5th November 1999. The Plan's resources, 110 billion lire, were destined primarily for the support of integrated measures to enhance commercial value and to strengthen the structures of producer organisations.

Law no. 488/99, the Budget, provides overall funding to the agricultural, forestry and fishing sectors for 4,413.41 billion lire, about 823 billion lire more than the previous budget.

In 1999 the Regions made progress in redefining the functions and responsibilities of local bodies, in accordance with legislative decree no.143/97. The fishing and aquaculture sector was probably that most affected by new legislation.

Documents regulating wildlife resources continued to be an important feature, with particular reference to species that may be hunted, and were mainly oriented to the conservation of production capacities of the area and to agri-tourism.

Chapter 13

Fiscal policy

Over the last decade Italian fiscal policy has been directed towards revising the tax system in the agricultural sector in order to bring it more closely into line with those used in the rest of the economy.

The movement towards harmonisation has aimed, in particular, at introducing a system of taxation for the “modern” element of the agricultural sector (limited companies, partnerships and larger sole proprietorships) equivalent to that imposed on firms in other productive sectors. This objective was present in the tax reforms of the nineteen seventies, more so in the second half of the nineteen eighties and has received further impetus with the recent reform introduced by the Minister Visco.

The process has not yet been completed: in the last two years, in fact, the prolongation of the transitory periods for the Value Added Tax (IVA) and the Regional Tax on Productive Activities (IRAP) demonstrates the political difficulties in pursuing such a line of action.

As regards tax on income of factors of production and on their mobility, in general, there is no specific normative for the agricultural sector for taxing the incomes of employees, the profits of limited companies, trading companies, and limited partnerships.

The situation is anomalous, instead, for sole proprietorships, private partnerships and non-trading bodies, both in comparison with the rules applied to other sectors and as regards other European countries, since the income earned is not considered and taxation is imposed on the basis of the cadastral system. At present, the cadastral coefficients for up-valuing the base figures on which taxes are imposed are fixed at eighty times the cadastral income for taxes due on ownership and seventy times for those due on potential agricultural production.

As regards taxes on goods and services, from the time that IVA was first introduced the agricultural sector has been allowed to adopt systems for exemption or lump sum deductions of the tax paid on purchases of inputs. For agricultural enterprises, IVA became not a form of tax but a veritable subsidy.

Later, with the Visco reform, the system of indirect taxation has been modified and a transitory regime introduced, the beginning of which

has at present been delayed until 31st December 2001 when it will give way to a definitive regime.

The Visco reform also introduced the IRAP, a tax practically unknown in other EU countries; it is a value added tax, calculated at firm level with a normal levy of 4.25 per cent. For agricultural enterprises the quota was fixed at 1.9 percent and from 1st January 1999 it should have gradually risen to reach the normal level by 2003, but for the moment this progression has been "frozen".

As well as IVA and IRAP there are a series of minor taxes and also a tax on mineral oils; this is of particular importance in the agricultural sector because of an extensive system of tax concessions.

Between 1990 and 1999, the taxes increased at a fairly modest rate – on average by 3 per cent per year, but with wide year to year variations, influenced particularly by changes in the regulations (for example, the introduction of ICI in 1993, of IRAP in 1998 and the up-valuing of cadastral coefficients in 1995 and 1998).

The modest increases in taxation are reflected in the ratio between taxes and value added at market prices: between 1990 and 1999 fiscal pressure in the agricultural sector has been virtually constant with variations of no more than one percentage point. This indicates that the tax system in agriculture tends to be regressive and this is due to a series of taxes based on cadastral values which yield revenue practically independent of economic variables such as GDP.

Estimates have been made of the impact of forms of subsidy to farms (effective tax concessions) and of tax savings (virtual tax concessions): the greater part is derived from tax concessions for social security contributions for employers and self-employed workers and also the tax on mineral oils.

An analysis disaggregated by Region has been carried out, based on data from the Farm Management Accounting Data Network, the methodology for which has recently been revised to take into account the new regime for IVA (Value Added Tax) and to comply more closely with the European Accounting Network; estimates are presented of the impact of IVA and IRAP following the recent Visco reform.

Structural and rural development policies

Since the first reform of Structural Funds in 1988, structural policies and policies for rural development in the European Union have become increasingly important in the strategy for development of rural areas. The transition from the planning period 1994-1999 to that of 2000-2006 presents a new challenge for socio-economic growth in these areas, on account of the novelties introduced by the new Regulations and because of the availability of substantial funds allocated by the EU.

The year 1999 saw a high level of activity on the part of all those involved in measures co-financed by Structural Funds. In fact, the various central and Regional administrations had to make the change from the current programming phase where all engagements had to be completed by the 31st December, to that relative to the period 2000-2006 for which new programmes had to be drafted.

As regards implementation of programmes for 1994-99, in Objective 1 areas investments were programmed for about 4.4 billion euro relating only to the co-financing by FEOGA. Reasonably good results were achieved in carrying out the programmes, with more than 100 per cent of resources allocated and about 53 per cent of payments made.

In Objective 5b areas, investments were planned for about 5.1 billion euro, including both public and private shares. By the end of 1999 allocations had passed the threshold of 100 per cent of resources available in almost all Regions. Payments actually made, however, were more limited, at about 51 per cent of the total cost.

As regards programmes financed under Objective 5a, measures relating to Regulation (EC) 950/97 performed well, with more than 85 per cent of public funds spent. The results relating to Regulation (EC) 951/97 were less successful and at the end of 1999 expenditure was only slightly higher than 30 per cent.

The most frequent causes of delays in Italy were those relating to administrative procedures. At first, difficulties in drawing up and approving programmes affected the initiation of the programmes. In the phases of implementation and management, however, difficulties did not decrease. These can be divided into three groups: those related to the type of measure; those linked to difficulties in carrying out the measures; and

those relating to the technical and administrative management of the measures.

The successful aspects of this programming must also be mentioned: the removal or attempts to remove many of these constraints. Very often, innovative solutions have been tried out and these have improved the efficiency and the quality of the projects financed as, for example, in the case of the Ciampi-Wulf Mathies agreement which fixed a series of thresholds in the spending of the various administrative bodies, and in that of the possibility of "overbooking", providing for financial coverage with national resources so as to build up a reserve of projects on which to draw in case projects already financed run up against problems. In this respect the Supervisory Committee played an important role and success was possible only due to the partnerships created by the different bodies involved in the implementation of the programmes.

Turning to the programming for 2000-2006, during 1999 fourteen Rural Development Programmes for Regions and for the autonomous Provinces of Bolzano and Trento were approved, with finance amounting to about 600 million euro each year from EAGGF which will cover all the measures foreseen by Regulation 1257/99.

In the Objective 1 Regions, instead, Rural Development Plans, containing only accompanying measures and compensatory payments still have to be approved. Seven Regional Operative Programmes have meanwhile been approved which, in addition to measures financed by the European Social Fund and the European Regional Development Fund, also include the structural measures financed by EAGGF. For the whole of the programming period financing from EAGGF will amount to 3 billion euro.

The Community initiative, LEADER, was launched by the Commission in 1991 with the aim of offering rural areas the opportunity to try out a new approach to development. Nine years have passed since then, during which two communications have been emanated: LEADER I (1991-94), which involved 217 rural areas (of which 29 in Italy) and LEADER II (1994-99) which involved 1,004 areas (203 in Italy).

In 1999 the main innovations in the LEADER initiative in Italy principally concern the selection of new Local Action Groups which increased from 186 to 203 and the allocation of funds to beneficiaries for over 100 per cent (107 per cent) by the end of 1999. Actual expenditure, however, was still low (14%), due to the numerous problems encountered in implementing the initiative which arose mainly from the excessively long period of time taken up by programming, the complexity of the normal

procedures for implementation, scarce familiarity with the programming instruments, difficulties in involving the private sector and raising the private quotas of expenditure. Nevertheless, positive signs are emerging in the areas involved – the establishment of new firms, creation of associations, skills in the management of projects, to quote some examples.

In 1999 the procedure for approval of new initiatives on rural development has gone ahead, with objectives more ambitious than the previous ones. It is, in fact, oriented towards high profile integrated development, capable of creating employment and results that will continue over time. The measures foreseen should result in new products and services, development of original methods which combine human, natural and/or local financing, formulation of new forms of participation and organisation of local communities in the decision-making process.

Chapter 15

EU expenditure

The EU budget for 1999 was the first to be presented in euros and the last to be affected by the financial decisions taken in Edinburgh in 1992. It includes funding for allocations amounting to more than 96 billion euros, of which the share for agriculture represented 41.4% of the total, confirming, once again, the sector's predominance over all the other sectors in the EU.

During 1999, the 2000 budget was agreed, amounting to over 93 billion euros for allocations, a 3.5% reduction as compared with 1999, and more than 89 billion euros for payments, an increase of 4.4%. Although the increase in funding for payments increased, it amounted to 1.11% of GNP and was still below the maximum level for own resources.

In the 2000 budget, agricultural expenditure in absolute terms remained close to the levels reached the previous year. Indeed, funding for allocations of just under 41 billion euros was assigned to the agricultural sector, equivalent to 44% of the overall budget. The main part of these resources – 36.8 billion euros – was assigned to cover expenditure for the common organisation of markets. In contrast, the amount assigned for implementing the “second pillar” of support measures for the agricultural sector, rural development policies and accompanying measures was just over 4 billion euros.

For structural interventions, funding amounted to about 32 billion euros, about 6 billion euros less than that of 1999.

The EAGGF Guarantee section, which finances expenditure for market policies and accompanying measures, continues to represent the largest slice of the EU's general budget, although its share has been gradually cut in recent years. Data for 1999, however, show a recovery in overall expenditure by the EAGGF-Guarantee fund (+2.9%), which rose to 39,854 million euros, though it was 5 billion euros less than that permitted according to the guidelines.

The primary beneficiary of expenditure associated with the current support system is the arable crops sector. This sector's rising importance has been affirmed in the last ten years, during which arable crops

have consistently been the largest item, about 45% in 1999. Expenditure for the fruit and vegetable sector is symptomatic, reaching a share of under 4%. The wine sector also recorded a further contraction in expenditure, its share which fell below 2%, due mainly to the reduction in payments for the regime of permanent withdrawal from production.

The beef sector witnessed a sharp reduction in its share (-573 million euros), falling to about 11%. Expenditure for dairy products also continued to contract, falling to just over 6%.

A significant share of overall expenditure covered financing of accompanying measures, amongst which agro-environmental measures took on major importance, receiving about three-quarters of the funding allocated to this package.

Closer analysis of the funding assigned to Italy reveals a significant recovery in expenditure which, after the marked reduction between 1997 and 1998, increased by over 13%, rising to more than 4,671 million euros, or 11.7% of the EU total.

The share of fresh fruit and vegetable products, along with that of tobacco recovered, while that of wine remained stationary at about 5%, and the olive oil sector continued to record swings associated with the cyclical nature of production, as well as with the fact that a large part of subsidies owed to olive growers is frequently carried over from one budget to another.

Another important fact regarding Italy was the marked reduction in expenditure on animal production, which experienced a real collapse in 1999 following the 1998 recovery, and fell to just over 3% of total expenditure.

However, the most important phenomenon was certainly that connected with the explosion in expenditure for accompanying measures, which rose to 671 million euros, equivalent to over 14% of total expenditure.

The positive trend in EAGGF-Guarantee expenditure in 1999 in Italy signified a recovery in Italy's share of total EU expenditure, following the drop recorded in 1998. Italy's share of expenditure (11.7%), however, is well below the share Italian agricultural production holds within the EU more than 16% in 1998, in terms of gross saleable output and 23% in terms of value added. The recovery in Italy's share of Community expenditure involved particularly olive oil (from 25% to 32%), fruit and vegetables (from 21% to 26%), but above all the accompanying measures, payments for which rose to about 26% of the EU total.

Besides France, other countries with a high proportion of expendi-

ture are Germany, with a share which in recent years has fallen to just under 15%; Italy, where there was a slow recovery after a period of continuous falls; the United Kingdom, which has seen its share fall due to a reduction in expenditure for the beef sector; Spain, with a 13% share, a recovery after a period of decline.

EAGGF-Guidance expenditure is lower than that of the Guarantee section, although in 1999 total EU allocations amounted to about 5,555 million euros. The marked increase in the amount allocated (+27% as compared with 1998), is due principally to the fact that 1999 was the final year of the 1994-1999 planning period. As a result, all the allocations of resources still available had to be completed by the end of 1999, although payments of funds allocated must take place by 2001.

In 1999 over 45% of total EU allocations (about 2,525 million euros) were for measures under Objective 1; in contrast, expenditure for areas under Objectives 5a and 5b had a 23% and 21% share respectively. Expenditure for the latter recorded a sharp increase as compared with the previous year, almost doubling. Just under a quarter of overall allocations were in favour of Italy, which recorded a 78% increase as compared with the previous year, confirmation of the considerable efforts made since 1997 to accelerate the use of available resources. Objective 1 also dominated Italy's allocations, absorbing about 60% of the total. The same was true for the other main member states, with the exception of France, where Objective 5a was the most important, with more than 43%. In contrast, objective 5a had a marginal position, reaching a share of just 10%.

In the entire 1994-99 period, the largest share of EU expenditure (19%), went to Germany, followed by Spain, with 18.6%. France and Italy also received significant shares, of about 14% and 15% respectively; Greece and Portugal both received over 8% of resources.

National and Regional expenditure in agriculture

The allocation of 2,412.2 billion lire to the Ministry for Agricultural and Forestry Policies (MIPAF) in 1999 was the lowest in the whole of the decade. Measures most directly associated with agricultural policy received 33 per cent of funds. The items which absorbed the greater part of these resources were management aid (8.2%), promotion and safeguarding of production (6.8%), and fishing (6.3%). In the three year period 1997-99 the Ministry made payments of 1,978 billion lire in 1997, 2,169 in 1998 and 2,293 in 1999.

The year was one of radical change for the Intervention Board, AIMA. The legislative decree of 27th May 1999 abolished the AIMA as such, and established the AGEA, the Agency for Payments to the Agricultural Sector, and by transferring the tasks of the former Board to the Regions, it proved to be perhaps the most important element in the federalist reform of the State which has directly involved the agricultural sector since 1997. In the three year period 1997-99, however, the activity of AIMA has continued to be extremely important in terms of payments: those related to production, in fact, amounted to 10,585.1 billion lire in 1997, 9,688.9 in 1998 and 9,272.1 in 1999, sums which make up about one third of all payments from public funds to the agricultural sector and are equivalent to about 12 per cent of gross saleable output in the sector. Of the funds paid out in the three year period, 87.2 per cent came directly from Community funds whilst the remaining 12.8 per cent came from national resources.

Referring now to 1998, the Regions allocated 12,700 billion lire to agriculture which, during in the same year, resulted in effective expenditure of 7.300 billion lire.

In 1999, total support to the agricultural sector amounted to 27,698 billion lire (24,656 at constant 1995 prices), equivalent to 35.4 per cent of agricultural production at market prices and to 53.3 per cent of value added in agriculture at market prices; transfers relating to agricultural policy were more than two thirds of the total (69.5%) and tax concessions made up the rest (30.5%)

The average level of support to agriculture in the three year period 1997-99 amounted to 28,050 billion lire at current prices (25,449 billion

at 1995 prices) equivalent to 54.8 per cent of value added in the sector and 36 per cent of output. In 1999 support maintained the same level as the previous year, both in real and in monetary terms: during the three year period the downward trend continued both in monetary and in real terms, (-2.7%).

The fall in fiscal concessions also continued (-8.1% in real terms) due, in particular, to the sharp drop in concessions on social security (-13.9%); transfers fell too, to a lesser extent.

The largest item of support continued to be Intervention Board (AIMA) measures which amounted to 9,341 billion lire (33.7% of the total), followed by Regional intervention (7,851 billions, 28.3%), by social security concessions (3,714 billion, 13.4%) fuel tax concessions (2,691 billions, 9.7%) and tax concessions on national, Regional and local taxes (1,457 billion lire, 5.3%). Bodies other than AIMA which effectuate market intervention spent 918 billion lire (3.3%) whilst MIPAF payments contributed 3.8 per cent, at 1,055 billion lire.

With reference to the composition of support, data for 1999 again demonstrate trends towards a growing share on the part of the Regions (from 23.4% in 1996 to 28.3% in 1999), and reduction in the share of fiscal concessions (from 34.6% in 1996 to 30.5% in 1999), in particular of concessions on social security contributions, which drop from 19 per cent in 1995 to 13.4 per cent in 1999.

The availability, for the first time, of data disaggregated by geographical area (North, Centre, South) enables an analysis to be made of the territorial distribution of public support to agriculture for 1997: the ratio of support to value added is higher in the Centre (61.1%) and the South (62.6%) than in the North (52.8%); transfers are very important in the Centre (72.3%) and the South (74.1%) whilst in the North they are well below the national average (56% as compared with 66.5%); fiscal concessions (national average 33.5%) are more important in the North (44%) as compared with the Centre (27.7%) and the South (25.9%) and social security concessions in particular, with a national average incidence of 18.9 per cent on total support, weigh much more heavily in the North (25.3%) than in the Centre (12.8%) and the South (15%); AIMA payments, the most important item of support, are comparatively lower in the North (31.9%) as compared with the Centre (46.7%) and the South (37.6%); payments by the Regions, with a 23.4 per cent share as a national average, are much more important in the South (31.1%) than in the Centre (15%) and the North (18.2%).

Disaggregation of the data for the three year period 1997-99 shows

that more than half the support (55.2% or 15,473 billion lire) was destined to measures that benefited farms (35.8% of it for production aid, 13.8% for management aid and only 5.6% for investment aid). Almost a third of payments (30.6% or 8,751 billion) was absorbed by income payments and the rest was used for payments for measures involving infrastructure (2,651 billion, 9.5%), development services (676 billion, 2.4%) for processing and marketing agricultural products (1.75%, 485 billion lire) and for research, which received only 0.7 per cent of the total (195 billion lire).

Research and development services in agriculture

As regards financial resources for research in Italy in 1999, there was a reduction in funding for the National Research Council (CNR), and an increase for the Ministry for Agricultural and Forestry Policies (MIPAF), the National Institute for Agricultural Economics (INEA), the National Institute of Nutrition (INN), the National Organisation for Selected Seed (ENSE) and the Higher Institute for Health (ISS). Overall, available Regional resources increased by 3.9%, whereas total public funding fell by around 6.7%, as compared with 1998.

The cost of employing a permanent staff of around a thousand at the Agricultural research institutes (IRSA), consisting of researchers, technical staff, administrative staff and assistants is estimated at over 80 billion lire. A conservative estimate of overall resources allocated by MIPAF amounts to over 200 billion lire. The IRSA and other institutes reporting to MIPAF received more than 70% of resources; universities received 18.8%, the CNR, ENEA (National Institute for Alternative Energy) and other bodies a much smaller share.

After many years of delay, the government issued a series of provisions in 1999 in accordance with the "Bassanini law" to reorganise public research bodies in the agricultural sector: the National Research Council; the Institute for Mountain Research; Experimental Stations for Industry; the network of bodies reporting to MIPAF (the Agricultural Research Institutes, the INEA, the INN, the ENSE, Centre for Specialisation and Research in Agricultural Economics for the Mezzogiorno, the National Institute for Apiculture, the Institute for Poplar tree Research, the Institute for the Study of Agricultural Markets.

The most important innovations in the new norms for the CNR are: the abolition of the 15 National Advisory Committees, replaced by a single "Scientific Advisory Committee" with 20 members, and the substitution of the two regulatory bodies, the Presidential Council and the Management Committee, by a single Regulatory Committee of 8 members with the powers of a management committee.

Two important principles were introduced with the reorganisation of the research network in agriculture reporting to MIPAF, which unites the 23 Agricultural Research Institutes (IRSA) established in 1968: the Coun-

cil has scientific, statutory, organisational, administrative and financial autonomy; all personnel of the Institute will become permanent employees of the new body. The new Council will have a President nominated by the Prime Minister and an administrative council, made up of 5 experts nominated by the appropriate cabinet Minister and the President; this will make decisions on all statutory, organisational, administrative and financial matters. Research programming will be the chief responsibility of the scientific council, made up of the President and a further 10 members, of which 5 chosen from highly-qualified technical and scientific experts and 5 elected from amongst the Institute's technicians and researchers.

The same legislation also includes the INEA, the INN, which becomes the National Research Institute for Food and Nutrition (INRAN), the ENSE and the Centre for Specialisation and Research in Agricultural Economics for the Mezzogiorno, renamed the Centre for Training in Economics and Policies of Rural Development. The first two institutes have been given the legal definition of "public research institute" and the other two, "public institute".

Turning to development services for agriculture, as part of the Multi-regional Operative Programme "Support for development services for agriculture" for Regions under Objective 1, 98.6% of planned funding has been allocated at 31st December 1999, while expenditure by beneficiaries amounted to about 56%.

For most Regions, legislation on services for agricultural development is very recent; indeed, with a few exceptions, such as Sicily, which passed legislation in 1977 prior to Regulation 270/79, in most Regions laws on these services were passed in the late 1980s or early 1990s. The most recent norm, Regional law no. 66 of 1999, which deals exclusively with agricultural extension and technical assistance in agriculture, strengthens the role of the Regional agency for agricultural development, ARSSA, on whose staff extension workers working with farmers' professional organisations are included, conferring on it a role of programming and supervision. In Emilia-Romagna, there was a change in the way the system of services was organised in the 1994-99 period. It was modified from a public-private co-management model to a clear separation of roles and duties between the two operators which have the common aim of achieving objectives to implement programmes identified at local level. This reform process was concluded with the emanation of Regional law no. 28/98.

As regards training, in the 1999-2000 Academic year, the number of students enrolled for degree courses in agricultural sciences amoun-

ted to 5,933 (out of 45,262 total enrolments) while those enrolled in diploma courses increased further, rising to around 1,000, out of 3,605 total enrolments. Thus 7.3% of agricultural sector university students follow diploma courses.

With respect to secondary schools, data for enrolments confirm the downtrend of recent years in the number attending technical institutes and, in particular, those following agricultural studies, with a further contraction for 1998/99 (-0.7%) as compared with the previous year.

As regards professional training organised by the Regions, in 1997/98 there was a marked increase in the number of courses offered: nearly 13,600 more than the previous year, amounting to a total of 36,497 courses. In particular, the number of courses for employed persons increased, rising from 7,713 to 14,200. The number of pupils enrolled also increased from 422,000 to nearly 670,000. At national level, the larger part of pupils was in tertiary activities, while the industrial and crafts sector recorded lower percentages. The share of agriculture was notable in the courses for special users (9.5%) and unemployed (8.9%).

Law no. 144 of May 1999 established courses of instruction and advanced technical training (IFTS) for young people and adults, both employed and unemployed, who wish to gain further qualifications and specialise after gaining their secondary school diploma. These courses are planned by the Regions on the basis of local demand, according to national standards. They last from 2 to 4 semesters (1,200 – 2,400 hours) and provide for long work-placements in companies.

Expenditure for professional training by Regions is mainly allocated from Community funds, which amount to 72% of total funding. In the South, Community funding covers almost the entire cost, while in the North it makes a consistent addition Regional funding.

For secondary schools, in 1998, expenditure by the Ministry for Education increased by 6% as compared with the previous year. This increase, which was concentrated mainly on classic educational courses, is probably linked to the increase in the number of students enrolled at these traditional secondary schools rather than to structural investment. Expenditure for university education also increased between 1998 and 1999, by 8.5%, with expenditure amounting to 12,293.9 billion lire in 1999. There was growth in expenditure on capital account and therefore in investments on infrastructure.

PART V

AGRICULTURE AND THE ENVIRONMENT

Conservation of natural resources: water and soil protection

Fifteen years after the first law on protection of water from pollution, legislative decree 152/99 was published, reorganising the norms on water into four main laws. The decree contains “dispositions for the protection of water and is in line with EEC directive 91/271 regarding urban waste water treatment and EEC directive 91/676 relating to protection of water from pollution caused by nitrates from agricultural sources”; it is based on a “systems” logic, according to which water quality and protection is achieved by considering the complete cycle of water resources rather than simply checking for polluting substances at single point. Furthermore, the decree also contains an advanced concept of water protection, according to which its pollution is equivalent to environmental damage. The decree’s specific objectives are as follows: to prevent and reduce pollution and clean polluted water sources; to improve the state of water and protect water destined for particular usage; to pursue a policy of long-term, sustainable use of water resources, with priority given to drinking water; to maintain the natural ability of water sources to self-clean, as well as their ability to sustain wide and varied animal and plant communities.

Some provisions regarding water saving and reutilisation of waste water are particularly relevant to the agricultural sector. Specifically, article 25 provides for the adoption of “measures required to eliminate waste, reduce consumption and increase recycling and reutilisation, using the best available techniques”. Articles 19 and 20 are also relevant, relating to “areas vulnerable to nitrates from agriculture” and “areas vulnerable to phyto-sanitary products and other vulnerable areas”, respectively. It is recommended that the Code of good agricultural practice be applied even for areas not considered vulnerable, in order to guarantee a general level of water protection. In vulnerable areas agricultural activity should employ eco-compatible techniques suitable to counteract and prevent environmental degradation.

There are 151 Land Reclamation Consortia operating in Italy in an area of just over 16 million hectares (53.7% of total land, but more than

80% of the plains) in favour of 6.8 million cadastral enterprises organised in Consortia whose numbers vary widely from Region to Region: there are hardly any in Valle d'Aosta, Liguria and Trentino-Alto Adige, whereas they cover almost the entire area in Le Marche, Puglia, Abruzzo and Emilia-Romagna (100%).

According to the OCSE, overall demand for freshwater per capita places Italy in first position in Europe and third in the world after the USA and Canada, with about 980 cubic metres per capita annually. According to ISTAT data, the overall potential volume of ground water resources that can be used in Italy is estimated at about 110 billion cubic metres. About 55% of resources are affected by fiscal, economic and qualitative constraints which makes use almost or totally impossible. There are, therefore, about 50 billion cubic metres available for the various uses. As regards types of water sources, 66% of overall demand is satisfied from ground water, 28% from underground sources and 6% from lakes and artificial reservoirs.

In 1996, irrigated land in Italy (2,944,000 hectares) represented about 20% of overall utilised agricultural land (SAU). In northern Regions it rose to 35% whereas in the Centre and South it fell to about 10%. According to ISTAT, irrigated land amounted to about 3,600,000 hectares, equivalent to 25% of total SAU, of which 63% was in the North, 8% in the Centre and 29% in the South. There were about 692,000 agricultural enterprises using irrigation effectively, of which 51% were in the North and Centre and 49% in the South and Islands.

Land reclamation consortia were responsible for about 2,860,000 hectares of irrigated land. Consequently, 740,000 hectares were not under Consortia responsibility, and were irrigated with water from various sources, such as wells, springs, small cisterns and aqueducts, which are not subject to any checks for irrigation programming and water resource management.

Pressures on the agro-ecosystem and sustainable agriculture

In contrast with the trend of recent years, fertiliser use rose in both absolute terms and in terms of area in 1997, an increase mainly attributable to the use of nitrogen fertilisers. Indeed, use of nitrogen fertilisers had increased by about 12% as compared with 1990, in contrast with a contraction in phosphorous pentoxide based fertilisers and a 3% contraction in potassium oxide based fertilisers. Higher than national average use per hectare was recorded in the North, where use per hectare is also higher for phosphorus and potassium fertilisers, despite the reductions made in recent years. In contrast, utilisation in the Centre and South was below the national average.

As regards phyto-pharmaceuticals, a 14% reduction was made in the overall quantity used, mainly due to fungicides and “various” products (fumigants and nematocides, poisoned baits, phyto-regulators and supplements) whose use fell in Central regions. Nonetheless, intensity of use per hectare in the North continued to be higher than the national average, in contrast with the situation in the South. As regards toxicity levels, an analysis showed that the use of toxic and highly toxic products was concentrated in southern Regions (nearly 70%) while use of those classified as harmful was concentrated in northern Regions (over 50%).

The longstanding question of a register for chemical treatments, which had been subject to innumerable delays, was finally concluded. In article 1 of law no. 362 of 14th October 1999, entitled “Quaderno da campagna” (farm register), implementation of the provisions laid out in the Decree 217/1991 of the Ministry of Health was finally ratified, obliging users to keep a written record of loading and unloading of phyto-sanitary products.

Monitoring of phyto-pharmaceutical residues in agro-food products was carried out in 1999 by the Ministry of Agricultural Policies (MIPAF) on field samples taken directly; they were also taken by the Ministry of Health on products on sale, and by the National Observatory of residues of Agrofarma on products both from farms and on sale. Results from the MIPAF survey showed a slightly higher percentage of irregular samples (4%) as compared with the previous year, mainly due to the different method followed in the most recent survey. In contrast, results published

by the Ministry of Health and by Agrofarma confirm a downward trend in the presence of residues. The number of offending samples recorded by the Ministry of Health fell from 5.6% in 1993 to 1.3% in 1999, while those recorded by Agrofarma amounted to 1.9%. The estimate regarding the quantity of phyto-sanitary residues ingested also showed a reduction.

Methyl bromide (MB) is widely used in the flower and vegetable sector to disinfest land. Italy is the leading user in Europe. Its use is concentrated mainly in central and southern Regions, with nearly 90% employed in Sicily, Lazio and Campania. Average national usage has risen since 1991, although there are substantial differences between the Regions. The situation reflects the difficulty in finding a satisfactory alternative to MB. In 1997, a protocol was signed in Montreal to limit the production and use of substances responsible for damaging the ozone layer. Gradual reductions in MB usage were established, maintaining the differentiation between developed and developing countries. The time scale for developed countries required a 25% reduction, as compared with 1991, by 1st January 1999, a 50% reduction by 1st January 2001, a 70% reduction by 1st January 2003 and an end to production and usage of this fumigant by 1st January 2005.

Implementation of agro-environmental measures continued in 1999, as set out in Regulation 2078/92. In the first five-year period of implementation they absorbed over two-thirds of EAGGF-Guarantee expenditure for measures accompanying the MacSharry reform. All Italian Regions, except for Campania, had concluded the first five-year implementation period for agro-environmental measures between 1998 and 1999.

During the 1999 season, the number of farmers participating in agro-environmental programmes increased further; on area of about 2.7 million hectares and nearly 50,000 adult bovine units were involved. About 200,000 farms benefited in Italy, equivalent to 12% of the national total with more than one hectare of land. As regards geographical location, more farms in the North and Centre benefited (17.1% and 15.3%, respectively) than in the South and Islands (8.1%). Expenditure for implementation of agro-environmental measures on Italian farms amounted to just under 1,550 billion lire, a 19% increase as compared the previous season. Data detailing the implementation reveal that 66% of area and 77% of expenditure related to measures for reducing fertilisers and phyto-pharmaceuticals and for adopting organic farming methods.

Considerable problems arose in paying out funds during the 1998 and 1999 seasons. Thousands of farmers experienced delays, some-

times considerable, in receipt of payments, due to lack of national co-financing funds. During early 2000, the CIPE authorised funding worth 260 billion lire for the national co-financing of Regional Development Plans for allocations made in 1999, and this will directly affect the amount of resources paid to Italy as part of the co-financing of the Regional Development Plans, in effect representing an advance on funding foreseen for the 2000-2006 period.

There were 49,188 organic farms in Italy as of 31st December 1999, with 953,057 hectares of utilised agricultural land (organic and under conversion). There continues to be sustained growth in this sector, both in the number of farms (+12%) and in the area cultivated (+22%). At national level, the South and Islands retain their dominant position, together representing 70% of farms and area. More than half the area organically farmed in Italy (51.4%) is under fodder crops, together with a further 21.1% under cereals, and this demonstrates the ease with which intensive crops can be converted to methods of organic cultivation. There was also an increase in the number of enterprises involved in production and processing or exclusively in processing, from 2,085 to 2,866 at the end of 1999 (+37.4%).

The area under organic farming in the EU amounted to over 3.2 million hectares in 1999, an increase of over 30% as compared with the previous year. Italy was the leading country in Europe, with almost 30% of Europe's organically farmed area; Germany followed (14%) and then Austria, Spain and France, with around 10% each.

The market for natural food is growing rapidly and worth about 10,500 billion lire at European level, while in Italy it amounted to 2,000 billion lire annually, with a trend in market growth of over 25% per year. Domestic consumption was equivalent to about 1,100 billion lire, or 1.5% of Italian food consumption; the remaining amount is exported, mainly to other European countries but also to the USA and Japan.

As regards legislation, Regulation (EC) no. 1804/99 was approved and came into force by August 2000, regulating livestock production and animal husbandry (cattle, sheep, goats, horse and poultry) with organic methods.

There were 468 livestock farms subject to the national certification system, 60% of which are based in northern Regions, and particularly the North-east.

PART VI

AGRICULTURAL PRODUCTION,
FORESTRY AND FISHING

Chapter 20

Cereals and industrial crops

World cereals production in 1999 amounted to 1,871 million tons, 28 million tons less (-1.5%) than the previous year (FAO data). Wheat production fell by relatively little (-1.5%), as did that of fodder crops (-3.6%), while production of rice rose 3.4%. Consumption is expected to increase by almost 1%, rising to 1,892 million tons, 21 million tons more than estimated production; as a result, stocks will probably be used for the first time in four years.

Estimated trade in cereals for the 1999/2000 season indicated an increase, rising to 225 million tons (+4.2%), 7.5 million tons of which was food aid

According to provisional data from the European Commission, the area under cereals in the EU in 1999 amounted to 36,378,000 hectares, 2.6% less than the previous season. Estimates for the 2000/2001 season show high levels of cereals production in the EU (about 210 million tons), due to an increase both in yields and in area sown.

In the 1998/99 season, expenditure for cereals under the Community subsidy regime amounted to 13,516 million euros, equivalent to 76% of expenditure for arable crops (17,566 million euros) and 34% of EAGGF-Guarantee expenditure for the year. Expenditure erogated in favour of Italy amounted to 1,444 million euros (482.5 million euros of which for supplementary aid for hard wheat), a reduction of nearly 3% as compared with 1998. Consequently, Italy's share of Community expenditure for the cereals sector fell from 10.9% to 10.7%.

The rate of set-aside in the 1998/99 season remained unchanged at 5% but rose to 10% for the 1999/2000 season.

According to provisional data from the European Commission, the area under rice in the EU in the 1999/2000 season amounted to 394,000 hectares, a contraction of 3.4% as compared with the previous year and also below the maximum guaranteed area (427,623 hectares).

Italian cereals production in 1999 was estimated at around 19.7 million tons, a 2% rise as compared with 1998, due to the increase in the area sown (+2.9%). Non-processed cereals are traditionally a negative component in the Italian agro-food trade balance. In 1999, the balance of

trade recorded a deficit of nearly 2,300 billion lire, a reduction as compared with 1998 (-10%), mainly because of a contraction in imports in value terms, due to a fall both in prices and in quantity. Italy's main trading partners for cereals are EU countries, which supply 75% of imports and receive 93% of Italy's limited export levels. Soft wheat represents 57% of imports, more than half of which come from France, followed by hard wheat, which represents about 15% of non-processed cereals imports. In this case, the supply markets appear less concentrated, with the USA and France providing just under 50% of the product. Maize has a 14% share of the sector's imports, nearly 90% of which come from France. Cereals derivatives is traditionally a positive component in the Italian agro-food trade balance and in 1999 the sector was the second largest for exports. The trade surplus amounted to more than 3,400 billion lire, less than in 1998 (-5%), due to a contraction in exports and an increase in imports.

The area under soft wheat in Italy in 1999 remained almost unchanged as compared with 1998 (+0.1%). However, the marked fall in yields caused a 6% contraction in production. The fall in production of hard wheat (-7.6%) was due entirely to levels of production in southern Regions, where the marked contraction in yields was not compensated by the increase in area sown. As regards the Common Organisation of Markets, the maximum guaranteed area allocated to Italy for traditional areas (1,646,000 hectares) was not exceeded in 1999, since the area for which applications were made amounted to 1,613 million hectares. In contrast, hard wheat production in non-traditional areas was well above the limit of 4,000 hectares (about 27,000 hectares).

The area under rice in Italy for the 1999/2000 season amounted to 220,795 hectares, a contraction of 1%, confirming the downward trend established in recent years. Production of unpolished rice (1,362,452 tons) fell 3.2% as compared with 1998, in coincidence with a net output of 843,223 tons of polished rice, unchanged since the previous year due to an increase in productivity in polishing of 2.3 per cent.

The area under maize amounted to 1,027,000 hectares (+5.9%). National production rose to more than one million tons (+10.6%), due also to an increase in yields, with a record increase of 16% in the North-east.

As regards oilseed crops and seed oil world production of oilseeds rose to 366 million tons in 1999, an increase of 1.4% as compared with 1998, already considered an excellent year (FAO data).

In the 1999/2000 season total EU oilseed production amounted to over 15 million tons, a 7% increase as compared with 1998. Italy was still

the leading producer of soya (70%) although the area under soya fell, to about 508,000 hectares (-21.2%). Foreign trade also recorded a contraction), with a fall in exports in quantity terms (-75%) and in imports (-2.2%).

As regards soya, the area in Italy in 1999 amounted to 246,000 hectares (-30% as compared with 1998); yields were unchanged, so production suffered a similar contraction to that of area (-29%), amounting to 893,000 tons. Imports of soya constituted 75% of overall imports of three oilseed crops considered, soya, sunflower and rapeseed, amounting to 282 billion lire.

As regards sunflower seeds, the area under sunflower in Italy amounted to 210,000 hectares (-10% as compared with 1998). In 1999, imports (234,000 tons) increased almost 2%; in contrast, exports fell 84%, dropping to less than 2,000 tons.

The area under rapeseed in Italy in 1999 amounted to 52,000 hectares, 14.8% less than in 1998. Due to a positive trend in yields, production suffered only a limited reduction (-4.6%), falling to 58,500 tons. In 1999, there was a recovery in imports, from 8,500 tons in 1998 to over 32,000 tons, which came mainly from Romania. In contrast, there was a continued contraction in exports which fell to 38 tons (-98%), destined for France.

Overall availability of oilseeds and seed oil grew by 1.2% in 1999 as compared with the previous year. The availability of oil-cakes and extracted flours fell by just under 1%, to 4,172,000 tons.

World sugar production in the 1999/2000 season was estimated at around 132.3 million tons (in raw sugar equivalent), 2.9 million tons less than the 1998/99 season. Community production of white sugar for the 1999/2000 season was estimated at 18 million tons, 17.7 million tons of which was sugar from sugar beet. Overall production increased 7.7% as compared with the previous season, despite a 2% contraction in the area under sugar beet.

Overall EU exports of sugar increased by 27% as compared with the 1998/99 season (2,900,000 tons within the quota and 3,441,000 tons exceeding the quota), representing a slight increase as compared with the 1997/98 season.

The area under sugar beet in Italy in 1999 amounted to 289,000 hectares (-1.4% as compared with 1998). However, sector operators suggest that these figures contain some discrepancies and put forward a more realistic estimate of 273,000 hectares.

In 1999, Italian foreign trade in sugar and other sugar products generated a volume of trade valued at around 900 billion lire, with a trade

deficit of 200 billion lire; both results were slightly lower than the previous year, due to a marked contraction in imports (-10%) and a significant increase in exports (+14%).

According to the United States Department of Agriculture (USDA), world uncured tobacco production destined for processing in 1999 amounted to 5,928,143 tons ("dry" weight). Overall Community production, taking into account the conversion coefficients to balance dry weight with that of the unbaled product (with about 15-22% humidity) was equivalent to about 5% of world production. The main producer countries within the European Union are Italy and Greece, both with shares of around 38%.

As regards legislation, the most important event for the EU was the establishment of the new Common Organisation of Markets for uncured tobacco, which came into force on 1st January 1999. The new Regulation no.1636/98, approved on 20th July 1998 by the EU Council radically reformed the uncured tobacco sector, differentiating Community subsidy on the basis of production quality. The precise modes of implementation of this reform were then stipulated in Regulation no.2848/98.

As regards Italy, the area under tobacco was substantially unchanged as compared with the 1998 season, amounting to about 46,900 hectares; overall production amounted to 1,323,000 quintals⁽¹⁾, in line with the previous season. About 90% of overall annual harvest is currently produced in four Regions: Campania, Umbria, Veneto and Puglia. In recent years, however, there has been a trend towards cultivation in the Centre and North. The area sown has fallen by 20% to 30% in Campania and Puglia in the last five years, while it has increased 6% in Veneto and maintained levels in Umbria. The two leading varieties still represent over 70% of production. In contrast, the cultivars of the third variety group (*dark air cured*) such as Paraguay and Badischer Geudertheimer are now in decline because of changing demand from the processing industry.

As regards Italy's foreign trade in tobacco, exports of uncured tobacco, amounting to 938,000 quintals in 1999, fell slightly in quantity as compared with the previous year (-2.1%), maintaining the trend that began several years previously, although the rate of contraction has slowed. Imports of uncured tobacco remained basically unchanged in quantity, amounting to 388,500 quintals, although there was an increase in value of over 11 billion lire, due mainly to the depreciation of the lira against the dollar.

⁽¹⁾ 1 quintal = 100 Kg

Chapter 21

Vegetables, fruit and flowers

In 1999, world production of fresh vegetables reached 630 million tons, an increase of 2% as compared with the previous year. Fruit production amounted to 445 million tons, a 3% increase.

Vegetable production in the EU grew by 2.2%, rising to 55 million tons. Within the sector there were some contrasting trends, among which the significant fall in production of pulses (-11%) and the increase in tomatoes (+10%). Italy, Spain and France are the main vegetable producers in the EU, with an overall share of 64%, followed by Greece (8%). Italy is the largest producer of tomatoes in Europe (44%).

EU fruit production amounted to 59 million tons (+8%), an overall increase to which all the main crops contributed, and in particular peaches and nectarines (+19%) and apples (+10%). The main European fruit producing countries are Italy (32%), Spain (25%) and France (20%), the latter recording the highest rate of growth in the sector (+17%) in 1999. The contrasting trend of supply and demand caused a reduction in prices (-1% for vegetables and -9% for fruit).

In 1999, the vegetables sector in Italy showed considerable dynamism, and an increase in area cultivated of 11% as compared with 1998. The main item in Italian vegetable production is tomato, which alone represents 52% of total fruit and vegetable production. In 1999, 88% of tomato production was tomato for industrial use, and produce destined for processing amounted to about 5 million tons, of which only 71% was subject to subsidies, being within the Community quota.

The surplus on the balance of trade for vegetables fell by about 112 million lire (-26% as compared with 1998). This reduction is due above all to an increase in vegetable imports (+12%), with export levels, in contrast, remaining stable.

Italian fresh fruit production amounted to 7,300,000 tons in 1999, a 9% growth as compared with 1998; nearly all the main crops contributed to this rise, except for dessert grapes, where production levels were almost unchanged, and pears, where production fell by 16%. Apples, dessert grapes, peaches and pears make up 80% of the sector's production and are specialised regionally: peaches in Campania (27%),

dessert grapes in Puglia (73%), apples in Trentino-Alto Adige (60%) and pears in Emilia-Romagna (63%).

Production of nuts amounted to 222,000 tons, an increase of 9% as compared with 1998. Foreign trade in fresh fruit and nuts did not alter significantly, recording a surplus of 1,304 billion lire, as in 1998. About 66% of fruit exports were made up of just four products (dessert grapes, apples, peaches and kiwi), mainly destined for Germany. Fruit imports included primarily bananas (32%), mainly from the "rest of the Americas" area and from Spain. Spain is also Italy's main supplier of peaches, strawberries and small fruit. Argentina and Chile provide about 50% of imported pears, together with Spain, which supplies 27%.

In 1999, there were significant changes in the area under citrus fruit, while the quantity produced returned to normal levels, with a 40% increase for oranges and 57% for clementines. In contrast, there were falls in production of lemons (-11%) and mandarines (-12.5%). Citrus fruit exports amounted to 145,544 tons, worth 133,150 million lire, representing a reduction of 28% in quantity and of 24.4% in value; imports rose 9.1% to 259,468 tons, worth 318,319 million lire (+176.7%). As a result, the overall trade deficit for fresh fruit amounted to 185 billion lire.

The citrus fruit sector recorded a considerable reduction for many components in 1998/99: 861,600 tons of citrus were processed, a reduction of 37.2% as compared with the previous year: 460,800 tons of oranges, 308,300 tons of lemons, 82,900 tons of small fruit; 8,000 tons of bergamot and 1,600 tons of grapefruit. The industry processed about 36% of citrus production, with prices for oranges of the blonde variety amounting to about 60 lire per kilo and those of Sicilian pigmented oranges (blood oranges) between 120 and 150 lire per kilo, rising to peaks of 200 lire per kilo for prime quality goods; lemons were valued at between 200 and 230 lire per kilo.

Exports of citrus derivatives rose to 213.6 billion lire in value, a 3% increase over the previous year; imports also increased to 114.1 billion lire, a 26.9% increase, resulting in a positive trade balance of 99.5 billion lire, equivalent to just over half the fresh fruit deficit.

As regards Community legislation, Regulation (EC) no. 1093/2000 fixed intervention limits for lemons for the 2000/2001 season (87,400 tons) and Regulation (EC) no. 1148/2000 reduced the amount of subsidy for lemons destined for processing in the 2000/2001 season by 36%, to 6.78 euros per 100 kilos for the pluri-annual contracts, to 5.89 euros per 100 kilos for the seasonal contracts and to 5.30 euros per 100 kilos for individual contracts.

As regards flower and plant production, overall production increased 1% as compared with 1998, but prices fell 7.4%, resulting in a net contraction of 6.5% for agricultural producers. The reduction in value affected both flower and nursery production, in both cases because of a reduction in prices, but the flower sector was worse hit. Indeed, despite a 0.7% increase in production, the value of production fell from 3,632 billion lire in 1998 to 3,359 billion lire in 1999 (-6.5%), following a reduction in prices of 8.1%. As for nursery production, the drop in prices amounted to 5% while production grew 2%. Leaf plant production, made up of the most expensive and valuable species for the end consumer, rose to 77 million pieces, an increase of 12.8%, in 1999. The "other" plants category also increased production (+5.6%) to 73 million pieces.

The value of Italian imports of flowers and plants increased once more in 1999, rising to about 715 billion lire (+8.3% as compared with 1998). Exports also increased; indeed, their increase in value (+9%; 881 billion lire) was greater than the increase in imports. As a result, the trade surplus rose to 166 billion lire (+17.2%). As regards flowers, the balance of trade worsened further: exports increased in 1999 by only 4.8%, while imports increased by about 12%. Consequently, the flower sector balance fell to just 81.2 billion lire, a reduction of 15.2%. In contrast, exports of leaf plants, which were already considerable, increased further in 1999 by 7.3%, while import levels remained quite low, resulting in a positive balance of trade for this sector of over 146 billion lire.

As regards fresh flowers, Community imports to Italy come almost entirely from Holland (94%) and about 4% from France. Flower exports to other EU states go firstly to Germany (53%), followed by France (14%), Holland (11%) and the United Kingdom (7%). Other exports are destined, above all, to Switzerland.

The balance of trade for potted plants consisted of imports worth 183 billion lire and exports worth 125 billion lire, resulting in a deficit of 58 billion lire, a slight contraction as compared with 1998. Imports were mainly from Holland (75%), while Italian exports went principally to Germany, France, Holland and Switzerland.

Grapes, wine and olives

In 1999, the area under vines world wide rose to over 7.4 million hectares, an increase of 1%. There was also an increase in grape production, which rose to over 60 million tons. The European Union is the main producer, with over 40% of total production. World wine production also recorded a recovery as compared with 1998 (+5.4%), almost entirely due to the 8% increase in production in the EU, which continued its leading role with a share of over 64% of world total production. The EU is also the main player in world trade, exporting more than 4.8 million tons. France, Italy and Spain are the leading exporters, with shares of 24%, 22% and 15% of total world exports respectively. In value terms, the EU's position improved further, with a share of almost 80%.

Overall wine production in the EU in the 1998/99 season rose to 168 million hectolitres, representing a recovery of 1.5% as compared with the previous year. Provisional data for the 1999/2000 season suggest total production of around 177.8 million hectolitres, a net increase as compared with the previous year.

As regards utilisation, the 1998/99 season highlighted a recovery in overall wine consumption (+1.8%), which rose to over 129 million hectolitres, equivalent to an annual consumption per capita of 34.65 litres.

In 1999 the area under vines in production in Italy remained substantially unchanged, although the data belies two contrasting trends: a slight increase in the area under production of grapes for wine (0.4%) and a slight fall (-0.6%) for dessert grapes. Total grape production was abundant, reaching over 95 million quintals, due above all to the situation in the wine grape sector. There was, however, a considerable decline in production in southern Regions, which fell by almost 5%, although this fall was more than compensated for by the positive trend in central and north-eastern Regions.

The recovery in production was an exclusive phenomenon of white wines, continuing the positive results of 1998, whereas red wine production recorded a contraction. There are currently 317 Italian wines which have been awarded the status of designation of controlled origin (DOC), and a further 21 wines which have designation of controlled guaranteed

origin (DOGC). The greatest concentration of DOC wines is in Piedmont and Tuscany, but there is also a certain number in Lazio. Campania, Puglia and Sardinia are the leading southern Regions. In addition, in early 2000, 115 wines had already been recognised as being of typical geographical origin (IGT).

Italy is a major wine exporter and in 1999 wine exports represented over 15% of total national agro-food exports, with a surplus balance equivalent to more than 85% of the value of the total trade in wine. Wine exports rose to more than 4,400 billion lire in value (+9% as compared with 1998). There was also an increase in imports (+5%), although this increase was due mainly to price increases rather than to a rise in volume.

Despite its secondary importance, exports of both red and white table wines (as distinct from quality certified wines) showed the most marked commercial dynamics, with red wine exports increasing by almost 12% and those of white wine rising even more dramatically (+19%); in both cases, the increases were due particularly to an enormous increase in volumes exported.

The Italian wine trade is concentrated geographically as regards imports (86% from France) whereas export destinations are more varied: besides Germany (32%), Italy also exports to a significant number of non-EU countries.

World olive oil production for the 1998/99 season amounted to 2.4 million tons, a contraction of about 2.6% as compared with the previous season. EU production amounted to around 1.7 million tons (-19% as compared with 1997/98); consequently the EU share of total world production also fell (from 86% to 71%).

International trade in olive oil is dominated by the EU, which recorded a market share of 41% for the 1998/99 season, followed by Tunisia (35%) for exports, and the USA (28%) for imports.

Community production attributed to the 1998/99 season for the concession of subsidies amounted to 1,951,070 tons, a contraction of around 19% as compared with 1997/98.

In 1999, the seventh promotional campaign was launched, financed with 35 million euros for three years and involving the 15 EU member states. Funding for Italy amounted to 4.1 million euros.

It is estimated that the area under olive groves was equivalent to 1,174,135 hectares (+3.4% as compared with 1998). Production of olives also increased (+50%) as did the quantity of oil extracted (+53.7%), which was about 724,286 tons. The Region producing most oil was Puglia, with 313,424 tons (+87%), followed by Calabria with 166,056 tons

(+65%). Data from other Regions show a 69% reduction in oil production in Liguria, with 2,570 tons, while in Campania production was unchanged as compared with 1998 (48,015 tons). Overall, the two leading Regions produced 66% of production, which rises to 74%, if Sicily is added.

Calabria and Puglia have 38% of olive oil mills, where 55% of total national production was extracted, with average production per oil mill equivalent to 101 and 128 tons respectively, as compared with a national average of 80 tons.

Overall foreign trade in olive oil in 1999 increased by 2.4%: imports fell by 4.3%, amounting to 418,029 tons and exports increased 16%, rising to 247,751 tons. Imports from Community countries fell substantially, taking a 65.7% share. The contraction was due principally to the marked fall in imports from Spain which, in 1999, amounted to about 75,000 tons of oil (-66%), with a 17.9% share (50.6% share in 1998).

As regards exports, there was an increase in exports to other Community countries. As regards the quality of oil bought, virgin olive oil, excluding the "lampante" quality, represented 63% of total olive oil imports and 53% of that exported, with substantial increases as compared with 1998. Purchases of "lampante" virgin olive oil, the second most important import (23.8%), fell by around 25%, while exports represented no more than 2% of total despite doubling as compared with 1998. The second most important export is refined oil, representing a 34% share.

Chapter 23

Livestock production

In 1999 world production of meat reached about 226 million tons, an increase of about 1.3% as compared with 1998. The total was made up of about 56 million tons of beef, more than 88 million tons of pork (39%), slightly more than 63 million tons of poultry (28%) and more than 11 million tons of sheep and goat meat (5%).

In the EU, beef production remained stable at about 7.6 million tons. As regards international trade, the EU improved its position as net exporter with a surplus of around 481,000 tons.

During the year, expenditure from the EAGGF Guarantee Fund for the beef sector amounted to about 4.6 billion euro, more than 11 per cent less than in 1998. The share going to Italy fell once more, and at 183 million euro it was 4% of the total.

Community output of pork continued to grow, reaching about 18 million tons; alongside the expansion in production, exports continued to perform well and these reached approximately 1.5 million tons. Imports, rather small in quantity, amounted to 63,500 tons, higher than in the previous year. EU expenditure on the sector was about 327 million euro.

Production of sheep and goat meat in the EU was about 1.1 million tons, more or less stationary as compared with 1998. Exports were slightly less than 200,000 tons, whilst imports were slightly more than 400,000 tons. EU expenditure on this sector was 1,894.3 million euro, almost entirely linked to the per head premium of the Common Organisation of the Market.

In 1999 poultry production in the EU reached 8.5 million tons, slightly lower than in the previous year. EAGGF expenditure on the poultry sector amounted to 110 million euro, of which 90 million were absorbed by export refunds; expenditure accruing to Italy is marginal, at 500 million euro.

The Italian beef herd increased slightly in 1999, reaching 7.4 million head, with an increase in dairy cattle (+1.3%) and a reduction in suckling cows (-1.6%). Production of beef and buffalo meat increased overall, reaching over 16 million quintals in live weight, 10 per cent higher than in 1998. About 4.5 million head were slaughtered, of which 2.6 mil-

lion were mature animals and slightly more than one million, calves; overall meat production in the sector amounted to slightly more than 11 million quintals of carcass weight.

Imports of live cattle were one of the largest items of the Italian agro-food trade deficit; in 1999 the value of imports of breeding cattle reached 1,650 million lire, whilst that of slaughter cattle reached 350 billion lire (+13.2%). The deficit for fresh and frozen beef was 2,100 billion lire.

The number of pigs in Italy was about 8.4 million, higher by 2.3 per cent as compared with 1998, and the production of meat expanded considerably due to an increase both in number and in the weight of the animals slaughtered, and at 17 million quintals, it was 4.6 per cent higher. The value of imports of live pigs for breeding amounted to 28 billion lire whilst those of animals for slaughter amounted to 188 billion.

Production of sheep and goat meat fell by 1.7 per cent to 859,000 quintals. The number of goats increased, reaching 8 per cent of the total. As regards trade in this sector, Italy imported animals for slaughtering to the value of 161 billion lire and meat for a total 148 billion lire.

Domestic production of poultry amounted to 14 million quintals live-weight in 1999. In addition, 4 million quintals of rabbit meat were produced.

According to FAO, world production of milk increased by about one per cent, to more than 562 million tons, with an expansion in production of about 5 million tons due to cow and buffalo milk.

In the EU, deliveries of milk increased by more than one million tons (+1.5%), the greatest increase for the whole decade. The season closed with a surplus of more than 500,000 tons above the sum of the national quotas.

As regards the problem of the quotas, in Italy the legislative decree 43/99 was passed and subsequently converted into Law n. 118/99. This cleared up a number of aspects relating to the closure of the four seasons from 1995/96 to 1998/99 and embodied three important decisions: the first confers on AIMA (the Intervention Board), in consultation with the Regional authorities, the power to revoke Individual Reference Quantities which have been either totally or partially unused; the second confirms priorities for compensation already introduced by the Law n. 642/96, limiting them, however, only to producers to whom quotas have been allotted; the third introduces the possibility of paying the super-levy by instalments for the 1995/96 and 1996/97 seasons in ten six-monthly instalments. Due to the provisions of this Law, it was possible to make payments and finally to close the first two of the seasons covered by this

norm.

Surplus production had been more than 430,000 tons in the 1995/96 period and about 530,000 tons in 1996/97; the fines inflicted on producers for the two seasons were for 221 and 371 billion lire respectively.

The results for the dairy sector appear to be in accordance with the medium to long term trend in the structure of supply and utilisation of the products. The tendency towards a gradual increase in the degree of self sufficiency in the sector continued in 1999, but this still remained low at less than 64 per cent. It seems that there was a considerable reduction in production in 1999. Data from Assolatte, the producers association, show a fall in the production of bovine milk of almost 300,000 tons which was only partially offset by a strong recovery, of 70,000 tons, in the production of buffalo milk, bringing it back to the level of 1997.

Domestic consumption of cheese grew by almost seven percentage points, with an increase of more than one kilo per head per year.

For the second year running, exports of cheese in milk equivalent showed a considerable increase, of over 10 per cent.

Despite three years of slump in the market for cheeses, there was no recovery during 1999 in wholesale prices for Parmigiano Reggiano and Grana Padano. For the former, the annual average price fell by a further 18 per cent, having reached a minimum of 13,750 lire per kilo in June and recovered to 14,500 lire per kilo at year-end when, however, prices were still 5.3 per cent lower than in December of the previous year. The trend for Grana Padano was more or less the same, but in this case, after the reaching the floor in June, the price rose by 4.3 per cent by year end and, due to this, the average annual price was actually 0.7 per cent higher than in 1998.

The uncertain recovery for processed products once more affected the inter-professional negotiations about the price to be paid to milk producers. An agreement was reached only at the beginning of August, on the level of 639 lire per litre including refrigeration and excluding VAT, 5 lire less than the price agreed in the previous year. Once again, therefore, the downward trend in milk price seen in the last two seasons continued.

The trade balance of the sector in 1999 recorded a noteworthy improvement. Even though the deficit remained, at 3,000 billion lire, it was lower by 4.3 per cent, due to a two per cent increase in exports and a contrasting but slightly lower reduction in imports. The products where the most positive results were achieved were cheeses, with higher exports on all the main markets. The average unit price per quintal of

milk-equivalent exports in 1996 had been 58 per cent higher than that for imports but this difference had fallen to 56 per cent in 1997, to 42 per cent in 1998 and it fell to 32 per cent in 1999.

About 12.7 billion eggs were produced in Italy in 1999. Family consumption absorbed 64 per cent of these, the rest being taken up by industry, of which pasteurised eggs accounted for 74 percent and shell eggs for 26 per cent.

Total world production of honey amounted to 1.2 million tons, much the same as in 1998. The EU produced 110,000 tons (9.2%). Italy, with 11,000 tons, is the fifth producer in Europe but the first for multiflora varieties of honey. Purchases from abroad totalled 12,500 tons, mainly from Argentina. Exports amounted to 3,464 tons for a value of about 14 billion lire, and went principally to Germany.

Chapter 24

Aquaculture

In 1998, world aquaculture production recorded a strong recovery, rising to 39,430 million tons, with an annual increase of 9.4%, as compared with that of 5.8% in 1997.

In Europe, there was an increase in salmon production, which rose from around 500,000 to 590,000 tons (+18%) between 1998 and 1999. The greatest increase was in Norway, which provides about 70% of European production.

In 1999 there were further increases in production of sea-bass and sea-bream, which rose to almost 100,000 tons of which 56,000 tons were sea-bass and 42,000 sea-bream. This represented an overall increase of 23.9% as compared with 1998. The greatest increases in production were recorded for Greece (from 36,000 to 50,000 tons, or +38.8%), Turkey (from 12,500 to 13,500 tons, or +8.0%) and Italy (from 10,100 to 11,400 tons, or +12.9%).

Italian aquaculture production remained almost unchanged in 1999, at around 224,000 tons, as compared with 222,000 tons in 1998 (0.6%). The overall situation does, however, conceal contrasting swings in the various sub-sectors. As regards fresh-water fish, there was a strong contraction in trout production (-4,000 tons), which fell to 44,000 tons.

Production of innovative marine species increased between 1998 and 1999, with diploodus and shi drum production rising from 200 to 350 tons and from 10 to 30 tons respectively. Shi drum farming appears to interest many producers but is limited by poor availability of havelings. Production of grooved carpet shells also increased to 500,000 tons, representing the most important sector of Italian aquaculture both in monetary and employment terms.

In value terms, aquaculture production rose to 1,055 billion lire in 1999, an increase of 0.7% as compared with the previous year.

There was also an increase in the production of marine havelings both of traditional and innovative species, which reached 115 million units (+5.5%), most of which were exported (about 60 million units).

The number of production plants involved in marine species farm-

ing in the sector increased in 1999. Three new enterprises were built in Puglia (2 farms with floating cages and one on land) and a further farm in Calabria. In addition, other farms built in previous years began production in Tuscany, Lazio, Campania and Puglia. They are mainly farms using floating cages in the sea.

Completion and monitoring for the Community programming of structural interventions for the 1994-99 period continued, jointly financed by the Special Fund for Fisheries Guidance, and final expenditure allocations for single measures were accepted. In the aquaculture sector 148 projects were initiated, worth 259 billion lire overall, of which about 50% with public subsidies.

As regards European policy, Community norms for the fishing and aquaculture sectors are set out in Regulation (EC) no. 1263/99, which defines the details of structural measures in the sector financed with the Special Fund for Fisheries Guidance and in Regulation (EC) no. 2792/99, which sets out the conditions and methods of contributions. The launch of the Community programme for fishing sector structural funds for the period 2000-2006 introduces important changes for aquaculture. Among the measures financed by the Special Fund for Fisheries Guidance, freshwater aquaculture is included, whereas in the past it benefited from EAGGF funds. The other major change comes about from the wider process of decentralisation of responsibilities and provides for a new instrument, the national DOCUP, for Regions not under Objective 1. This document contains specific measures and objectives planned and managed at regional level, whilst the fishing fleet remains the responsibility of the Ministry of Agricultural Policy (MIPAF). Given the strictly territorial nature, measures regarding the development of aquaculture and marine fish farming are also included among the regional responsibilities.

As regards national legislative activity, the sixth Triennial Plan for the period 2000-2002 was drawn up by the Directorate General for Fishing and Aquaculture. There were 15 new applications for subsidised loans for aquaculture farms as provided for under the Fifth triennial plan and a pilot project was approved concerning insurance policies in aquaculture.

In accordance with Law no. 164/98, regarding measures for fishing and aquaculture, the CIPE deliberation of 21 April 1999 approved the national plan for the development of aquaculture in freshwater, as an addition to the Fifth fishing plan. The Plan provides incentives worth 15.5 billion lire for specific and diversified measures.

Sales of fish and aquaculture products increased (+17%) as com-

pared with 1998, because of an increase both in the number of buyers and in the average consumption per family.

Producer prices of products from fish farming remained almost unchanged or fell slightly: portioned white trout was sold for an average price of 3,600 lire per kilo, while portioned rainbow trout was sold for 4,000 lire; there was a further contraction in the price of eel, both for smaller and larger sizes, with prices at around 12,000 and 14,000 lire per kilo, respectively. The price of sea-bass and sea-bream also fell slightly, to around 13,000 and 12,000 lire per kilo.

The increase in the trade deficit for fish products was smaller (1.6%), but still confirmed the national fishing sector's dependence on foreign imports, with a deficit of over 4,000 billion lire.

Chapter 25

Fishing

World production of fish suffered a marked reduction, of about 5 million tons (-4%) in 1999. From 1990 to 1997, production had risen from 99 million tons to 122 million tons and subsequently fell to 117 million tons in 1998; 86.3 million tons of this were marine and freshwater fish and 30.9 million farmed fish from aquaculture.

There were a number of events which affected the fishing sector in 1999, some of which seriously damaged the sector, especially the increase in diesel prices and the stop to activities caused by the bombing in the Former Yugoslav Republic. This can be divided into two periods: the first, from 14th May to 3rd June, for the sailors who stopped voluntarily for serious security reasons (Chioggia, Venice and Manfredonia); and the second period from 4th June, affecting the whole of the Adriatic, initially until 15th July but then extended until 31st August by decree no. 243 of 27th July 1999, concerning emergency measures for fishing in the Adriatic sea.

As regards legislative activity, under the decree of 14th January 1999 the Plan for controlling the fishing of red tuna in Italy was initiated. The decree obliges owners of fishing vessels more than 10 metres long to record in a register to be kept on board the amount of red tuna caught, the date and place of catches, as well as the type of fishing equipment used.

After years of waiting, legislative decree no. 217 of 27th July 1999 was emanated, to bring into line the current legislation regarding safety on-board; a further decree followed, no. 298 of 17th August 1999, emanated in accordance with EC directive 93/103 regarding the minimum health and safety requirements on board fishing vessels.

Regulation (EC) no. 2737/1999 established new methods for recording information on fishing catches by member states. Once again, the regulation requires an on-board register for fishing in the Mediterranean, in which any species kept on board in quantities greater than 50 kg must be recorded. This is a new procedure for fishing vessels under 18 metres in length.

Finally, law no.1164 of 21st May 1998, regarding fishing and aquaculture measures, provided for the integration of the Fifth triennial plan with a specific plan for freshwater fishing. Funding for the plan amounted to 15.5 billion lire for 1998 and 1999.

The overall allocation of Community funds for the programme of the Special Fund for Fisheries Guidance programme, updated in June 2000, amounted to 1,761 billion lire, of which 1,101 billion lire were for Objective 1 and 660 billion lire for Objective 5a. National and Community allocations in Italy under this measure were equivalent to 183 billion lire for Objective 1 areas and 9.7 billion lire in the areas under Objective 5a.

Furthermore, negotiations were finalised for the Special Fund for Fisheries Guidance, valid for the period 2000-2006. Important changes were made, including the full participation of the Regions, which became reference bodies for Community structural policies, thus establishing close collaboration between central and regional government, and signifying a direct relationship for the Regions, the European Union and the member State in a stable form for the first time.

In 1999, the Italian fishing fleet was comprised of 19,798 craft, with a total tonnage of 230,018 tons and total power of 1,534,284 Kw. As regards number of craft, small fishing vessels continue numerically to dominate the fleet, with 12,482 craft, equivalent to 63% of the fleet.

The reduction in fishing with hydraulic nets which began in 1998 continued in 1999, in accordance with the Second Plan for Clams, which foresees the reduction in the number of licences issued for fishing bivalve mussels with hydraulic nets from 764 to 655 in the Adriatic and from 75 to 40 in the Tyrrhenian sea and a block on licences until 1st January 2009.

Italian fish production in 1999 amounted to 416,000 tons, a fall of nearly 50,000 tons (-10.5%) as compared with 1998. In value terms, production amounted to around 2,963 billion lire, 245 billion lire less (-7.6%) than the previous year.

The fish processing sector recorded further expansion following its growth in production in 1998. Overall quantity of the main processed products amounted to 126,000 tons, an increase of 4% compared with the previous year. Turnover for national production was estimated at 1,331 billion lire, as compared with 1,276 billion lire the previous year. Export levels were stable (11,681 tons) while imports, at 54,160 tons, grew at a faster rate (+8%) as compared with 1998.

As regards the preserved fish sector, the tuna sector maintained its dominant position, with production amounting to 89,000 tons and representing 71% of the total sector, followed by anchovies, which account for 15% of production, including salted anchovies (11,000 tons) and filets in oil (8,000 tons). Sardines in oil hold only a marginal position in the sector, with a share of less than 1.5%; overall production of preserved clams

amounted to 2,400 tons, equivalent to a 2.1% share; finally, production of other fish species in oil, salt water or marinated amounted to 13,800 tons, equivalent to 11% of the Italian preserved fish production.

The tuna industry recorded a greater increase in production (+3.5%) than in 1998. Turnover was stable (812 billion lire) as was the average price (9,120 lire per kilo).

The trade balance for the fish sector worsened again in 1999; imports totalling 726,000 tons were offset by 116,000 tons of exports, with a consequent trade deficit of 610,000 tons; in value terms, imports stood at around 4,874 billion lire while exports amounted to just 640 billion lire, resulting in a deficit of around 4,234,000 billion lire. The trade deficit increased by 9% in volume terms and 6% in value terms as compared with the previous year.

Imports of live, fresh and frozen fish increased by around 8%, rising to about 560,000 tons; the rise in preserved fish products was more modest (+5.9%), and reached a level of 166,000 tons. Export levels remained relatively stable, with exports of live, fresh and frozen fish at 99,878 tons, worth 497 billion lire and exports of preserved fish products at 16,238 tons, worth 143 billion lire.

Forestry

The area given over to forest in Italy is estimated at about 6,850,000 hectares, representing about a third of total national territory, and an annual increase of around 0.1%. Whilst in recent years the area under coppice and minor tree formation has remained stable, there have been increases in high coppice at a rate of about 5,000 hectares per year. Forests are concentrated mainly in the hilly and mountainous areas of Italy. Liguria is the most densely wooded Region in Italy, with 53% of total area given over to forest, followed by Trentino-Alto Adige, with 46%, and Tuscany with 38%. Calabria is the southern Region with the greatest area under forest, with 480,000 hectares. It is also the second Region for the area given over to high coppice with more than 300,000 hectares, equivalent to about 10% of total high coppice woods.

Forest areas are mainly in private ownership (60%) while 35% is owned by the State, Regions and Municipalities. The remaining 5% is property of other bodies (the Roman Catholic Church), but mostly in forms of collective ownership, which are quite common in the alpine areas but also present in some areas of the Apennines.

Forest policy in recent years has been based around Regulation (EEC) no. 2080/92, which established a regime of Community aid for afforestation of agricultural land and for the improvement of wooded areas, and Regulation (EEC) no. 867/90, which provides for measures regarding the commercialisation of timber products and the restructuring of forest and timber enterprises. Regulation 2080/92 has been implemented directly by the Regions via specific operative programmes and nearly all the Regions and autonomous Provinces in Italy have been involved, with the exception of the autonomous Province of Trento; altogether in the five-year period 1994-99 afforestation amounted to around 77,000 hectares. The most active Regions were Lombardy, with 16,800 hectares, Sicily (8,300 hectares) and Sardinia (around 7,400 hectares).

The average area for afforestation in the North varied between 7 hectares in Lombardy to about 3 hectares in Piedmont, Veneto and Friuli-Venezia Giulia. In contrast, in the South, the average area for afforestation was much greater, up to 18 hectares in Calabria, 15 hectares in

Sardinia and 13 hectares in Puglia. Differences in agricultural systems account for the differing size of projects: these are more intensive in the North, where high land prices and high productivity make forestry incentives less attractive, and especially those compensating for loss of income. The average cost per hectare for afforestation varies from a minimum of 4.8 million lire in Lombardy to a maximum of around 12 million lire in Calabria.

The total area undergoing forest improvement is about 27,000 hectares.

As regards the state of forests, studies show that 23% of trees examined (almost 130,000 in the whole of Europe) were moderately or seriously damaged; almost 40% of trees displayed symptoms of defoliation, while only 37% were in a healthy state.

From 1990 to 1998, an average per year of 124,000 hectares were affected by fire in Italian Mediterranean areas annually, of which 57,000 hectares were wooded (and 67,000 hectares non-wooded). In 1999 this situation improved slightly, with 39,000 hectares of wooded land affected and around 32,000 hectares of non-wooded land. However, the average area for each fire in 1999 was 10.3 hectares, just under the average for the previous period. The Regions most badly hit by fires in 1999 were: Sardinia, Sicily, Calabria, Liguria and Piedmont. Seasonal distribution of fires reveals the peak months to be in the summer (70% of fires). The other high-risk time of year (especially in the North) are the winter months - in January and February, when low rainfall and the large amount of easily inflammable material (branches, leaves and dry grass) help the fire to spread easily. Greatest damage is caused by large-scale fires (more than 100 hectares) which, although rare (around 0.1% of total number of fires), cause about 50% of damage. In contrast, fires whose cause can be traced back to human action represent about 82.4% of the total, 74.8% of which are due to voluntary action and only 7.6% to involuntary circumstances. Each year about 60,000 hectares of forest is set alight.

Production of firewood represents 56% of total domestic production of timber. The most valuable production, such as sawn roundwood and veneer are only about 30% of total production. In 1999, the quantity of cut and commercialised timber increased by 17% as compared with 1998.

The timber and wood products industry recorded a 3.8% rise in production, with production increases in almost every sector with the exception of sawn wood. Production of window fixtures, doors and staircases increased substantially (+12%), associated with the recovery in

the renovation and building markets, as did production of pallets (+6.5%), and fibreboard (+3.1%). Producer prices showed a downward trend throughout 1999, closing the year with an overall reduction of 0.7%. A fall was recorded for sawnwood, board and plywood, while producer prices for wood products and the construction industry increased slightly.

Although the balance of trade for the forest and timber sector is positive, it reveals a strong dependency on raw material imports. Italy imports conifer sawnwood from Austria and Germany (about 6 million cubic metres), temperate deciduous trunks and planks from France and Hungary and conifer trunks and planks from Austria, Switzerland and Germany (about 2 million cubic metres). As regards semi-dressed timber products, fibrewood and particleboard are the major imports. As compared with 1998, timber imports, semi-dressed and finished products increased by about 9%. There was only a slight reduction in imports of unworked timber and for semi-dressed wood products.

Exports from the timber sector are still far greater than imports. Furniture exports are worth about 14,600 billion lire, exports of other furnishings about 2,500 billion lire, and exports of semi-finished and finished products are together worth over two thousand billion lire. The trade balance for the sector stood at 11,391 billion lire, a contraction of 5% as compared with 1998. Overall turnover increased 2.6% and industrial production of timber increased 4% as compared with the previous year.

The paper and allied products industry recorded extremely positive results after a rather shaky start to the year. Industrial production increased overall by 3.8%, reaching a new maximum of 8.3 million tons. Turnover for the sector increased only by 1.7%, to 11,650 billion lire. The share of foreign penetration in the Italian market, (i.e. the ratio between imports and apparent consumption of paper and card) increased further, rising to 40.5%. In contrast, the national share destined for foreign markets increased in 1999 to 2.4 million tons (+8.3%).

TABLES

N.B. The unit of measurement 1 quintal is equivalent to 100 kilograms

Tab. 1.6 - Index of value added per unit of labour in agriculture in EU countries, in real terms and at factor cost (1990-91=100)

	1992-93	1996	1997	1998	% change	
					1998/97	1999/98
Belgium	90,0	75,9	79,5	72,8	-8,4	-9,0
Denmark	87,6	120,4	117,2	96,1	-18,0	-11,0
Germany	112,7	127,6	131,6	132,9	1,0	-3,0
Greece	91,9	100,3	97,5	96,2	-1,3	0,0
Spain	94,0	145,7	139,3	130,6	-6,2	-3,0
France	98,5	121,0	120,7	121,8	0,9	-4,0
Ireland	109,5	129,2	130,0	121,4	-6,6	-12,0
Italy	100,4	117,4	112,8	112,0	-0,7	-2,0
Luxemburg	88,6	100,8	96,3	98,3	2,1	2,0
Netherlands	80,5	81,6	92,0	81,2	-11,7	-6,0
Austria	101,1	105,8	97,7	93,6	-4,2	-1,0
Portugal	87,2	119,1	102,8	90,4	-12,1	16,0
Finland	87,0	101,9	94,3	89,6	-5,0	-2,0
Sweden	76,6	68,0	72,3	73,1	1,1	6,0
United Kingdom	109,7	125,5	96,4	80,7	-16,3	-2,0
EU	98,8	119,7	116,1	111,8	-3,7	-3,0

Source: EUROSTAT.

Tab. 2.2 - Gross domestic product and value added at market prices¹

	1990	1997	1998	1999	% change	
					1998/97	1999/98
current prices, billion lire						
Agriculture, forestry and fishing	41.970	52.249	52.833	53.820	1,1	1,9
Industry, narrow definition	371.272	513.872	532.157	541.307	3,6	1,7
Construction industry	78.889	94.824	96.058	98.841	1,3	2,9
Commerce, maintenance, hotels and restaurants, transport and telecommunications	284.506	435.467	452.093	466.000	3,8	3,1
Financial intermediation, property trading and entrepreneurial activity	277.195	478.359	497.821	512.859	4,1	3,0
Other activities and services	252.426	371.497	383.021	396.652	3,1	3,6
Value added at market prices	1.306.255	1.946.255	2.013.983	2.069.478	3,5	2,8
Financial intermediation measured indirectly	63.179	79.531	78.135	77.478	-1,8	-0,8
VAT and indirect taxes on imports	77.756	117.115	131.855	136.165	12,6	3,3
Gross domestic product at market prices	1.320.832	1.983.850	2.067.703	2.128.165	4,2	2,9
constant prices, billion lire (1995)						
Agriculture, forestry and fishing	45.119	52.328	52.946	55.897	1,2	5,6
Industry, narrow definition	451.027	490.161	501.041	509.717	2,2	1,7
Construction industry	94.365	89.344	89.404	90.338	0,1	1,0
Commerce, maintenance, hotels and restaurants, transport and telecommunications	360.900	412.342	422.331	428.604	2,4	1,5
Financial intermediation, property trading and entrepreneurial activity	383.219	434.574	440.090	440.759	1,3	0,2
Other activities and services	312.163	332.385	334.180	338.732	0,5	1,4
Value added at market prices	1.646.790	1.811.132	1.839.090	1.864.046	1,5	1,4
Financial intermediation measured indirectly	71.082	81.378	84.288	83.851	3,6	-0,5
VAT and indirect taxes on imports	102.176	109.870	112.095	114.212	2,0	1,9
Gross domestic product at market prices	1.877.885	1.839.624	1.867.769	1.894.407	1,5	1,4

¹ Net of financial intermediation measured indirectly.

Source: Ministero del tesoro, bilancio e programmazione economica.

Tab. 2.5 - Agriculture in the economy

	1992-93	1997	1998	1999
% change in value added (at 1995 prices)				
agriculture	-	0,9	1,1	5,3
industry	-	-	2,5	1,7
services	-	-	1,4	0,9
Incidence of agriculture on total value added	3,0	2,8	2,7	2,7
Value added per unit of labour (000 lire,1995)				
agriculture ¹	30.015	39.238	40.554	45.093
industry	72.494	82.402	81.765	83.489
services	74.199	78.834	79.426	78.548
<i>Index, 1992-93=100</i>				
agriculture ¹	100	131	135	150
industry	100	114	113	115
services	100	106	107	106
% share of agriculture in total employment ²	8,0	6,6	5,9	5,5
% change in the index of consumer prices ³				
food	-	0,3	1,5	1,0
total	-	1,9	2,0	1,7
% change in producer prices				
food	-	1,1	1,4	-0,4
total	-	1,3	0,1	-0,3
Terms of trade for agriculture	101,6	98,0	99,3	97,2
Incidence of agro-food trade on total overseas trade				
% exports	7,4	6,8	6,8	7,1
% imports	14,5	12,4	11,9	11,2
Exports-Imports/Exports+Imports				
agro-food products	-33,3 ⁴	-23,2	-21,8	-18,6
all products	-2,8 ⁴	6,7	5,8	3,9
Changes in terms of trade ⁵				
agro-food products	-	-1,3	7,5	1,9
all products	-	-1,0	4,0	-0,8

¹Agriculture, forestry and fishing.

² In labour units.

³ Harmonised index.

⁴ 1992.

⁵ Change over previous year.

Source: Istat and Banca d'Italia.

Tab. 3.1 - Production and value added at basic¹ prices in agriculture and forestry²

	At current prices			At constant prices (1995)		
	1999			1999		
	1998	value	percent change	1998	value	percent change
Agriculture						
Arable crops	32.567.606	31.903.041	38,8	33.078.557	33.301.206	0,7
Cereals	10.278.069	9.932.591	12,1	11.494.064	11.586.035	0,8
of which wheat	-	-	0,0	4.332.203	4.033.534	-6,9
Legumes	96.436	105.772	0,1	99.954	108.313	8,4
Vegetables and potatoes	11.592.332	11.962.757	14,5	10.790.859	11.090.202	2,8
Industrial crops	3.235.175	2.893.710	3,5	3.204.640	3.016.277	-5,9
Fodder crops	3.734.280	3.649.246	4,4	3.898.696	3.884.308	-0,4
Flowers and ornamental plants	3.631.314	3.358.965	4,1	3.590.344	3.616.071	0,7
Tree crops	18.997.616	20.232.582	24,6	16.518.570	18.590.275	12,5
Vineyards	7.337.206	7.375.033	9,0	5.842.477	6.022.212	3,1
Olives	4.046.488	4.391.307	5,3	3.412.407	4.202.076	23,1
Citrus	1.493.192	1.947.108	2,4	1.421.316	1.843.119	29,7
Fruit	5.013.303	5.445.257	6,6	4.766.176	5.425.176	13,8
fresh	4.607.011	5.033.524	6,1	4.331.766	5.016.487	15,8
dried and nuts	406.292	411.733	0,5	434.410	408.689	-5,9
Other tree crops	1.107.427	1.073.877	1,3	1.076.194	1.097.692	2,0
Livestock	26.081.465	26.014.298	31,6	26.816.300	27.214.048	1,5
Meat	16.105.441	16.054.364	19,5	17.122.887	17.367.680	1,4
of which beef	6.424.427	6.708.189	8,2	6.997.481	7.193.336	2,8
pork	3.827.860	3.589.781	4,4	4.398.018	4.485.790	2,0
poultry	5.092.838	4.881.972	5,9	4.930.913	4.902.916	-0,6
Milk	8.140.347	8.154.541	9,9	7.994.746	8.119.100	1,6
Eggs	1.775.200	1.746.660	2,1	1.648.077	1.676.662	1,7
Honey	35.109	35.454	0,0	28.641	29.510	3,0
Non-food livestock production	25.368	23.279	0,0	21.949	21.096	-3,9
Associated services ³	4.195.774	4.153.316	5,0	3.904.576	3.944.949	1,0
Total production at basic prices	81.842.461	82.303.237	100,0	80.318.003	83.050.478	3,4
Intermediate products ⁴	26.470.657	26.170.575	31,8	26.257.365	26.109.957	-0,6
Value added at base prices	55.371.804	56.132.662	68,2	54.060.638	56.940.521	5,3
Forestry						
Timber products ⁵	1.015.058	1.049.254	96,8	959.381	1.089.253	13,5
of which: wood for manufacture	568.608	483.779	44,6	427.312	414.648	-3,0
firewood and charcoal	446.450	565.475	52,2	532.069	674.605	26,8
Non-timber products	28.174	34.522	3,2	18.314	22.937	25,2
Total production at basic prices	1.043.232	1.083.776	100,0	977.695	1.112.190	13,8
Intermediate products ⁴	129.445	145.017	13,4	128.899	139.105	7,9
Value added at basic prices	913.787	938.759	86,6	848.796	973.085	14,6

¹ Calculations have been made using the concept of "basic prices", introduced with the revised SEC95 system; these include subsidies exclude indirect taxes on produce.

² Provisional data for 1999. For Regional data, see Appendix tables A1 and A4 for agriculture and A6 for forestry in the Italian version c volume.

³ These are included in the classes 01.41 and 01.42 of the classification of economic activities and include hire of agricultural machiner contracting for operations of preparing fields for cultivation, application of pesticides, irrigation, mowing and harvesting, and preparing produce for the market, excluding processing. Services for livestock production are those for reproduction, including selection, artificial insemination, delivery.

⁴ Data calculated on the basis of the revised national accounting system, SEC95.

⁵ Value of the volume of timber utilised.

Source: INEA calculations on ISTAT data.

Tab. 3.6 - Value added per employee in agriculture, at basic prices¹, by Region and by area (thousand lire, 1995 prices)

Regions	1998	1999	% change 1999/98
Piemonte	54.971,5	61.517,3	11,9
Valle d'Aosta	22.056,0	26.957,7	22,2
Lombardia	81.280,1	88.496,3	8,9
Liguria	67.859,9	64.330,3	-5,2
Trentino-Alto Adige	36.804,8	39.585,7	7,6
Veneto	62.284,0	65.849,7	5,7
Friuli-Venezia Giulia	53.966,2	62.796,3	16,4
Emilia-Romagna	48.113,4	51.254,8	6,5
Toscana	44.009,9	53.589,2	21,8
Umbria	50.629,7	65.290,8	29,0
Marche	48.676,5	54.442,4	11,8
Lazio	48.485,7	52.436,1	8,1
Abruzzo	48.349,7	52.907,1	9,4
Molise	26.846,5	30.672,6	14,3
Campania	29.126,7	35.180,3	20,8
Puglia	36.542,8	42.923,8	17,5
Basilicata	36.254,3	43.806,4	20,8
Calabria	31.932,5	36.524,7	14,4
Sicilia	37.296,2	38.180,5	2,4
Sardegna	36.764,9	41.147,1	11,9
Italy	45.009,6	50.197,8	11,5
North-east	68.320,6	74.086,6	8,4
North-west	51.678,0	55.364,8	7,1
Centre	47.319,7	54.584,5	15,4
South and islands	34.877,1	39.534,2	13,4

¹ calculations have been made using the concept of "basic prices", introduced with the revis SEC95 system; these include subsidies and exclude taxes on products.

Source: INEA calculations on ISTAT data.

Tab. 4.5 - Changes in turnover in the Italian food industry

	Turnover						
	total		national		foreign		Foreign/ total 1999 (%)
	avg. % p.a. 1995-99	1999 / 1998	avg. % p.a. 1995-99	1999 / 1998	avg. % p.a. 1995-99	1999 / 1998	
Overall index	1,8	1,9	1,2	2,2	3,6	1,1	-
Manufacturing industry	1,9	2,2	1,3	2,8	3,6	1,1	-
Food and drinks ¹	1,0	1,2	0,4	1,1	5,6	2,3	100,0
-meat	-1,9	-1,0	-2,3	-1,1	5,0	-0,2	16,5
-fish	2,0	-3,4	1,7	-3,7	6,5	1,3	2,8
-fruit & vegetables	3,5	3,4	3,4	2,8	3,9	5,0	8,9
-vegetable oils and fats	-4,4	-7,5	-4,8	-8,9	0,0	10,4	4,6
-dairy	0,1	0,6	-0,1	0,5	2,3	2,1	18,5
-milling and pasta	1,8	-5,7	-2,4	-3,4	12,7	-9,5	5,1
-other food products	2,9	3,5	2,2	3,8	6,5	2,0	26,4
-drinks	2,5	5,4	2,1	4,6	4,7	10,5	17,2

¹ Net of turnover for the feedstuffs industry.

Source: INEA calculations on ISTAT data (Indices of turnover, base 1995=100).

Tab. 4.8 - Firms and employees in the food¹ and drinks industry, firms classified by number of employees

	1991			1996			% change 1991-96	
	n. employees per firm	n. firms	n. employees	avg. employees per firm	n. firms	n. employees	avg. employees per firm	% change 1991-96 firms employees
1-2		26.207	40.392	1,5	35.345	50.810	1,4	34,9 25,8
3-5		21.841	81.886	3,7	20.704	76.450	3,7	-5,2 -6,6
6-9		6.792	48.388	7,1	6.661	47.090	7,1	-1,9 -2,7
10-19		3.721	49.305	13,3	3.805	50.406	13,2	2,3 2,2
20-49		1.864	54.963	29,5	1.793	52.048	29,0	-3,8 -5,3
50-99		479	32.710	68,3	392	27.223	69,4	-18,2 -16,8
100-199		246	34.703	141,1	233	32.785	140,7	-5,3 -5,5
200-499		128	37.235	290,9	113	32.528	287,9	-11,7 -12,6
> 500		67	76.248	1.138,0	44	63.276	1.438,1	-34,3 -17,0
Total		61.345	455.830	7,4	69.090	432.616	6,3	12,6 -5,1

¹ Excluding the feedstuffs industry.

Source: INEA calculations on ISTAT data *Censimento dell'industria e dei servizi 1991*, *Censimento intermedio dell'industria e dei servizi 1996*.

Tab. 4.9 - Firms and employees in the food¹ and drinks industry, by sub-sector, 1991 and 1996

	1991			1996			% change 1991-96	
	firms	employees	employees per firm	firms	employees	employees per firm	firms	employees
Meat processing	3.758	56.081	14,9	3.855	54.920	14,2	2,6	-2,1
Fish processing	402	7.658	19,0	392	6.473	16,5	-2,5	-15,5
Processing of fruit and vegetables	1.588	36.913	23,2	1.932	27.816	14,4	21,7	-24,6
Production of olive oil	4.218	12.935	3,1	4.675	13.500	2,9	10,8	4,4
Production of seed oil, margarine and other fats	499	6.144	12,3	379	3.957	10,4	-24,0	-35,6
Dairy products	3.579	53.217	14,9	3.713	50.168	13,5	3,7	-5,7
Milling	2.681	14.712	5,5	2.304	13.262	5,8	-14,1	-9,9
Bakeries - fresh bread and cakes	32.602	122.689	3,8	36.728	126.836	3,5	12,7	3,4
Pasta	4.542	23.479	5,2	4.914	21.306	4,3	8,2	-9,3
Industrial bakeries	1.059	23.617	22,3	1.282	23.090	18,0	21,1	-2,2
Cocoa, chocolate, sweets and confectionery	462	18.731	40,5	532	15.056	28,3	15,2	-19,6
Ice cream	760	5.739	7,6	2.675	8.461	3,2	252,0	47,4
Sugar production and refining	15	5.747	383,1	12	4.683	390,3	-20,0	-18,5
Infant and dietary products	14	1.855	132,5	16	2.143	133,9	14,3	15,5
Various food products	1.736	19.018	11,0	2.361	20.664	8,8	36,0	8,7
Ethyl alcohol and distilled alcoholic beverages	536	7.939	14,8	681	6.220	9,1	27,1	-21,7
Industrial production of wine	2.435	21.857	9,0	2.158	19.364	9,0	-11,4	-25,6
Beer and malt	10	4.373	437,3	15	3.255	217,0	50,0	-12,8
Mineral water and soft drinks	449	13.126	29,2	466	11.442	24,6	3,8	
Total	61.345	455.830	7,4	69.090	432.616	6,3	12,6	-5,1

¹ Excluding the feedstuffs industry.

Source: INEA calculation on data from ISTAT, op.cit.

Tab. 4.10 - Firms and employees in the food' and drinks industry by geographical area

	1991			1996		
	firms number	%	employees number	firms number	%	employees number
North-west Italy	14.256	23,2	143.926	15.722	22,8	141.296
North-east Italy	13.531	22,1	128.923	14.587	21,1	124.266
Central Italy	9.672	15,8	66.964	10.697	15,5	60.654
Southern Italy	16.055	26,2	82.284	18.587	26,9	75.101
Islands	7.831	12,8	33.733	9.497	13,7	31.299
Total	61.345	100	455.830	69.090	100	432.616

¹Excluding the feedstuffs industry.

Source: INEA calculations on data from ISTAT, op. cit.

Tab. 5.5 - Cooperation in the agro-food sector - size and growth rates

	1999	1995	% change 1999/95
Cooperatives (n.)	7.322	10.588	-30,8
Turnover (billion lire)	37.217	38.655	-3,7
Members (thousands)	989	1.322	-25,2
Average turnover per cooperative	5,1	3,7	39,2
Average n. members per coop.	135	125	8,2

Source: INEA calculations on data from the Cooperative Central Organisations and Nomis

Tab. 6.3 - Italian foreign trade in agro-food products by area of the world

	Billion lire			% agro-food on total trade		
	imports	exports	balance	imports	exports	balance
	1999					
EU 15	29.942	20.049	-9.893	12,6	8,4	-19,8
Other developed countries	2.962	5.514	2.552	5,6	7,6	30,1
CEECs	1.103	902	-201	6,7	4,0	-10,0
Other countries of Eastern Europe	736	615	-121	6,5	6,3	-8,9
Mediterranean countries of Europe, Africa and Asia	1.523	912	-611	8,2	4,1	-25,1
Rest of the world	6.910	1.645	-5.265	15,0	3,3	-61,5
World	43.177	29.637	-13.540	11,2	7,1	-18,6
	1998					
EU 15	30.175	18.997	-11.178	13,2	8,1	-22,7
Other developed countries	3.711	5.182	1.471	7,2	7,5	16,5
CEECs	1.047	864	-183	6,9	3,9	-9,6
Other countries of Eastern Europe	978	934	-44	10,8	7,5	-2,3
Mediterranean countries of Europe, Africa and Asia	1.401	912	-489	8,8	3,8	-21,1
Rest of the world	7.301	1.757	-5.544	13,6	3,0	-61,2
World	44.614	28.647	-15.967	11,9	6,8	-21,8

Source: INEA, Il commercio estero dei prodotti agro-alimentari. Rapporto 1999.

Tab. 6.5 - Italian foreign trade in agro-food products by sub-sector in 1999

	Billion lire					Exports-Imports/
	imports	%	exports	%	balance	Exports+Imports
Cereals	2.359,3	5,5	103,8	0,4	-2.255,5	-91,6
Fresh vegetables and legumes	857,3	2,0	1.296,6	4,4	439,3	20,4
Dried vegetables and legumes	149,7	0,3	34,3	0,1	-115,4	-62,7
Citrus fruit	340,3	0,8	150,4	0,5	-189,9	-38,7
Fresh fruit	1.411,9	3,3	3.024,4	10,2	1.612,5	36,3
Dried fruit	537,0	1,2	228,6	0,8	-308,4	-40,3
Coarse vegetables	798,2	1,8	32,6	0,1	-765,6	-92,1
Oilseeds	516,9	1,2	13,5	0,0	-503,4	-94,9
Coffee, tea and spices	1.565,3	3,6	68,1	0,2	-1.497,2	-91,7
Flowers and ornamental plants	635,5	1,5	661,4	2,2	25,9	2,0
Raw tobacco	306,7	0,7	335,7	1,1	29,0	4,5
Live animals for food	2.720,0	6,3	106,1	0,4	-2.613,9	-92,5
of which cattle	2.079,4	4,8	66,4	0,2	-2.013,0	-93,8
Other live animals	43,0	0,1	7,1	0,0	-35,9	-71,6
Other livestock products	941,4	2,2	38,7	0,1	-902,7	-92,1
Forestry products	1.451,3	3,4	326,1	1,1	-1.125,2	-63,3
of which timber	1.046,1	2,4	26,9	0,1	-1.019,2	-95,0
Game and fish	1.399,4	3,2	303,6	1,0	-1.095,8	-64,3
Other	266,6	0,6	195,6	0,7	-71,0	-15,4
Total primary sector	16.299,7	37,8	6.926,6	23,4	-9.373,1	-40,4
Cereal derivatives	803,9	1,9	4.287,9	14,5	3.484,0	68,4
of which pasta	11,6	0,0	1.945,1	6,6	1.933,5	98,8
Sugar and confectionery	1.215,7	2,8	1.099,7	3,7	-116,0	-5,0
Fresh and frozen meat	5.502,7	12,7	956,9	3,2	-4.545,8	-70,4
Meat preserves	242,3	0,6	979,8	3,3	737,5	60,4
Preserved fish	3.624,9	8,4	350,7	1,2	-3.274,2	-82,4
Processed vegetables	1.025,5	2,4	1.937,7	6,5	912,2	30,8
Processed fruit	664,4	1,5	1.279,0	4,3	614,6	31,6
Dairy products	4.855,5	11,2	1.884,9	6,4	-2.970,6	-44,1
of which milk	1.397,1	3,2	14,0	0,0	-1.383,1	-98,0
of which cheese	1.981,5	4,6	1.478,7	5,0	-502,8	-14,5
Oils and fats	2.668,2	6,2	1.711,0	5,8	-957,2	-21,9
Oilseed flour and cakes	1.377,3	3,2	317,7	1,1	-1.059,6	-62,5
Drinks	1.613,9	3,7	5.829,2	19,7	4.215,3	56,6
of which wine	356,7	0,8	4.466,6	15,1	4.109,9	85,2
Other industrial food products	3.282,9	7,6	2.075,8	7,0	-1.207,1	-22,5
Total food industry	26.877,0	62,2	22.710,4	76,6	-4.166,6	-8,4
Total agro-food	43.176,8	100	29.637,0	100	-13.539,8	-18,6

Source: INEA, *Il commercio estero dei prodotti agro-alimentari. Rapporto 1999*

Tab. 7.1 - The structure of the Italian distributive system¹

	1997	1998	1999	% change 1999/98
Retail shops ²	626.318	623.456	623.984	0,1
-food	225.100	224.100	224.251	0,1
Mobile sales points	63.300	57.600	52.800	-8,3
-food	17.000	14.700	12.900	-12,0
Wholesale	101.344	95.296	90.309	-5,2
-food	34.667	32.047	31.825	-0,7
Hypermarkets	230	240	251	4,6
Supermarkets	5.207	5.449	5.892	8,1
Discount ²	2.528	2.334	2.531	8,4
Department stores	902	904	971	7,4
Cash and Carry	288	283	283	
Cafés and bars	184.009	178.652	173.912	-2,7

¹ At 1st January.

² At year end.

Source: MICA 1998 and Nielsen 1998.

Tab. 7.13 - Food products registered with Denomination of Protected Origin and Protected Geographical Indication in the EU¹

	Fruit &				Bread &									
	Cheese	Meat	Preserved meat	vegetables	Fats ²	Water	Beer	Honey ³	Other ⁴	Fish	cakes	Vinegar	Non-food ⁵	Total
France	39	47	1	19	4	-	-	4	1	-	1	-	2	118
Italy	30	1	24	26	21	-	-	-	-	-	1	2	-	105
Greece	20	-	-	28	22	-	-	1	1	1	1	-	3	77
Portugal	11	19	12	19	5	-	-	9	-	-	-	-	-	75
Germany	4	6	1	2	1	31	11	-	-	1	4	-	-	61
Spain	12	7	6	15	7	-	-	1	-	-	2	-	-	50
United Kingdom	11	5	-	1	-	-	3	1	3	1	-	-	-	25
Austria	6	-	1	2	1	-	-	-	-	-	-	-	-	10
Netherlands	4	-	-	1	-	-	-	-	-	-	-	-	5	-
Luxembourg	-	1	1	-	1	-	-	1	-	-	-	-	4	-
Belgium	1	-	1	-	1	-	-	-	-	-	-	-	-	3
Denmark	2	-	-	1	-	-	-	-	-	-	-	-	-	3
Ireland	1	-	-	-	-	-	-	-	-	1	-	-	-	2
Sweden	1	-	-	-	-	-	-	-	-	-	1	-	-	2
Finland	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Total	142	86	47	115	63	31	14	17	5	4	10	2	5	541

¹ Situation up-dated to Regulation (CE) 1904/2000 of 7/9/2000.

² Including olive oil and other fats.

³ Including also other products of animal origin, such as products based on eggs.

⁴ Including various food products such as saffron and lime.

⁵ Including various agricultural products not for human consumption such as essential oils, hay, resins.

Tab. 8.1 - The Italian domestic market for agricultural equipment and inputs

	Fertilisers	Phyto- pharmaceuticals	Seeds	Animal feedstuffs	Agricultural machinery	Total	Agricultural products
	Value (billion lire)						
1995	1.844	1.338	955	9.072	4.904	18.113	82.220
1997	1.758	1.370	1.063	8.780	5.365	18.337	85.874
1998	1.696	1.401	1.066	8.337	5.774	18.275	85.287
1999	1.605	1.351	1.035	8.062	6.260	18.313	85.799
% change, 1999/98	-5,4	-3,6	-2,9	-3,3	8,4	0,2	0,6
Avg. ann. rate of growth (%) 1995-1999	-3,4	0,2	2,0	-2,9	6,3	0,3	1,1
	Quantity ¹						
1995	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1997	94,7	95,2	110,5	94,1	106,7	98,5	101,0
1998	92,6	96,7	112,4	91,4	111,6	98,5	101,9
1999	92,1	94,5	112,9	90,0	117,9	99,3	105,2
% change, 1999/98	-0,6	-2,3	0,4	-1,5	5,6	0,8	3,3
Avg. ann. rate of growth (%) 1995-1999	-2,0	-1,4	3,1	-2,6	4,2	-0,2	1,3
	Prices ²						
1995	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1997	100,6	107,6	100,7	102,8	102,6	102,8	103,4
1998	99,3	108,3	99,3	100,6	105,5	102,5	101,8
1999	94,5	106,8	96,1	98,7	108,3	101,8	99,2
% change, 1999/98	-4,8	-1,3	-3,2	-1,9	2,6	-0,6	-2,6
Avg. ann. rate of growth (%) 1995-1999	-1,4	1,7	-1,0	-0,3	2,0	0,5	-0,2

¹ Indices of quantity refer to the values at constant, 1995 prices of intermediate inputs and of gross agricultural production and to values at 1995 prices of agricultural machinery on the domestic market from UNACOMA.

² Price indices relate to implicit prices calculated by the ratio of values at current prices to those at 1995 prices.

Source: INEA calculations on data from ISTAT and UNACOMA.

Tab. 9.8 - Subsidised credit for agriculture, forestry and fishing

	Beyond short-term				Short-term				Total	
	1998		1999		1998		1999		1998	
			% change				% change			% change
North-west	1.452,0	1.167,0	-19,6		313,0	180,0	-42,5	1.765,0	1.347,0	-23,7
North-east	2.549,0	2.361,0	-7,4		1.110,0	488,0	-56,0	3.659,0	2.849,0	-22,1
Centre	1.385,0	1.216,0	-12,2		506,0	399,0	-21,1	1.891,0	1.615,0	-14,6
South and islands	3.355,0	2.831,0	-15,6		1.018,0	506,0	-50,3	4.373,0	3.337,0	-23,7
Italy	8.741,0	7.575,0	-13,3		2.947,0	1.573,0	-46,6	11.688,0	9.148,0	-21,7

Source: Bollettino statistico Banca d'Italia, 1999.

Tab. 10.5 - Indicators of employment of immigrant, non-EU labour in Italian agriculture in 1999, by geographical area

	Agricultural/ total workers ¹		agricultural workers ²		Non-EU		equivalent labour units ²		Non-EU agric.wkrs. total agric. wkrs. (d=b/a%)		Non-EU agric. UL / Non-EU agric.wkrs. (e=c/b%)	
	(a) n.		(b) n.	%	(c) n.	%	(d) n.	%	(d) %	(d) %	(e) %	(e) %
NORTH	427.000		28.848	31,1	14.820	19,0			6,8		51,4	
Piemonte	65.000		2.400	2,6	2.138	2,7			3,7		89,1	
Valle d'Aosta	3.000		370	0,4	393	0,5			12,3		106,2	
Liguria	20.000		1.500	1,6	169	0,2			7,5		11,3	
Lombardia	80.000		2.930	3,2	3.722	4,8			3,7		127,0	
Veneto	87.000		5.565	6,0	2.321	3,0			6,4		41,7	
Trentino-Alto Adige	36.000		12.000	12,9	2.872	3,7			33,3		23,9	
Friuli-Venezia Giulia	19.000		843	0,9	323	0,4			4,4		38,3	
Emilia-Romagna	117.000		3.240	3,5	2.882	3,7			2,8		89,0	
CENTRE	146.000		14.926	16,1	19.166	24,6			10,2		128,4	
Toscana	44.000		4.376	4,7	8.617	11,1			9,9		196,9	
Marche	28.000		980	1,1	1.828	2,3			3,5		186,5	
Umbria	16.000		1.030	1,1	633	0,8			6,4		61,5	
Lazio	58.000		8.540	9,2	8.088	10,4			14,7		94,7	
SOUTH	387.000		42.160	45,5	38.070	48,9			10,9		90,3	
Abruzzo	29.000		1.480	1,6	1.357	1,7			5,1		91,7	
Molise	13.000		200	0,2	71	0,1			1,5		35,5	
Campania	121.000		7.380	8,0	6.181	7,9			6,1		83,8	
Puglia	134.000		8.970	9,7	8.727	11,2			6,7		97,3	
Basilicata	25.000		4.330	4,7	2.072	2,7			17,3		47,9	
Calabria	65.000		19.800	21,4	19.662	25,2			30,5		99,3	
ISLANDS	174.000		6.777	7,3	5.841	7,5			3,9		86,2	
Sicilia	129.000		6.310	6,8	5.299	6,8			4,9		84,0	
Sardegna	45.000		467	0,5	542	0,7			1,0		116,1	
ITALY	1.134.000		92.711	100,0	77.897	100,0			8,2		84,0	

¹ Source ISTAT.

² From the INEA survey.

Source: INEA calculations.

Fig. 11.1 - Index of nominal prices and of deflated prices for agricultural land in Italy

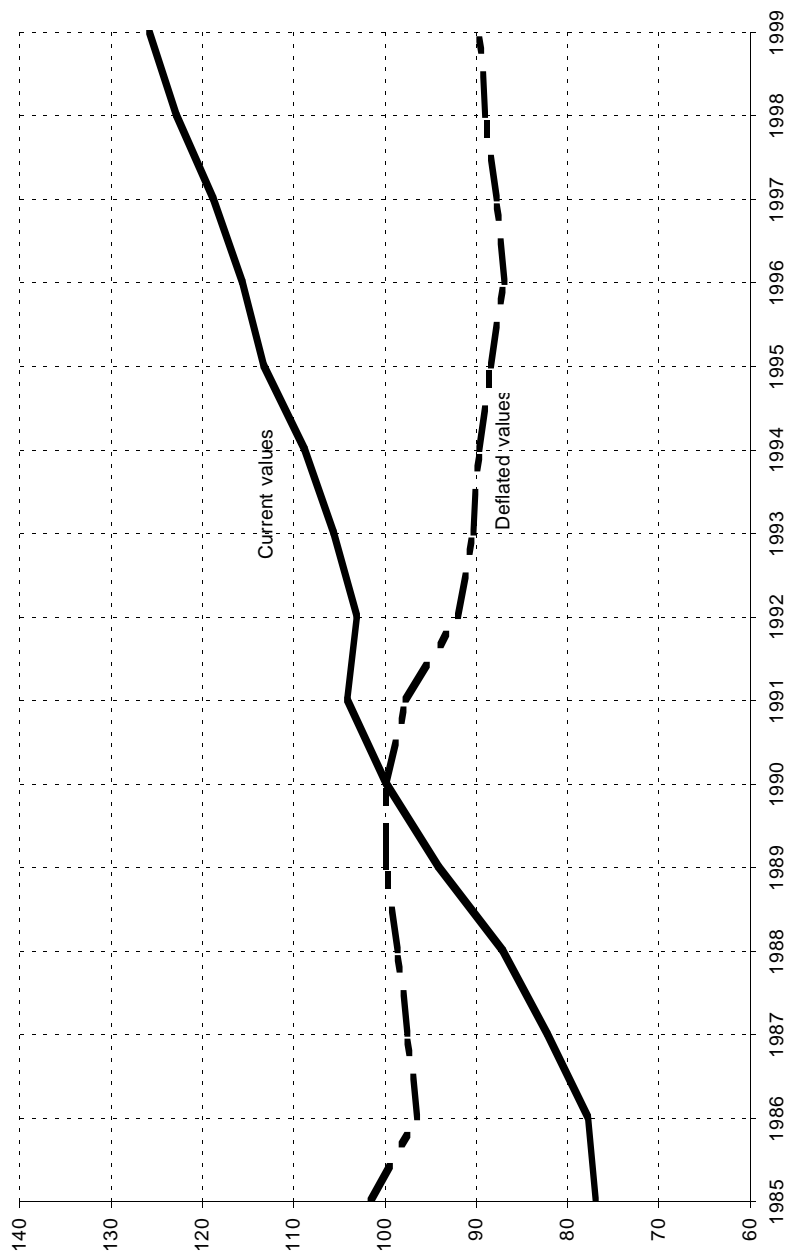
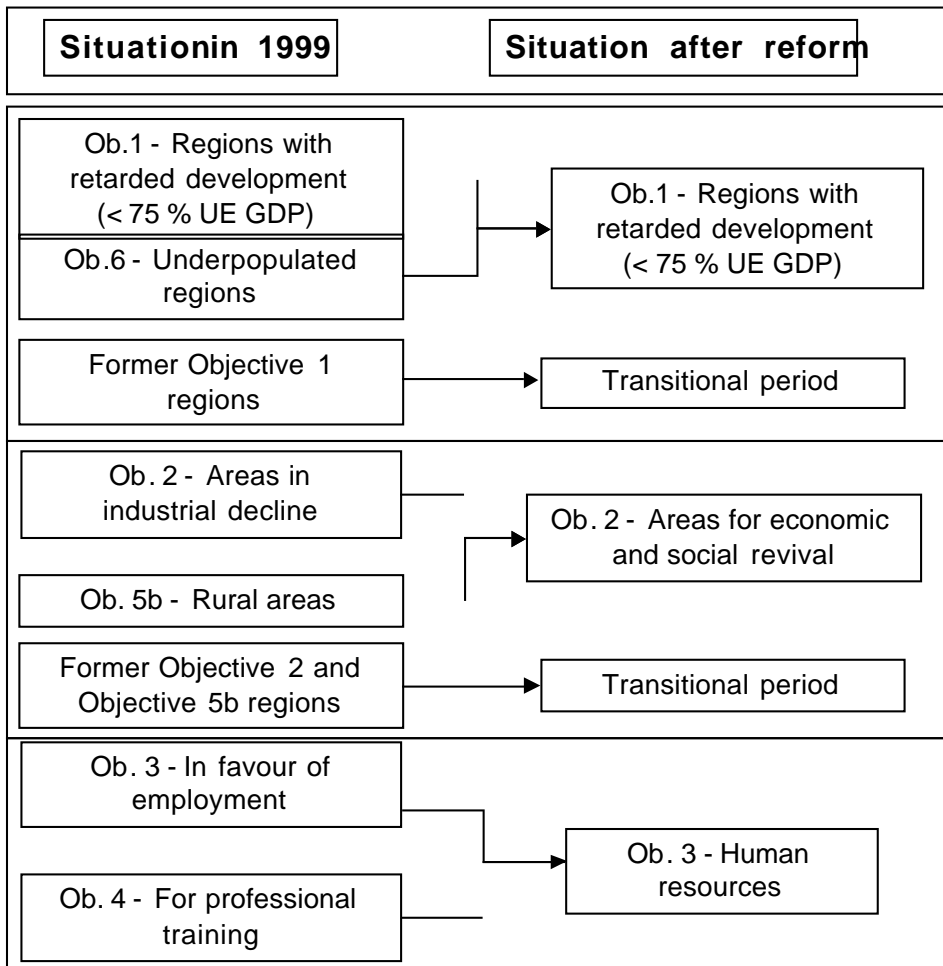


Fig. 12.1 - The new Objectives: definition of areas



Tab. 13.2 - Percentage share of value added at market prices absorbed by the different forms of taxation

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Agriculture	14,4	14,9	17,2	17,3	15,9	14,2	14,4	14,8	15,0	14,7
Other sectors	40,7	41,4	41,3	43,3	41,8	42,5	44,7	46,3	44,7	45,2
Other sectors/Agriculture	2,8	2,8	2,4	2,5	2,6	3,0	3,1	3,1	3,0	3,1

Source: INEA calculations on data from ISTAT and Ministry of Finance.

Tab. 13.7 - Percentage share of forms of taxation on profits

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Agriculture	15,6	16,2	20,6	21,1	17,7	15,0	14,0	14,6	17,1	16,1
Other sectors	52,0	55,2	53,4	61,2	56,5	56,7	61,9	66,1	68,2	69,9
Other sectors/Agriculture	3,3	3,4	2,6	2,9	3,2	3,8	4,4	4,5	4,0	4,4

Source: INEA calculations on data from ISTAT and the Ministry of Finance.

Tab. 13.9 - Taxes and tax relief as share of value added at market prices

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	(percentage values)									
Tax levies	14,4	14,9	17,2	17,3	15,9	14,2	14,4	14,8	15,0	14,7
Tax relief	18,4	18,0	18,3	20,3	18,6	19,8	19,6	18,6	16,0	15,7

Source: INEA calculations on data from ISTAT and the Ministry of Finance.

Tab. 14.3 - Financial implementation of Operative Programmes - (EAGGF section) - by type of intervention

	(situation at 31/12/1999)					
	Total cost	Allocations	Payments	Allocations: Total cost	Expenditure: Total cost	Payment: Allocation
	000 euro			%		
	1	2	3	4=2/1	5=3/1	6=3/2
Rural infrastructure	370.921	442.465	173.507	119,3	46,8	39,2
Environment and soil conservation	206.591	188.263	137.476	91,1	66,5	73,0
Services for development	188.643	150.843	82.883	80,0	43,9	54,9
Promotion	58.906	44.352	6.979	75,3	11,8	15,7
Diversification	213.633	236.306	83.923	110,6	39,3	35,5
Farm structures	2.630.027	2.672.145	1.353.302	101,6	51,5	50,6
- conversion	1.269.600	1.351.073	625.826	106,4	49,3	46,3
- Reg. 950/97	730.554	737.110	488.929	100,9	66,9	66,3
- processing and trading structures	629.873	583.962	238.547	92,7	37,9	40,8
Specific projects	24.000	25.182	13.372	104,9	55,7	53,1
Total	3.692.721	3.759.556	1.851.441	101,8	50,1	49,2
Measures under way	303.322	296.424	294.797	97,7	97,2	99,5
Grand total	3.996.042	4.055.980	2.146.239	101,5	53,7	52,9

Source: INEA calculations on data from SIRGS.

Tab. 15.2 - EAGGF Guarantee expenditure by product

	Total EU				Italy				Italy:EU			
	million euro		%		million euro		%		million euro		%	
	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999
Arable crops	17.945	17.866	46,3	44,8	1.951	1.832	47,3	39,2	10,9	10,3	10,9	10,3
- cereals	13.577	13.516	35,0	33,9	1.484	1.444	35,9	30,9	10,9	10,7	10,9	10,7
- oilseeds	2.498	2.429	6,4	6,1	394	313	9,5	6,7	15,8	12,9	15,8	12,9
- protein crops	618	647	1,6	1,6	9	10	0,2	0,2	1,5	1,5	1,5	1,5
- other	-10	-11	0,0	0,0	0	0	0,0	0,0	0,0	0,0	0,0	0,0
- set-aside	1.263	1.284	3,3	3,2	64	66	1,5	1,4	5,1	5,1	5,1	5,1
Sugar	1.777	2.113	4,6	5,3	186	201	4,5	4,3	10,5	9,5	10,5	9,5
Olive oil	2.267	2.092	5,8	5,2	563	664	13,6	14,2	24,8	31,7	24,8	31,7
Dried forage and dried legumes	378	376	1,0	0,9	45	47	1,1	1,0	11,9	12,5	11,9	12,5
Textile crops and silk worms	870	1.027	2,2	2,6	0	0	0,0	0,0	0,0	0,0	0,0	0,0
Fruit and vegetables	1.510	1.454	3,9	3,6	315	378	7,6	8,1	20,8	26,0	20,8	26,0
Vine products	700	615	1,8	1,5	226	250	5,5	5,4	32,2	40,7	32,2	40,7
Tobacco	870	908	2,2	2,3	260	349	6,3	7,5	29,9	38,4	29,9	38,4
Other vegetable crops	354	285	0,9	0,7	102	96	2,5	2,1	28,7	33,7	28,7	33,7
Subtotal I : vegetable crops	26.670	26.736	68,8	67,1	3.647	3.817	88,3	81,7	13,7	14,3	13,7	14,3
Dairy crops	2.597	2.510	6,7	6,3	95	-215	2,3	-4,6	3,7	-8,6	3,7	-8,6
Beef	5.161	4.579	13,3	11,5	240	183	5,8	3,9	4,6	4,0	4,6	4,0
Sheep and goat meat	1.535	1.894	4,0	4,8	128	168	3,1	3,6	8,3	8,9	8,3	8,9
Pork, eggs and poultry	328	433	0,8	1,1	9	13	0,2	0,3	2,7	3,0	2,7	3,0
Other animal products	95	16	0,2	0,0	0	2	0,0	0,0	0,0	12,5	0,0	12,5
Fishery products	21	8	0,1	0,0	0	0	0,0	0,0	0,0	0,0	0,0	0,0
Subtotal II: livestock products	9.736	9.440	25,1	23,7	472	152	11,4	3,3	4,8	1,6	4,8	1,6
Non-Annexe 2 products	553	573	1,4	1,4	24	20	0,6	0,4	4,3	3,5	4,3	3,5
Food programme	334	722	0,9	1,8	73	82	1,8	1,8	21,8	11,4	21,8	11,4
Peripheral areas	-	224	-	0,6	-	-	-	-	-	-	-	-
Fraud control	40	19	0,1	0,0	3	3	0,1	0,1	7,2	15,8	7,2	15,8
Payments relating to other years	-655	-606	-1,7	-1,5	-270	-59	-6,5	-1,3	41,2	9,7	41,2	9,7
Publicity and promotion	45	57	0,1	0,1	3	4	0,1	0,1	7,3	7,0	7,3	7,0
Other measures	177	100	0,5	0,3	-16,3	-20	-0,4	-0,4	-9,2	-20,0	-9,2	-20,0
Subtotal III	495	1.089	1,3	2,7	-183	31	-4,4	0,7	-37,0	2,8	-37,0	2,8
Income payments	1	-	0,0	-	-	-	-	-	-	-	-	-
Accompanying measures	1.847	2.588	4,8	6,5	194	671	4,7	14,4	10,5	25,9	10,5	25,9
Total EAGGF Garanzia	38.748	39.854	100,0	100,0	4.129	4.671	100,0	100,0	10,7	11,7	10,7	11,7

Source: INEA calculations on Community data..

Tab. 15.3 - EAGGF Guarantee expenditure by type of intervention

	(million euro)									
	Total EU					Italy				
	1998	%	1999	%	1998	%	1999	%	1998	1999
Export refunds	4,788.3	12.2	5,567.8	13.8	354.9	8.1	323.3	6.8	7.4	5.8
- cereals and derivatives	429.4	1.1	883.0	2.2	30.7	0.7	53.1	1.1	7.1	6.0
- sugar and isoglucose	1,265.5	3.2	1,591.1	3.9	139.5	3.2	153.3	3.2	11.0	9.6
- milk and milk products	1,426.7	3.6	1,439.3	3.6	24.6	0.6	22.2	0.5	1.7	1.5
- beef	774.5	2.0	594.9	1.5	55.7	1.3	32.8	0.7	7.2	5.5
- other	892.3	2.3	1,059.5	2.6	104.4	2.4	61.9	1.3	11.7	5.8
Buying in and management of stocks	2,459.6	6.2	1,860.3	4.6	291.0	6.6	268.7	5.7	11.8	14.4
- cereals	1,083.9	2.8	712.7	1.8	-0.3	0.0	1.8	0.0	0.0	0.3
- sugar and isoglucose	349.5	0.9	342.8	0.8	44.0	1.0	45.7	1.0	12.6	13.3
- wines and wine products	512.2	1.3	418.4	1.0	148.7	3.4	138.3	2.9	29.0	33.1
- dairy products	140.9	0.4	302.5	0.7	50.1	1.1	72.7	1.5	35.6	24.0
- beef	145.4	0.4	-36.6	-0.1	-2.5	-0.1	-18.0	-0.4	n.c.	49.2
- other	227.7	0.6	120.4	0.3	51.0	1.2	28.2	0.6	22.4	23.4
Reduction of productive capacity	2,289.2	5.8	2,159.3	5.3	105.1	2.4	98.7	2.1	4.6	4.6
- set aside	1,262.6	3.2	1,283.8	3.2	63.8	1.5	66.1	1.4	5.1	5.1
- other	1,026.6	2.6	875.5	2.2	41.3	0.9	32.6	0.7	4.0	3.7
Consumption aid	720.0	1.8	578.5	1.4	60.8	1.4	41.2	0.9	8.4	7.1
- olive oil	136.0	0.3	58.3	0.1	47.4	1.1	27.9	0.6	34.8	47.9
- dairy products	584.0	1.5	520.2	1.3	13.4	0.3	13.3	0.3	2.3	2.6
- other	-	-	-	-	-	-	-	-	-	-
Processing aid	1,606.3	4.1	1,972.0	4.9	311.4	7.1	399.7	8.5	19.4	20.3
- wine and wine products	132.6	0.3	161.4	0.4	69.0	1.6	106.1	2.2	52.0	65.7
- fruit and vegetables	682.5	1.7	757.4	1.9	229.3	5.2	277.9	5.9	35.1	36.7
- dairy products	654.1	1.7	744.4	1.8	7.3	0.2	6.9	0.1	1.1	0.9
- other	167.1	0.4	308.8	0.8	5.8	0.1	8.8	0.2	3.5	2.9
Production aid	24,786.2	62.9	24,525.1	60.6	3,005.6	66.3	2,843.5	60.1	12.1	11.6
- arable crops	15,103.5	38.3	14,806.8	36.6	1,853.6	42.1	1,704.3	36.0	12.3	11.5
- olive oil	2,046.5	5.2	2,019.7	5.0	485.3	11.0	625.8	13.2	23.7	31.0
- tobacco	871.2	2.2	909.8	2.2	259.6	5.9	348.4	7.4	29.8	38.3
- fruit and vegetables	627.8	1.6	553.3	1.4	49.9	1.1	75.9	1.6	7.9	13.7
- beef	3,236.8	8.2	3,174.0	7.8	149.9	3.4	139.4	2.9	4.6	4.4
- sheep and goatmeat	1,534.9	3.9	1,891.8	4.7	128.1	2.9	168.2	3.6	8.3	8.9
- other	1,365.5	3.5	1,169.7	2.9	79.2	1.8	-218.5	-4.6	5.8	n.c.
Other measures	2,753.2	7.0	3,797.3	9.4	271.0	6.2	754.4	16.0	9.8	19.9
Total agricultural expenditure (1)	39,402.8	100.0	40,460.3	100.0	4,399.8	100.0	4,729.5	100.0	11.2	11.7

(1) Total agricultural expenditure does not correspond exactly with that in Table 15.2 because of rounding.
Source: INEA calculations on Community data.

Tab. 16.14 - Support to the agricultural sector by type of measure, average 1997-99

Type of measure	Intervention board	Other intervention bodies	Rotating funds-EC Regs.	Ministry Ag. Pols.	Mechanisation Fund	Regions	Fuel subsidies	Social security subsidies.	VAT	(billion lire, current prices)			
										IRPEF IRAP	ICI	Total	
billion lire, current prices													
Research	-	-	-	72	-	123	-	-	-	-	-	195	
Development services	-	-	-	79	-	597	-	-	-	-	-	676	
Processing and marketing	-	-	-	181	-	304	-	-	-	-	-	485	
Measures to benefit farms	8.475	882	-	348	81	2.373	2.624	-	690	-	-	15.473	
- aid for farm investme t	-	-	-	100	81	1.379	-	-	-	-	-	1.561	
- management aid	-	-	-	241	-	994	2.624	-	-	-	-	3.859	
- production aid	8.475	882	-	7	-	2.169	-	-	690	-	-	10.053	
Infrastructure	210	-	-	273	-	1.756	-	-	-	-	-	2.651	
Income support	1.247	-	1	-	-	-	-	4.349	-	-	1.219	8.571	
Total	9.931	882	1	952	81	7.321	2.624	4.349	690	1.219	1.219	28.051	
percentages													
Research	-	-	-	0,3	-	0,4	-	-	-	-	-	0,7	
Development services	-	-	-	0,3	-	2,1	-	-	-	-	-	2,4	
Processing and marketing	-	-	-	0,6	-	1,1	-	-	-	-	-	1,7	
Measures to benefit farms	30,2	3,1	-	1,2	0,3	8,5	9,4	-	2,5	-	-	55,2	
- aid for farm investme t	-	-	-	0,4	0,3	4,9	-	-	-	-	-	5,6	
- management aid	-	-	-	0,9	-	3,5	9,4	-	-	-	-	13,8	
- production aid	30,2	3,1	-	0,0	-	-	-	-	2,5	-	-	35,8	
Infrastructure	0,7	-	-	1,0	-	7,7	-	-	-	-	-	9,5	
Income support	4,4	-	0,0	-	-	6,3	-	15,5	-	-	4,3	30,6	
Total	35,4	3,1	0,0	3,4	0,3	26,1	9,4	15,5	2,5	4,3	4,3	100	

¹ Central government income tax, Regional government tax on production and Local government tax on property.

Source: INEA calculations.

Tab. 17.1 - Allocation of public funds for research in the agricultural system in 1998 and 1999

	1998 (million lire)	1999 (million lire)	(%)
MURST (Min. for Universities & Research)-Research at Faculties of Agric.&Vet. Sci.	254.835	254.835	35,4
MURST (Min. for Universities & Research)-Research by food firms	113.000	51.951	7,2
CNR (National Research Council)	83.933	79.231	11,0
MIPAF(Ministry for Agricultural and Forestry Policies)	63.605	67.009	9,3
INEA (National Institute for Agricultural Economics)	20.195	23.908	3,3
ISMEA (Institute for the Study of Agricultural Markets)	4.728	4.728	0,7
INN (National Institute for Nutrition)	9.550	12.550	1,7
Experimental Institute "Lazzaro Spallanzani"	3.557	4.638	0,6
ENSE (National Institute for Selected Seeds)	12.408	14.887	2,1
National Institute for Wild Fauna	4.990	4.990	0,7
ENEA (National Institute for Alternative Energy) -Agricultural research	4.359	4.359	0,6
MICA (Ministry for Industry, Commerce and Crafts), Experimental Institute for industry	17.657	8.531	1,2
ISS (Higher Institute for Health)	4.293	19.072	2,6
Livestock Research Institutes	12.187	12.181	1,7
ICRAM (Central Institute for Research on the Sea)	11.919	1.146	0,2
CeSRAM (Centre for Specialisation and Research in agricultural economics for the Mezzogiorno)	583	583	0,1
Institute for international and comparative agricultural law	285	285	0,0
Regional governmental bodies	127.110	132.104	18,3
Foreign Ministry, contributions to International Organisations	11.100	11.100	1,5
Agronomic Institute for Overseas (Foreign Ministry)	12.130	12.130	1,7
Total	772.424	720.218	100,0

Allocations by MIPAF for 1998 and 1999 do not include funds assigned to INEA, INN, ENSE, Spallanzani etc.

Data relate to expenditure for research classified under the following socio-economic objectives, following the NABS system:

4.5. Nutrition and food safety; 6. Production and agricultural technology; 6.0. General research; 6.1. Livestock production; 6.2. Veterinary medicir
6.3. Fishing and aquaculture; 6.4.Crops; 6.5.Forestry and timber industries; 6.6. Agro-food technology; 6.9.Other research on production and
technology; 7.81, Production of food and drinks; 11.7. Agricultural sciences.

Sources: NABS forms from ISRDS-CNR, Questionnaires from INEA-ORA CNR, Annual reports of the Institutes, MIPAF, MURST.

Tab. 18.3 - Agricultural land utilised, irrigated and irrigable land

Regions	(hectares)					
	Total land area (1)	Land area utilised ¹ (2)	Irrigable land (3)	% (3/2)	Irrigated land (4)	% (4/2)
Piemonte	2.539.894	1.169.599	441.286	37,7	396.838	33,9
Valle d'Aosta	326.347	87.121	24.194	27,8	18.893	21,7
Lombardia	2.386.062	1.111.146	748.047	67,3	671.209	60,4
Trentino-Alto Adige	1.360.730	409.873	66.611	16,3	64.111	15,6
Veneto	1.837.921	868.494	434.566	50,0	298.832	34,4
Friuli-Venezia Giulia	784.413	260.197	61.882	23,8	59.229	22,8
Liguria	542.080	80.867	13.548	16,8	19.846	24,5
Emilia-Romagna	2.212.352	1.192.655	500.728	42,0	279.870	23,5
Toscana	2.299.733	902.110	76.805	8,5	70.677	7,8
Umbria	845.604	391.838	44.662	11,4	45.105	11,5
Marche	969.350	588.618	48.078	8,2	37.852	6,4
Lazio	1.720.781	821.249	139.005	16,9	111.475	13,6
Abruzzo	1.079.916	502.980	59.376	11,8	49.251	9,8
Molise	443.762	243.187	19.326	7,9	8.562	3,5
Campania	1.359.533	632.753	127.295	20,1	121.517	19,2
Puglia	1.936.305	1.431.099	310.456	21,7	256.299	17,9
Basilicata	999.227	597.035	50.408	8,4	42.371	7,1
Calabria	1.508.032	649.866	101.074	15,6	101.387	15,6
Sicilia	2.570.747	1.564.804	226.148	14,5	209.272	13,4
Sardegna	2.408.989	1.327.616	145.605	11,0	81.905	6,2
Italy	30.131.778	14.833.106	3.639.098	24,5	2.944.500	19,9
North	11.989.799	5.179.951	2.290.860	44,2	1.808.828	34,9
Centre	5.835.468	2.703.815	308.550	11,4	265.108	9,8
South and Islands	12.306.511	6.949.339	1.039.688	15,0	870.564	12,5

¹ Data for the land area utilised and the irrigable area refer to 1997; those for irrigated land are for 1996. Following ISTAT, by irrigable area is meant the maximum area which could have been irrigated during the reference year, given the potential of the irrigation plants and the amount of water normally available on 1 farm. By irrigated area is meant the area which was irrigated at least once during the year.

Source: ISTAT, Indagine sulla struttura e sulle produzioni delle aziende agricole (1996 e 1997).

Tab. 19.10 - The market for organic products in some European countries - 1999

	Turnover for organic product (million euro)	Share of the market	Change in turnover cf. 1991 (%)	Share of large scale retailing	Specialised shops
Austria	218	3	10-15	65	-
Denmark	-	3	30-40	75	-
France	700	0,5	20	38	35
Germany	2.500	-	5-10	24	33
United Kingdom	800	1	40	70	-
Italy	950	-	10-20	23	-
Netherlands	234	-	10-15	20	50
Sweden	-	-	20-30	80	-
Switzerland	360	-	30-40	75	20

Source: Wisconsin Department of Agriculture on data from AgraEurope, Fas, Produce Studies, Gira, Euroconsulting, International Trade Forum; Söl-Stiftung Ökologie _ Landbau, Mangano R. Le tavole del biologico (Nuova Ecologia, 9/99).

Tab. 19.11 - Supermarkets, specialised shops, outlets in franchising, agri-tourist outlets, canteens and restaurants in Italy which deal in organic products - 1999

	Supermarkets with organic fruit and vegetables	Shops for organic food	Franchising outlets ¹	Agritourist outlets	School canteens	Restaurants for "natural" foods
North-west	256	321	16	44	15	35
North-east	235	286	11	84	62	26
Centre	113	206	10	210	24	41
South	16	70	0	119	3	4
Islands	4	35	0	30	4	2
Italy	624	918	37	487	108	108

¹ Including those to be opened by 31/12/2000.

Source: BioBank.

Tab. 20.6 - Area and output of soft and durum wheat

	Area (000 ha)			Output (000 q)						Yield (q/ha)	
	1998	1999	% change	total ¹		harvested ²		% change	1998	1999	
				1998	1999	1998	1999				

¹ Data on output are rounded and may not coincide with the product of the area and yield.

² Total output net of that not harvested or lost during harvesting.

Source: INEA calculations on data from ISTAT .

Tab. 20.7 - Area and output of maize

	Area (000 ha)		Output (000 q)					Yield (q/ha)	
	1998	1999	% change		total		1999	harvest	
					1998	1999		1998	1999
North-west	406	423	4,2		40.792	43.848		40.762	43.828
North-east	426	466	9,4		40.236	46.872		39.783	46.093
Centre	84	87	3,6		6.698	7.239		6.468	6.969
South and islands	54	51	-5,6		3.548	3.270		3.532	3.248
Italy	970	1.027	5,9		91.274	101.229		###	100.138
								94,1	98,6

Source: INEA calculations on data from ISTAT .

Tab. 20.13 - Area and output of soya, rapeseed and sunflower

	Area (000 ha)			Output (000q)			Yield (q/ha)	
	1998	1999	% change	1998	1999	% change	1998	1999
SOYA								
North-west	119	81	-31,9	4.149	2.777	-33,1	34,9	34,3
North-east	231	164	-29,0	8.355	6.110	-26,9	36,2	37,3
Centre	1	1	0,0	38	37	-2,6	38,0	37,0
South and islands	-	-	-	5	4	-20,0	18,2	16,8
Italy	351	246	-29,9	12.547	8.928	-28,8	35,7	36,3
RAPESEED								
North-west	8	8	0,0	167	166	-0,6	20,9	20,8
North-east	3	2	-33,3	68	42	-38,2	22,7	21,0
Centre	21	16	-23,8	207	169	-18,4	9,9	10,6
South and islands	29	26	-10,3	171	208	21,6	5,9	8,0
Italy	61	52	-14,8	613	585	-4,6	10,0	11,3
SUNFLOWER								
North-west	23	19	-17,4	650	537	-17,4	28,3	28,3
North-east	12	9	-25,0	310	257	-17,1	25,8	28,6
Centre	162	146	-9,9	3.259	3.077	-5,6	20,1	21,1
South and islands	36	36	0,0	570	583	2,3	15,8	16,2
Italy	233	210	-9,9	4.789	4.454	-7,0	20,6	21,2

Source: INEA calculations on data from ISTAT .

Tab. 20.20 - Area and output of sugar beet

	Area (000 ha)			Output (000 q)					Yield (q/ha)	
	1998	1999	% change	total		1998	1999	% change	1998	1999
				1998	1999					
North-west	41	41	0,0	21.971	22.229	21.955	22.052	0,4	535,9	542,2
North-east	131	134	2,3	67.994	75.466	67.943	75.115	10,6	519,0	563,2
Centre	70	67	-4,3	24.915	26.837	24.211	26.171	8,1	355,9	400,6
South and islands	45	41	-8,9	20.388	18.414	19.709	17.974	-8,8	453,1	449,1
Italy	287	283	-1,4	135.268	142.946	133.818	141.312	5,6	471,3	505,1

Source: INEA calculations on data from ISTAT .

Tab. 20.24 - Area and output of tobacco by variety

Cultivar	Variety group	Area (ha)			Output (q) ¹		
		1998	1999	% change	1998	1999	% change
Bright Total	(g.v. 01)	19.156 19.156	19.200 19.200	0,2 0,2	482.437 482.437	483.000 483.000	0,1 0,1
Burley Maryland Total	(g.v. 02)	10.918 807 11.725	10.750 850 11.600	-1,5 5,3 -1,1	447.059 18.375 465.434	448.300 19.200 467.500	0,3 4,5 0,4
Paraguay Forch. Havanna lbr. Bad. Geuderth. Beneventano Total	(g.v. 03)	532 799 6.879 26 8.236	465 860 6.400 25 7.750	-12,6 7,6 -7,0 -3,8 -5,9	26.000 18.542 152.186 396 197.124	24.000 16.600 141.300 260 182.160	-7,7 -10,5 -7,2 -34,3 -7,6
Kentucky Total	(g.v. 04)	2.998 2.998	3.050 3.050	1,7 1,7	68.907 68.907	69.600 69.600	1,0 1,0
Perustitza Erzegovina Xanty Yaka' Total	(g.v.05)	1.568 3.003 190 4.761	1.500 3.000 165 4.665	-4,3 -0,1 -13,2 -2,0	36.126 81.773 3.454 121.353	35.870 82.200 3.150 121.220	-0,7 0,5 -8,8 -0,1
Italy		46.876	46.265	-1,3	1.335.255	1.323.480	-0,9

¹ Tobacco leaves, unbaled.
Source: EUROSTAT estimates.

Tab. 21.5 - Area and output of fresh vegetables and tubers cultivated in open field

	Area (ha)		% change	Output (000 q)				% change	Yield (q/ha)	
	total			harvested		1998	1999			
	1998	1999								
Tomatoes	113.744	127.891	12,4	54.490	70.803	53.656	68.432	27,5	479,1	553,6
for canning	-	103.772	-	-	62.058	-	59.956	-	-	598,0
Carrots and parsnips	9.809	12.208	24,5	4.822	5.424	4.718	5.074	7,5	491,6	444,3
Cauliflower	25.252	25.835	2,3	5.237	5.320	4.936	5.073	2,8	207,4	205,9
Fennel	22.706	22.536	-0,7	5.309	5.085	5.084	4.883	-3,9	233,8	225,6
Artichokes	49.831	50.955	2,3	5.371	5.229	5.085	4.722	-7,1	107,8	102,6
Water melon	-	13.974	-	-	5.196	-	4.709	-	-	371,8
Onions	15.998	15.673	-2,0	4.691	4.721	4.510	4.593	1,8	293,2	301,2
Melons	21.922	20.977	-4,3	4.334	4.279	4.170	4.084	-2,1	197,7	204,0
Lettuce	19.592	20.481	4,5	3.959	4.124	3.749	3.846	2,6	202,1	201,3
Cabbages	13.418	14.119	5,2	3.178	3.225	3.040	3.099	1,9	236,8	228,4
Courgettes	13.547	11.484	-15,2	3.557	2.616	3.396	2.521	-25,8	262,6	227,8
Egg-plant	9.717	10.082	3,8	2.635	2.577	2.460	2.518	-2,3	271,2	260,2
Peppers	11.417	12.131	6,3	2.539	2.577	2.432	2.432	-1,1	222,4	212,4
Chicory	15.900	16.066	1,0	2.551	2.443	2.457	2.356	-4,1	160,4	152,0
Endives	12.134	12.097	-0,3	2.468	2.439	2.336	2.312	-1,0	203,4	201,6
Beans	22.551	22.581	0,1	1.973	1.988	1.913	1.926	0,7	87,5	88,0
Turnip tops	11.280	11.473	1,7	1.936	1.974	1.733	1.802	4,0	171,6	172,1
Celery	4.114	3.928	-4,5	1.454	1.371	1.413	1.316	-6,8	353,4	349,1
Cultivated mushrooms	-	-	-	570	1.240	570	1.240	117,5	-	-
Strawberries	4.146	4.142	-0,1	846	870	810	834	2,9	204,1	210,0
Spinach	7.102	6.472	-8,9	1.002	863	940	821	-12,7	141,1	133,3
Peas	-	11.306	-	-	762	-	736	-	-	67,4
Leaf beet	3.324	3.052	-8,2	805	744	777	698	-10,2	242,2	243,8
Broad beans	13.475	8.090	-40,0	842	466	808	439	-45,7	62,5	57,6
Turnips	1.513	1.857	22,7	416	460	385	430	11,8	275,0	247,5
Asparagus	-	4.177	-	-	290	-	284	-	-	69,5
Garlic and spring onion	-	2.925	-	-	255	-	249	-	-	87,3
Radish	-	943	-	-	242	-	217	-	-	256,9
Cucumber	-	859	-	-	207	-	199	-	-	241,1
Parsley	-	731	-	-	128	-	110	-	-	174,8
Vegetables	422.492	470.322	11,3	-	-	-	-	-	-	-
Potatoes	90.174	85.576	-5,1	23.207	21.365	21.951	20.695	-5,7	257,4	249,7
of which new	25.611	22.513	-12,1	6.492	4.652	6.306	4.296	-31,9	253,5	206,6
common	64.563	63.063	-2,3	16.715	16.714	15.645	16.399	4,8	258,9	285,0
Sweet potatoes	-	1.275	-	-	193	-	102	-	-	151,5
Tubers	90.174	86.851	-3,7	23.207	21.558	21.951	20.797	-5,3	257,4	248,2

Source: INEA calculations on data from ISTAT

Tab. 21.6 - Area and output of greenhouse vegetables

	Area (ha)			Output (quintals)				
	1998		% change	total		harvested		% change
	1998	1999		1998	1999	1998	1999	
Tomatoes	8.691,40	5.728,60	-34,1	6.275.124	3.257.302	6.115.183	3.092.312	-49,4
Courgettes	2.844,70	2.666,46	-6,3	1.454.271	1.147.002	1.356.303	1.099.136	-19,0
Strawberries	3.315,60	3.025,06	-8,8	1.004.327	980.880	969.383	947.739	-2,2
Melons	3.055,40	2.953,70	-3,3	1.041.867	980.892	1.002.041	941.557	-6,0
Lettuce	2.148,70	2.420,81	12,7	597.213	685.006	565.968	642.982	13,6
Peppers	2.734,10	1.889,23	-30,9	1.156.665	615.850	1.138.460	600.338	-47,3
Egg-plant	1.799,50	1.396,30	-22,4	910.714	483.553	898.111	472.713	-47,4
Cucumber	451,50	407,17	-9,8	247.808	193.238	242.814	189.800	-21,8
Beans	509,00	554,05	8,9	110.455	97.260	105.938	91.649	-13,5
Asparagus	569,20	643,75	13,1	47.103	53.027	46.052	50.685	10,1
Other	1.307,90	1.254,10	-4,1	494.445	345.380	471.213	338.170	-28,2

Source: INEA calculations on ISTAT data.

Tab. 21.8 - Area and output of principal fruits and nuts

	Area (000 ha)			in production			Production (000 q)			
	total			1999		% change	total		harvested	
	1998	1999		1998	1999		1998	1999	1998	1999
Apples	70	69	64	64	0,0	0,0	22.015	23.835	21.433	23.435
Dessert grapes	72	72	71	70	-1,4	-1,4	15.362	15.618	14.964	15.042
Peaches	69	70	65	64	-1,5	-1,5	9.873	11.908	9.706	11.538
Pears	49	47	45	44	-2,2	-2,2	9.929	8.250	9.646	8.111
Nectarines	32	33	29	29	0,0	0,0	4.621	6.237	4.550	6.116
Kiwi	18	19	17	17	0,0	0,0	2.802	3.462	2.652	3.334
Apricots	17	17	15	15	0,0	0,0	1.395	2.256	1.356	2.122
Plums	14	14	12	12	0,0	0,0	1.551	1.943	1.489	1.893
Cherries	31	30	28	28	0,0	0,0	1.258	1.390	1.233	1.292
Hazel nuts	70	70	69	69	0,0	0,0	1.211	1.224	1.167	1.184
Almonds	90	90	89	89	0,0	0,0	925	1.130	880	1.037

Source: INEA calculations on data from ISTAT.

Tab. 21.12 - Area and output of citrus fruit

	Area (000 ha)				Production (000 q) ¹					
	total		in production		total		1998		1999	
	1998	1999	1998	1999	% change	1998	1999	% change	1998	1999
Oranges	109	108	107	106	-0,9	14.223	19.922		18.191	40,6
Lemons	36	35	36	35	-2,8	6.172	5.824		5.435	-10,9
Clementines	25	25	23	24	4,3	2.960	4.797		4.495	57,4
Mandarines	11	11	11	11	0,0	1.661	1.576		1.453	-12,5

¹ Total output, net of fruit not harvested or lost in the process of harvesting.

Source: INEA calculations on data from ISTA

Tab. 21.15 - Area and output of the main flowers cultivated

	Open air cultivation ¹			Greenhouse cultivation			Total	
	1998	1999	% change	1998	1999	% change	1998	1999
Area (hectares)								
Cut flowers	2.524	2.500	-1,0	4.669	4.618	-1,1	7.193	7.118
Roses	212	221	4,2	1.121	1.175	4,8	1.333	1.396
Carnations	204	192	-5,9	1.041	1.020	-2,0	1.245	1.212
- American	61	48	-21,3	102	98	-3,9	163	146
- Mediterranean	94	102	8,5	771	765	-0,8	865	867
- other	49	42	-14,3	168	157	-6,5	217	199
Chrysanthemum	513	502	-2,1	627	615	-1,9	1.140	1.117
- uniflora	281	274	-2,5	234	221	-5,6	515	495
- multiflora	232	228	-1,7	393	394	0,3	625	622
Gladioli	469	448	-4,5	461	415	-10,0	930	863
Gerbers	59	62	5,1	368	365	-0,8	427	427
Lilies	153	166	8,5	272	275	1,1	425	441
Sprays	2.341	2.444	4,4	167	174	4,2	2.508	2.618
Green	750	771	2,8	89	94	5,6	839	865
Green with fruit	19	22	15,8	2	4	100,0	21	26
Flower	1.609	1.651	2,6	75	76	1,3	1.684	1.727
- ginestra	989	997	0,8	1	2	100,0	990	999
- mimosa	543	549	1,1	28	31	10,7	571	580
Production (million stems)								
Cut flowers	958	1.143	19,3	3.461	3.883	12,2	4.419	5.026
Roses	60	58	-3,3	818	815	-0,4	878	873
Carnations	295	264	-10,5	1.527	1.374	-10,0	1.822	1.638
- American	106	101	-4,7	143	122	-14,7	249	223
- Mediterranean	117	110	-6,0	1.123	1.024	-8,8	1.240	1.134
- other	72	53	-26,4	261	228	-12,6	333	281
Chrysanthemum	191	174	-8,9	277	269	-2,9	468	443
- uniflora	80	73	-8,8	61	54	-11,5	141	127
- multiflora	111	101	-9,0	216	215	-0,5	327	316
Gladioli	82	89	8,5	142	129	-9,2	224	218
Gerbers	46	41	-10,9	355	349	-1,7	401	390
Lilies	25	33	32,0	88	108	22,7	113	141
Sprays	1.328	1.395	5,0	82	97	18,3	1.410	1.492
Green	601	642	6,8	65	69	6,2	666	711
Green with fruit	5	6	20,0	1	3	200,0	6	9
Flower	722	747	3,5	19	25	31,6	741	772
- ginestra	420	429	2,1	0	1	-	420	430
- mimosa	276	281	1,8	2	4	100,0	278	285
Leaf plants ²	5.363	6.570	22,5	63.540	70.178	10,4	68.903	76.748
Kentia	581	702	20,8	6.087	6.897	13,3	6.668	7.599
Other palms	2.348	2.590	10,3	3.947	4.789	21,3	6.295	7.379
Pothos	200	346	73,0	12.473	13.400	7,4	12.673	13.746
Dieffenbachia	100	189	89,0	5.487	4.513	-17,8	5.587	4.702
Ficus	477	614	28,7	3.391	3.224	-4,9	3.868	3.838
Flowering plants ²	34.801	41.137	18,2	219.753	232.309	5,7	254.554	273.446
Geranium	1.380	1.856	34,5	32.070	38.382	19,7	33.450	40.238
Chrysanthemum	8.567	9.050	5,6	17.655	18.712	6,0	26.222	27.762
Cyclamen	488	612	25,4	21.133	25.394	20,2	21.621	26.006
Other plants ²	38.179	28.233	-26,1	30.863	34.655	12,3	69.042	62.888

¹ Including plants cultivated under temporary cover (tunnels etc.).

² Thousand plants.

Source: INEA calculations on data from ISTAT.

Tab. 22.3 - Area and output of vines¹

	Total area (hectares)		Area in production (hectares)			Total output (000 q)		Output harvested (000 q)	
	1998	1999	1998	1999	% change	1998	1999	1998	% change
Grapes for wine									
North-west	92.502	92.694	89.035	88.648	-0,4	7.008	7.070	6.985	7.063
North-east	171.285	173.300	162.736	163.440	0,4	23.096	25.200	23.086	24.987
Centre	152.695	153.265	151.086	151.592	0,3	12.282	12.926	11.852	12.552
South and islands	416.210	417.188	401.027	403.348	0,6	36.255	35.154	35.681	33.975
Italy	832.692	836.447	803.884	807.028	0,4	78.641	80.350	77.604	78.577
Dessert grapes									
North-west	187	187	185	185	0,0	14	17	14	17
North-east	98	98	93	96	3,2	10	10	10	10
Centre	1.506	1.407	1.466	1.351	-7,8	264	256	246	238
South and islands	70.612	70.090	68.762	68.432	-0,5	15.074	15.336	14.694	14.778
Italy	72.403	71.782	70.506	70.064	-0,6	15.362	15.619	14.964	15.043
Total									
North-west	92.689	92.881	89.220	88.833	-0,4	7.022	7.087	6.999	7.080
North-east	171.383	173.398	162.829	163.536	0,4	23.106	25.210	23.096	24.997
Centre	154.201	154.672	152.552	152.943	0,3	12.546	13.182	12.098	12.790
South and islands	486.822	487.278	469.789	471.780	0,4	51.329	50.490	50.375	48.753
Italy	905.095	908.229	874.390	877.092	0,3	94.003	95.969	92.568	93.620

¹ Excluding areas for reproduction of vines.

Source: INEA calculations on data from ISTAT.

Tab. 22.5 - Wines of certified territorial origin: DOCG, DOC and IGT, by Region¹

	DOCG ⁴	DOC ²⁻⁵	IGT ³⁻⁶
Valle d'Aosta	-	1	-
Piemonte	7	50	-
Liguria	-	8	1
Lombardia	2	16	12
Trentino-Alto Adige	-	7	4
Veneto	1	21	10
Friuli-Venezia Giulia	-	9	3
Emilia-Romagna	1	20	10
Toscana	6	41	6
Marche	-	11	1
Umbria	2	13	6
Lazio	-	25	5
Abruzzo	-	3	9
Molise	-	3	2
Campania	1	20	8
Basilicata	-	1	2
Puglia	-	25	6
Calabria	-	12	13
Sicilia	-	18	7
Sardegna	1	20	15
Italy	21	317	115

¹ Situation at 30th June 2000.

² 7 of which are inter-Regional.

³ 4 of which are inter-Regional.

⁴ DOCG - Denomination of Origin, Controlled and Guaranteed.

⁵ DOC - Controlled Denomination of Origin.

⁶ IGT - Typical Geographical Indication.

Source: Comitato nazionale di tutela delle denominazioni di origine.

Tab. 22.10 - Area under olive groves and production of olive oil

Year	Area ¹ as main crop	(area in hectares; production in thousand quintals)			
		Production of olives		Olives for	
		total	harvested	table	oil production
1998	1.135.488	26.639	25.485	749	24.736
1999	1.174.135	40.029	38.429	849	37.581
% change 1999/98	3,4	50,3	50,8	13,4	51,9
					4.713
					7.243
					53,7

¹ Area "pro-rata".

Source: INEA calculations on ISTAT data.

Tab. 23.3 - Production of meat in Italy¹

	(liveweight)		
	1998	1999	% change
	(000 q)	(000 q)	1999/98
Beef and buffalo meat	14.878	16.372	10,0
Pork	16.499	17.251	4,6
Sheep and goat meat	874	859	-1,7
Other	316	282	-10,8
Poultry	14.380	14.160	-1,5
Rabbit and game	3.890	3.960	1,8

¹ Marketable output. The figure has been calculated from ISTAT, adding to total slaughterings the ascertained increase in liveweight net of the weight of foreign-produced cattle at the moment of the importation.

Source: INEA calculations on data from ISTAT

Tab. 23.7 - Availability and utilisation of milk

	Bovine		Ovine		Goat		Buffalo		Total	
	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999
Availability	125,010.687	123,283.051	5,943.040	6,137.189	1,206.400	1,190.459	507.750	1,280.000	132,667.877	131,890.698
Domestic production ¹	107,363.055	104,445.416	5,943.040	6,137.189	1,206.400	1,190.459	507.750	1,280.000	115,020.245	113,053.063
Imports	17,647.632	18,837.635	-	-	-	-	-	-	17,647.632	18,837.635
Utilisation										
Milk for drinking	30,720.000	30,800.000	10,000	10,000	300.000	300.000	-	-	31,030.000	31,110.000
- untreated and pasteurised	-	15,000.000	-	10,000	-	300.000	-	-	-	15,310.000
- long-life	-	15,800.000	-	-	-	-	-	-	-	15,800.000
Industrial use	94,290.687	92,483.051	5,933.040	6,127.189	906.400	890.459	587.750	1,280.000	101,717.877	100,780.698

¹ Net of use on farm.

Source: Estimates from Assolatte.

Tab. 23.8 - Availability and utilisation of some dairy products

	Production		Imports		Exports		Apparent consumption		Apparent consumption per head (kg/year)	
	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999
Milk for fresh consumption	31.030.000	30.800.000	3.389.945	3.156.635	62.448	130.200	34.357.497	33.826.435	59.50	58.92
Cheese	9.032.747	9.693.856	3.024.987	3.200.746	1.457.894	1.607.299	10.599.840	11.287.303	18,52	19,66
Butter	910.191	1.100.000	277.197	279.650	233.710	131.843	953.678	1.247.807	1,67	2,17
Yoghurt ¹	1.850.000	1.875.000	823.930	865.185	49.578	54.400	2.624.352	2.685.785	4,59	4,68

¹ Including other fermented milk products.

Source: Estimated from Assolatte.

Tab. 23.11 - Production and consumption of eggs in Italy¹

	Total production		Net imports eggs and egg-based products ¹		Total for consumption		Consumption per head	
	number (millions)	weight (tons)	number (millions)	weight (tons)	number (millions)	weight (tons)	number	
1998	12.433	783.300	270	17.000	12.703	800.300	222	
1999	12.660	797.600	140	8.800	12.800	806.400	224	
% change 1999/98	1,8	1,8	-48,1	-48,2	0,8	0,8	0,9	

¹ Figures include eggs in shell and egg-based products converted into egg equivalent.

Source: Unione nazionale avicoltura.

Tab. 24.4 - Output from aquaculture - 1999

				(tons)
	Farms			
	extensive	intensive	sea-farming	total
Mussels	-	-	103.000	103.000
Clams	-	-	50.000	50.000
Trout	-	44.000	-	44.000
Sea-bass	600	5.940	660	7.200
Sea-bream	900	4.080	720	5.700
Eels	100	3.100	-	3.200
Mullet	3.000	-	-	3.000
Gracilaria	-	-	3.000	3.000
Other fish	-	2.000	-	2.500
Catfish	-	750	-	750
Carp	-	700	-	700
Sturgeon	-	450	-	450
Diplodus	-	300	50	350
Ombrina	-	35	-	35
Total	4.600	61.355	157.430	223.885

Sources: API, ICRAM, INEA.

Tab. 25.6 - Catches by Region and by species - 1999

					(tons)
Region	Fish	Clams	Molluscs	Crustaceans	Total
Liguria	7.192	-	591	305	8.088
Toscana	17.085	-	3.244	594	20.923
Lazio	8.723	188	1.137	324	10.372
Campania	14.455	-	1.511	442	16.408
Sardegna	14.282	-	3.100	783	18.165
Calabria	12.181	-	765	640	13.587
Sicilia	71.574	-	6.233	16.108	93.916
Puglia	56.314	2.796	8.103	5.685	72.899
Abruzzo	13.123	6.360	3.017	1.271	23.771
Marche	23.369	12.753	11.375	1.739	49.236
Emilia-Romagna	28.302	3.703	6.266	3.143	41.414
Triveneto	21.004	8.966	14.840	2.811	47.621
Italy	287.605	34.766	60.183	33.846	416.400

Source: IREPA.

Tab. 25.9 - Fish processing in Italy

	Tons			Million lire
	1998	1999	% change	1999
Tuna in oil	86.000	89.000	3,5	812.000
Sardines in oil	1.865	1.800	-3,5	12.600
Salted anchovies	10.500	11.000	4,8	99.900
Anchovy fillets in oil	7.800	8.000	2,6	104.000
Preserved clams	2.500	2.400	-4,0	33.600
Other fish in oil, marinated or plain	12.500	13.800	10,4	269.100
Total	121.165	126.000	4,0	1.331.200

Source: ANCIT.

Tab. 26.1 - Forest area by type of woodland and by altimetric zone

	Mountains			Hills		Plains		Total		(thousand ha) % change 1998/97
	1997	1998		1997	1998	1997	1998	1997	1998	
High coppice	2.069,8	2.070,4		695,4	697,8	193,7	194,9	2.958,9	2.963,1	0,14
Coppice	1.971,7	1.971,7		1.528,0	1.528,0	117,7	118,4	3.617,4	3.618,1	0,02
Mediterranean bush	26,8	26,7		205,2	205,2	34,4	34,4	266,3	266,3	0,00
Total area	4.068,3	4.068,9		2.428,6	2.431,0	345,8	347,7	6.842,6	6.847,5	0,07

Source: INEA calculations on data from ISTAT.

Tab. 26.2 - Forest area by type of ownership

				(thousand ha)
	Forest area			% change
	1997	1998	%	1998/1997
State and Regional governments	510,1	510,5	7,5	0,09
Local authorities	1.874,9	1.875,0	27,4	0,00
Other bodies	352,4	352,5	5,1	0,02
Private	4.105,2	4.109,5	60,0	0,10
Total	6.842,6	6.847,5	100	0,07

Source: INEA calculations on ISTAT data.

